

Oracle® Exchange

Setup Guide for Supply Chain Hub

Release 6.2

May 2001

Part Number: A88858-01

ORACLE®

Oracle® Exchange Setup Guide for Supply Chain Hub, Release 6.2

Part Number: A88858-01

Copyright © 1996, 2001, Oracle Corporation. All rights reserved.

Primary Author: Linda Rodish

Contributing Authors: Catherine Bauer, Hema Budaraju

Contributors: Manish Patel, PK Dash, Pavan Vedere, Kenneth Eales, Lawrence Danko, Arunava Biswas

The Programs (which include both the software and documentation) contain proprietary information of Oracle Corporation; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs is prohibited.

Program Documentation is licensed for use solely to support the deployment of the Programs and not for any other purpose.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. Oracle Corporation does not warrant that this document is error free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Oracle Corporation.

If the Programs are delivered to the U.S. Government or anyone licensing or using the programs on behalf of the U.S. Government, the following notice is applicable:

Restricted Rights Notice Programs delivered subject to the DOD FAR Supplement are "commercial computer software" and use, duplication, and disclosure of the Programs, including documentation, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement. Otherwise, Programs delivered subject to the Federal Acquisition Regulations are "restricted computer software" and use, duplication, and disclosure of the Programs shall be subject to the restrictions in FAR 52.227-19, Commercial Computer Software - Restricted Rights (June, 1987). Oracle Corporation, 500 Oracle Parkway, Redwood City, CA 94065.

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and Oracle Corporation disclaims liability for any damages caused by such use of the Programs.

Oracle is a registered trademark, and Oracle Exchange and Oracle Workflow are trademarks or registered trademarks of Oracle Corporation. Other names may be trademarks of their respective owners.

Contents

Chapter 1: Supply Chain Hub Overview

Introduction to Oracle Supply Chain Hub	1-2
Supply Chain Hub - Common Integrated Components.....	1-5
Supply Chain Hub - Communication E-Hub.....	1-6
Supply Chain Hub - Collaboration E-Hub	1-7
Supply Chain Hub - Collaborative Planning E-Hub	1-8
Supply Chain Hub - Complete Integration.....	1-10
Other Features of the Supply Chain Hub	1-11
Setup Steps Overview	1-12

Chapter 2: Initial Setup and Preparing for Collaborations

Setting up the Initial Supply Chain Hub	2-2
Step 1: Setting Up Supply Chain Users and Items	2-3
Step 2: Loading Items.....	2-7
Downloading the Item Template.....	2-7
Filling the Item Template.....	2-8
Uploading the Completed Item Template	2-10
Step 3: Assigning Users To Items	2-12
Assigning Users to Items Manually	2-12
Assigning Users to Items Through Bulk Upload	2-13
Step 4: Cross Referencing Items	2-15
Cross Referencing Items Manually	2-15
Cross Referencing Items Through Bulk Upload.....	2-15
Step 5: Cross Referencing Trading Partners	2-17
Preparing for Collaborations	2-19

Step 1: Determining the Type of Collaboration	2-20
Step 2: Setting Up Collaboration Terms and Inviting Partners to Collaborate	2-22
Step 3: Viewing the Terms of a Collaboration Invitation.....	2-27
Step 4: Responding to a Collaboration Invitation.....	2-28
Step 5: Checking the Status of a Collaboration.....	2-30
Posting Data to the Hub	2-34
Exporting Data Formats From the Hub	2-35
Posting demands and supplies to the Hub	2-40
Posting Demands and Supplies to the Hub Manually	2-48
Posting Demands and Supplies to the Hub Using XML	2-50
Demand inbound file in XML format	2-52
Supply inbound file in XML format.....	2-52
Sequence Schedule transaction file in XML format.....	2-53
Real-time Inventory Availability/Pricing Check:.....	2-53
Posting Demands and Supplies to the Hub Using Flat File Bulk Upload	2-55
Viewing Formats	2-56
Detailed Views or Vertical Views.....	2-56
Horizontal or Bucketed Views	2-56
User Preferences - Defining Demand/Supply Viewing Formats	2-57
Graphical Options.....	2-60

Chapter 3: Initial Setup of Collaborations

Setting Up Collaborations	3-2
Collaborative Demand Planning.....	3-3
Permissible order types.....	3-5
Define tolerances	3-5
Business Process.....	3-6
Notifications	3-8
Exceptions (Planning/Demand Planning/Exceptions).....	3-9
Intelligence	3-10
Example of Demand Planning Collaboration.....	3-11
Collaborative Supply Planning	3-13
Permissible order types.....	3-15
Define tolerances	3-15
Business Process.....	3-16

Notifications	3-19
Exceptions (Planning/Supply Planning/Exceptions).....	3-20
Intelligence	3-21
Example of Supply Planning Collaboration.....	3-22
Vendor Managed Inventory.....	3-24
Permissible order types	3-25
Define tolerances for VMI	3-25
Business Process	3-26
Notifications	3-27
Exceptions (Planning/Inventory Planning/Vendor Managed Inventory - Exceptions).....	3-28
Example of Vendor Managed Inventory Collaboration	3-30
Customer Managed Inventory	3-32
Permissible order types	3-33
Define tolerances for CMI.....	3-33
Business Process	3-34
Notifications	3-35
Exceptions (Planning/Inventory Planning/Customer Managed Inventory - Exceptions)	3-36
Example of Customer Managed Inventory Collaboration	3-37
Production Sequencing.....	3-39
Business Process	3-40

Chapter 4: Initial Setup of Additional Features

Setting Up Additional Features	4-2
Order Visibility.....	4-3
Business Process	4-4
Collaboration	4-4
Item Cross Reference	4-4
Permissible order types	4-5
Upload Files Format: Load Orders/Documents	4-5
Permissions for view orders/documents.....	4-11
View Orders (Vertical Listing) and exporting data.....	4-12
Pegging.....	4-12
Tracking	4-14
Order visibility exceptions	4-15
Example of order visibility.....	4-16

Exceptions.....	4-18
Supply Chain Hub - Event Management Engine	4-19
Prerequisites for exceptions generation.....	4-20
Late Orders	4-20
Material Shortage	4-21
Response to Trading Partner Required.....	4-22
Potential Late Orders.....	4-23
Forecast Mismatch.....	4-24
Early Orders.....	4-25
Material Excess	4-25
Trading Partner Response Required.....	4-26
Accessing the Exceptions	4-27
Order Promising or Real-Time Check Availability.....	4-29
Business Process.....	4-30
To Set the ATP Message Handler For Inbound/Outbound XML Transactions.....	4-32
Example of Order Promising Collaboration.....	4-33

Appendix A: Sample XML File and DTD for a Demand Transaction

Sample Demand Transaction File.....	A-2
Forecast Line Section	A-6
DTD for a Demand transaction File.....	A-16
(000_sync_forecast_001.dtd.....)	A-16

Appendix B: Sample XML File and DTD for a Supply Transaction

Sample Supply Transaction File.....	B-2
Control Area	B-2
Header Area.....	B-5
Line area	B-6
DTD for a Supply transaction File.....	B-13
(000_sync_supply_001.dtd.....)	B-13

Appendix C: Sample XML File and DTD for a Sequence Schedule Transaction

Sample Supply Transaction File.....	C-2
Control Area	C-2
Data Area.....	C-3

DTD for a Sequence Schedule Transaction File	C-8
(000_sync_seqsched_001.dtd.....)	C-8

Appendix D: Using XML Documents to Inquire or Respond

Sample file for Availability Inquiry XML Document from Hub to Supplier.....	D-2
Availability Response XML Document from Supplier Back to Hub.....	D-8
.....	D-11
DTD for a Availability Check Inquiry Transaction File	D-11

Index

Send Us Your Comments

Oracle Exchange Setup Guide for Supply Chain Hub, Release 6.2

Part No. A88858-01

Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this document. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most?

If you find any errors or have any other suggestions for improvement, please indicate the document title and part number, and the chapter, section, and page number (if available). You can send comments to us in the following ways:

- Electronic mail: your_product@us.oracle.com
- FAX: telephone number Attn: Oracle Your Product Name Here
- Postal service:
Oracle Corporation
Oracle Your Product Name Here Documentation
Street Address, Mailstop
City, State Postal Code
Country

If you would like a reply, please give your name, address, telephone number, and (optionally) electronic mail address.

If you have problems with the software, please contact your local Oracle Support Services.

1

Supply Chain Hub Overview

Topics covered in this chapter include:

- [Introduction to Oracle Supply Chain Hub](#) on page 1-2
- [Setup Steps Overview](#) on page 1-12

Introduction to Oracle Supply Chain Hub

Oracle[®] Supply Chain Hub (OSCH) enables members to share supply and demand information and generate high-level multi-participant collaborative plans. OSCH is part of Oracle Hub, an integrated suite of e-business solutions for global trading communities, that is designed to fully leverage the largest communications network on the planet, the internet.

This OSCH Setup Guide contains up-to-date information about the current OSCH product you have installed and guides you step-by-step through the required set-ups and functions.

This manual is organized for fast, easy access to information on each of the following topics:

- Supply Chain Hub set ups, installation pre-requisites, and supported configurations
- Navigation and workflows
- Supply Chain collaborations through business scenarios
 - Demand planning
 - Supply planning
 - Vendor managed inventory
 - Customer managed inventory
 - Production sequencing
 - Order visibility
 - Order promising
- Exceptions generated by the SCH
- Supply chain intelligence
- Multilingual support

Oracle Supply Chain Hub provides advanced capabilities for communicating, collaborating, and planning demand and supply information with trading parties across all tiers of a supply chain. Oracle Supply Chain Hub is built with proven components and based on open standards, allowing easy integration for companies that currently use ERP systems, e-mail, EDI, or even spreadsheets.

Oracle Supply Chain Hub provides the following benefits to users:

- Complete integration with Marketplace Exchange, Product Development Exchange, Transportation Exchange, and Oracle Advanced Planning and Scheduling (APS)
- Increased ability to follow customer demand

- » Decreased order-to-delivery cycle times
- » Reduced inventory levels
- » Reduced manufacturing cost via plant overtime reduction
- » Increased velocity of the material flow through the supply chain
- » Increased velocity of the information flow through the supply chain, leading to improved visibility and improved decision making

To realize these benefits and to adapt to the new internet-based collaboration paradigm, SCH provides an architecture that is based on the following:

Table 1-1 Supply Chain Hub Architecture

Common Integrated Components	n	Self-Service Web Browser User Interface
	n	Workflow
	n	Common Data Model
	n	Performance Measurement
	n	Customizable Views
	n	Cross Referencing
	n	Flexible Data Hub Formats:
		<i>Spreadsheet</i>
		<i>E-mail</i>
		<i>Flat File</i>
	<i>EDI</i>	
	<i>XML</i>	
Communication E-Hub	n	Common repository for cross-enterprise planning information
		<i>Supply</i>
		<i>Demand</i>
		<i>Rules</i>
	n	Message translation
	n	Upload
n	Download	
Collaboration E-Hub	n	Exception Handling
		<i>Detection</i>
		<i>Notification</i>
		<i>Trends</i>
	n	Collaborative Supply Planning
	n	Collaborative Demand Planning
		<i>Forecasting</i>
	n	Collaborative Inventory Visibility through collaborative Vendor Managed Inventory/Customer Managed Inventory
	n	Collaborative Order Promising
n	Collaborative Transportation Planning	

Table 1-1 Supply Chain Hub Architecture

Collaboration Planning E-Hub	n	Aggregate Supply Chain Model
	n	Requirements Planning
	n	Planning Exception Notifications
	n	Real-time Multi-level Available To Promise (ATP)
Complete Integration	n	Marketplace Exchange
	n	Product Development Exchange
Other Features	n	ADA compliance
	n	Multi-lingual
	n	Euro
	n	Time zones

Supply Chain Hub - Common Integrated Components

- n Self-Service Web Browser User Interface

Users can access the Hub using a common web browser-based interface to easily view and update supply and demand data. The user interface is designed to allow branding and is completely self-service oriented to assure companies a low cost (no installation, no extensive training) and easy way to enter a trading community.

- n Workflow

Business relationships between parties in trading communities vary, hence the definition of business process flows needs to be adaptable to the unique requirements of these communities. Supply Chain Hub leverages the scalable capabilities of Oracle Workflow to customize your business processes by trading partner.

Workflow governs the following Supply Chain Hub processes:

- * Invitation process
- * Exception generation
- * Excel/XML loads

Oracle does not recommend customization of workflows. Any customization is not supported.

- n Common Data Model

Oracle Supply Chain Hub integrates with Oracle Marketplace Exchange and Oracle Product Development Exchange. All products share a common model for product sourcing (catalogs), global dimensions, trading partner references, performance indicators, and business process workflows.

n Performance Measurement

In an internet collaboration model you need access to performance data and trends to analyze the trading communities' improvements in cycle time, cost, inventory turns, forecast accuracy, and so on. Oracle Supply Chain Hub provides out-of-the-box metrics to analyze trends in exceptions and the velocity in which they are resolved.

n Customizable Views

Trading parties can tailor the level of aggregation (plant, division, company, and so on) with which supply and demand data can be viewed.

n Cross Referencing

Cross-referencing capabilities are provided to enable Hub members to view supply and demand data using their own part numbers.

n Flexible Data Exchange Formats

Users can view, send, and receive supply and demand data in a variety of formats:

flat file/spreadsheet

XML

EDI (for example, 830 - forecasts, 862 - shipping schedules, 866 - production sequence)

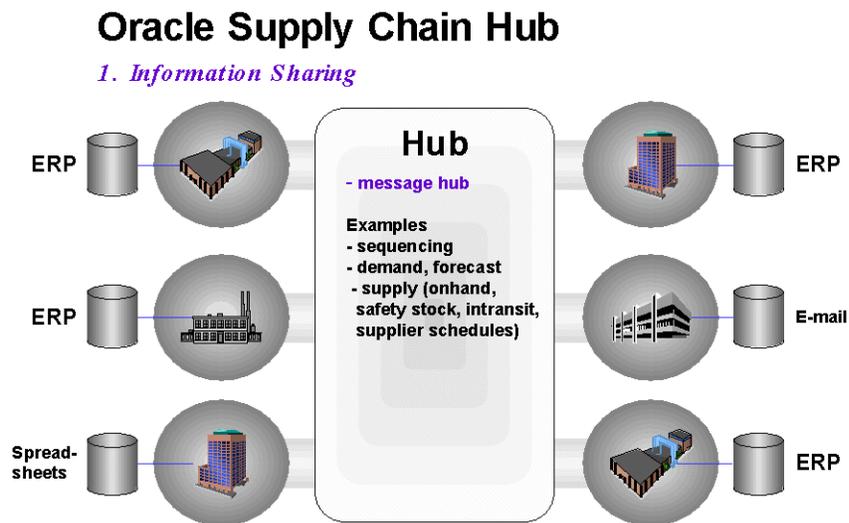
The use of common data formats eliminates the barrier to enter a Hub, since it requires no investments in new technology. The Hub XML formats are OAG compliant and transactions like forecast, committed demand, on-hand, in-transit, safety stock, actual production, actual production for forecast, actual production for committed demand, supplier capacity, planned production, planned production for forecast, and planned production for committed demand are supported. Oracle Supply Chain Hub provides the infrastructure to allow seamless communication between EDI and non-EDI enabled trading partners.

Supply Chain Hub - Communication E-Hub

You can deploy Oracle Supply Chain Hub as a communication E-Hub. Serving as a message hub, Oracle Supply Chain Hub provides a common repository for cross-enterprise planning information (for example, demand, supply, and rules governing material flow between Hub

members). It provides translation capabilities so that information can be uploaded to and downloaded from Oracle Supply Chain Hub in a variety of formats.

Figure 1–1 Information Sharing



Supply Chain Hub - Collaboration E-Hub

Oracle Supply Chain Hub processes information posted to it, sends out notifications of constraint violations to appropriate members, assists in resolving the constraints, and monitors the resolution of these constraints. Oracle Supply Chain Hub serves as an information filter that directs attention to the areas of the extended supply chain with the most critical issues and helps to resolve these issues. It automates key inter-enterprise collaborative processes and provides integration points to the procurement, logistics, and product development services on the Hub. Further, the open architecture of Supply Chain Hub enables you to include all your trading partners, regardless of the level of sophistication of their internal systems or their collaboration capabilities.

Constraint Detection and Exception Notification

You can model exceptions to highlight supply chain constraints across multiple tiers of a supply chain. Exceptions are flagged by the E-Hub and automatically sent to the trading partners. The exception routing is workflow-based and can be

tailored by trading partner. Oracle Supply Chain Hub also monitors the trends in exception volume and speed of resolution.

- n Collaborative Supply Planning

Collaborative Supply Planning enables you to automatically compare demands to allocated capacities. You can automatically flag discrepancies for quick resolution and generate (reverse) auctions to fill capacity excesses (shortfalls). The low level entry of the Hub will allow tier-2 and tier-3 suppliers to become part of the supply planning process without the need for investment in EDI, ERP, or APS.

- n Collaborative Demand Planning

Collaborative Demand Planning enables automatic comparison of demands to prior agreements. Discrepancies are flagged for quick resolution. You can also collaborate and agree on promotion planning by specifying uplifts in demand to effectively plan promotions. Collaborative Demand Planning results in dramatic forecast accuracy improvements across the supply chain, as well as better executed promotion planning.

- n Collaborative Vendor-managed/Customer-managed Inventory

Trading partners can publish reorder points, safety stock levels, and onhand balances. They can be instantly notified of replenishment needs when reorder points are reached. Oracle Supply Chain Hub also sends the appropriate order document to the supplying trading partner.

- n Collaborative Order Promising

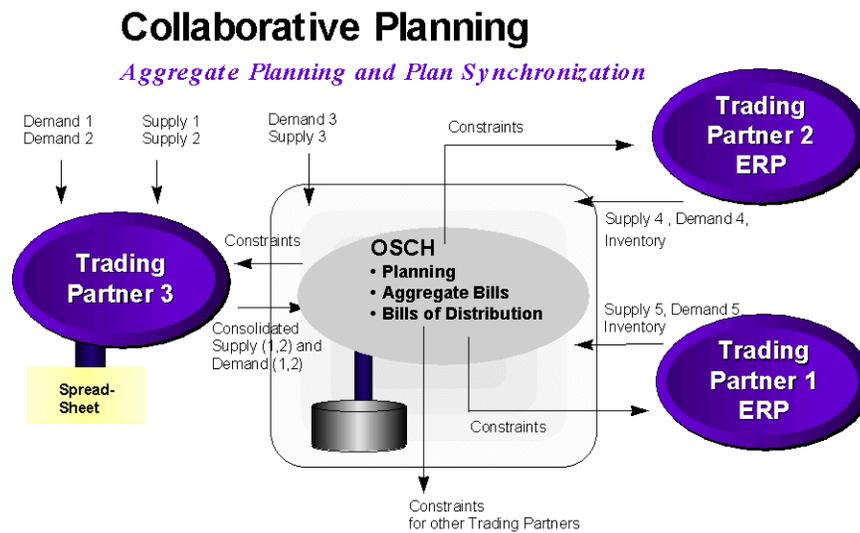
Oracle Supply Chain Hub enables members to publish available to promise requests and to route those requests to the relevant parties. In this scenario, the available to promise request is directed to a member's available to promise server, which then returns a result or even a dependent request for a next-tier partner to the Hub. The order promising capabilities are integrated with the Marketplace shopping cart to allow for availability checks during the buying process.

Supply Chain Hub - Collaborative Planning E-Hub

Oracle Supply Chain Hub can be used to model an extended supply chain at an aggregate level and then calculate net material requirements over time. The effects of supply and demand changes at any part of an extended supply chain are quickly and automatically propagated across all supply chain tiers, thereby maximizing supply chain responsiveness. The planning performed by OSCH accounts for the supply constraints sent to the Hub by the disparate planning systems of different trading partners. The output of the Hub planning

process can be seamlessly passed to disparate ERP systems through OAG compliant XML messages.

Figure 1–2 Collaborative Planning



▫ Requirements Planning

You can use Oracle Supply Chain Hub to plan requirements across multiple supply chain tiers. You can use the Supply Chain Hub to synchronize plans from multiple disparate planning systems once these systems publish the planning results to the Hub and trigger appropriate exception notifications after the synchronization process.

▫ Planning Exception Notifications

You can model planning exceptions to highlight supply chain constraints (for example, capacity over-utilization, alternate sources, material excess or shortage) across multiple tiers of a supply chain. In addition, you can define business process workflows between trading partners that allow for tailoring of the exception routing.

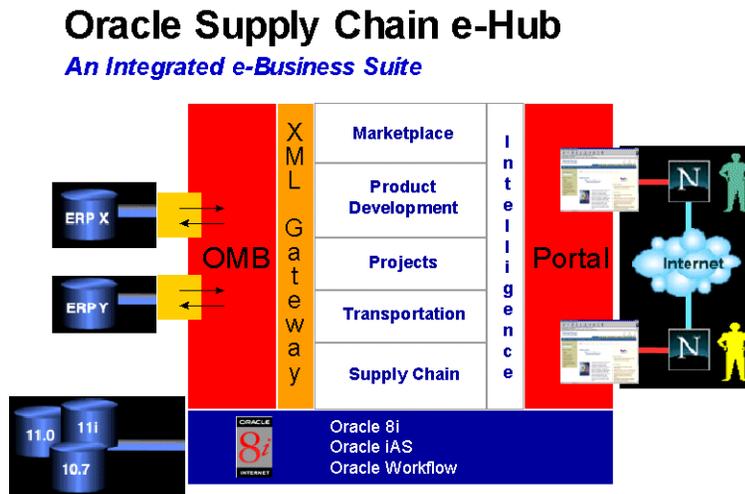
▫ Real-time Multi-level Available To Promise (ATP)

While using OSCH, you can provide real-time available to promise dates based on aggregate, not detailed, capacities across multiple tiers of a supply chain. You can perform ATP checks in a single pass using aggregate statements of capacities across multiple tiers of a supply chain (as opposed to routing ATP requests tier-to-tier, as in the collaborative order promising mode).

Supply Chain Hub - Complete Integration

Not only does OSCH provide unique offerings for communicating, collaborating, and planning across entire trading communities, it also provides tight integration with other Exchange components. Out-of-the-box integration with Marketplace, and Product Development allow trading communities to gain maximum benefits across all collaborative business processes.

Figure 1–3 Integrated Supply Chain



Marketplace Exchange Integration

Oracle Supply Chain Hub tightly integrates with Marketplace Exchange to allow auctions for sell-off of excess supply, automatic creation of reverse auctions for supply shortages, collaborative order promising, and aggregate planning of procured products, transportation, and services.

- **Product Development Exchange Integration**

Oracle Supply Chain Hub enables supply chain demands (for example, demand for prototype parts) and supplies (for example, prototype tooling availability dates) to be dynamically linked to tasks in Oracle Product Development Exchange design projects. Demand and supply mismatches that occur as a result of rescheduling tasks are flagged and notifications are sent to the appropriate trading parties.
- **Complete and Flexible Integration with Oracle Advanced Planning Scheduling (APS)**

Oracle APS and Oracle Supply Chain Hub share the same supply, demand and supply chain business objects. Hub supply and demand information is shared using XML transactions.

ATP requests can be passed automatically from Oracle Supply Chain Hub to the Global ATP Server engine of Oracle APS. The real-time, multi-level ATP result returned by Oracle APS can be passed automatically to Oracle Supply Chain Hub. This gives Hub members who use Oracle APS the ability to respond in real-time (on a 24/7 basis) to ATP requests from across the extended supply chain, enhancing their value as a supplier.

Other Features of the Supply Chain Hub

- **ADA Compliance**

Oracle Supply Chain Hub is designed to meet the standards specified by the Americans with Disabilities (ADA) act, as per the guidelines of W3C's Web Content Accessibility Initiative. The Hub is usable via a screen reader such as JAWS, and includes alternate text for all images and descriptions and dynamic content.
- **Multilingual and Euro Support**

The Supply Chain Hub supports multiple languages for the Hub and the user. The system also supports different currencies including the Euro.

Setup Steps Overview

The following three tables display the setup steps in order that you can implement the Hub.

Table 1-2 Setting up the Supply Chain Hub

Number	Step	Required or Optional
1	Set up Supply Chain Hub users and items	Required
2	Load items	Required
3	Assign users to items	Optional
4	Cross referencing items	Required
5	Cross referencing with trading partners	Required

Table 1-3 Preparing for Collaborations

Number	Step	Required or Optional
1	Determine the type of collaboration	Required
2	Set up collaboration terms	Required
3	Invite trading partners to collaborate	Required
4	View the terms of the collaboration	Optional
5	Respond to a collaboration invitation	Required
6	Check the status of a collaboration	Optional

Table 1-4 Posting Data to the Hub

Number	Step	Required or Optional
1	Post data manually	Optional
2	Post data through XML	Optional
3	Post data through flat file bulk upload or spreadsheet	Optional

You can post data to the Hub in any of the following three ways; you must use at least one.

2

Initial Setup and Preparing for Collaborations

Topics covered in this chapter include:

- [Setting up the Initial Supply Chain Hub](#) on page 2-2
- [Preparing for Collaborations](#) on page 2-19
- [Posting Data to the Hub](#) on page 2-34

Setting up the Initial Supply Chain Hub

After you install the OSCH, you setup the Hub to meet your specific business needs. This chapter discusses in detail the steps required to setup Supply Chain Hub.

This chapter does not include setup for all other allied Oracle Exchange components such as MarketPlace Exchange, Product Development Exchange, and Transportation Exchange. You should refer to the Setup Guide of each individual product for detailed descriptions of the setup steps.

This manual is designed to give you an explanation of each of the steps for Supply Chain Hub. The setup steps are:

1. Set up Supply Chain users and items
2. Load items
3. Assign users to items
4. Cross reference items
5. Cross reference with trading partners
6. View formats

Before the initial setup of your supply chain, you must complete the following steps first:

1. Register and approve companies
2. Assign admin job function to a particular user or users
3. Approve the users of your company

Note: See the Marketplace Implementation and Setup Guide for more information about completing the tasks listed above.

Step 1: Setting Up Supply Chain Users and Items

You need to have the proper Hub roles assigned to you in order to access the functions within the Supply Chain Hub (for example, update Supply Chain supplies and demands.)

Each user is assigned at least one role to access the Hub. Your roles are assigned to you by your company administrator. If you are a company administrator, you can be assigned all roles at the discretion of the Hub operator. This is a significant task and time should be taken to ensure that the roles assigned match specific business purposes.

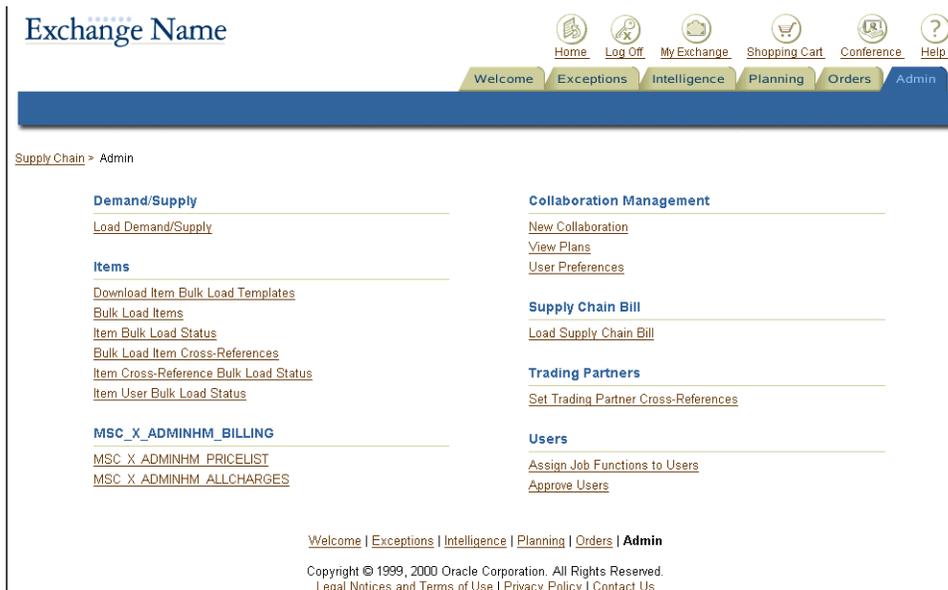
To assign roles, as the company administrator, complete the following steps:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click on the "Admin" tab.
3. On the **Admin** page, click the "Users" link.
4. Search for and click on your name.
5. Scroll down and click the "Assign Job Function" button.
6. Check the Job Functions to be assigned. You can also click on a job function link to view the associated exchange tasks with that job.

Note: In case you need to create new responsibilities or a new job function, click "Create and assign a new job function."

7. Click "Assign Job Functions."

Figure 2-1 Admin. Tab



The roles that are relevant to Supply Chain and the Supply Chain functionality that enable you to access different areas of the system are described below. Business practices within your company will dictate which roles are assigned to you.

Table 2-1 Supply Chain Roles

Buyer	Retrieve items from the Hub catalog and perform real time inventory availability/pricing checks for those items.
Buyer/Sourcing Professional	Create reverse auctions from Supply Chain screens to overcome supply shortfalls.
Seller	Create auctions from Supply Chain screens to address supply excesses.
Catalog Author	Load items.
Company Administrator	Assign roles to other users in your company. Be the default recipient of notifications pertaining to an item if that item does not have a specific user assigned to it. Make another user a company administrator (there can be multiple company administrators). Assign trading partner cross references.
Product Development User	Create item cross references. Assign users to items.

Table 2-1 Supply Chain Roles

Supply Chain Administrator	Initiate supply chain collaboration via the collaboration invitation process. Edit demands and supplies. Receive Supply Chain notifications.
Supply Chain Planner	Edit demands and supplies. Receive Supply Chain notifications.
Supply Chain Reviewer	View demands and supplies.

To look at the Hub tasks associated with the job function, click the function. For example, these are the tasks associated with a seller:

Job Function Name: Seller

Description: Sell items on the Hub, acknowledge orders from buyers, bid in buyer auctions, create seller auctions, and view seller intelligence reports. The seller can do the following tasks:

Table 2-2 Supply Chain Hub Tasks

Hub Task	Description
Access To Do List.	User can access personalized To Do List.
Access Trading Partner Directory.	Access Trading Partner Directory.
Acknowledge Orders.	User can acknowledge orders placed with the user's company.
Approve or Reject Order Cancellation Requests.	User can approve or reject the order cancellation requests.
Create Event	User can create and publish negotiation event.
Create Seller's Negotiation	User can create seller's negotiation and publish it to buyers.
Log On	User can access the Log On page for the Hub.
Register	User can register and check the status of the registration.
Respond to Buyer's Negotiation	User can respond to any buyer's negotiation (as a seller).
View Catalogs Tab	User can view the Catalogs tab. (Separate tasks control the user's access to functions within the tab.)
View Company Information	User can view the user's company information.
View Events	User can view details of an event created by the user's company.
View Home Page	User can view the Home page for the Hub.

Setting up the Initial Supply Chain Hub

Table 2-2 Supply Chain Hub Tasks

Hub Task	Description
View Intelligence Tab	User can view the Intelligence tab. (Separate tasks control the user's access to functions within the tab.)
View Marketplace Selling	User can view Marketplace Selling Welcome page.
View My Charges	User can view the charges for the user's own activity on the Hub.
View My Hub Tab	User can view the My Hub tab. (Separate tasks control the user's access to functions within the tab.)
View Supply Chain Tab	User can view the Supply Chain tab. (Separate tasks control the user's access to functions within the tab.)
View Negotiations Tab	User can view the Negotiations tab. (Separate tasks control the user's access to functions within the tab.)
View Orders - Supplier	User can view the history of orders placed with the user's company.
View Product Development Tab	User can view the Product Development tab. (Separate tasks control the user's access to functions within the tab.)
View Seller Intelligence Reports	User can view intelligence reports for selling activity performed by the user's company on the Hub.

Step 2: Loading Items

Before you load items, you need to have the Catalog Author role to load items.

See Setting Up Supply Chain Users and Items in chapter 1 for more information.

You can upload items by preparing a suitably formatted tab-delimited text file off-line and then uploading that file to the Hub. A complete description of uploading items to the Hub is contained within the help text and Readme file for Catalog Authoring. This help text covers only the subset of steps required to enable Supply Chain functionality.

To load items complete the following steps:

1. Download a spreadsheet or XML template to fill in with item information.
2. Filling in the template
3. Uploading the completed template to the Hub

Downloading the Item Template

To download the item template, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. Click the "Download item bulkload templates" (you can download either spreadsheet templates or XML Resources) link.
 - a. If you want to use a spreadsheet template:
 - b. Select the radio button for I want to load a spreadsheet file.
 - c. Select what you want to load:
 - I want to load items and prices together (Select this if this is your first load)
 - I want to load items (Select this to update previously loaded items)
 - I want to load prices (Select this to create new buyer specific price lists or to update previously loaded pricing)
 - d. Select a category for the items that you will upload to the Hub.

Note: The category must be an item category (a bottom-level category that contains only items), not a grouping or browsing category (a higher-level category that contains other categories, but no items). The item category represents a product family for supply chain purposes.

- e. Click "Download Now" to save a .zip file to your system including:
 - n A .txt file that can be opened and edited in Excel or another spreadsheet
 - n Excel spreadsheet examples illustrating how to load items, price lists, or items and price lists combined
 - n General instructions for saving your file in the correct .txt format for loading
 - f. Next, fill in the spreadsheet template. Follow the directions in the downloaded read-me file. Use the downloaded sample files as guides.
4. If you want to use a XML template:
- a. Select the radio button you want to load an XML file.
 - b. Click the "Download Now" button to save a .zip file to your system including:
 - n Catalog Document Type Definition (DTD)
 - n XML examples illustrating how to load items, price lists, or items and price lists combined
 - n General instructions for writing your XML
 - c. Next, fill in the XML template. Follow the directions in the downloaded read-me file. Use the downloaded sample files as guides.

Filling the Item Template

The following columns in the template file have specific functional consequences for Supply Chain and should be filled in carefully.

- 1. Secured Item
 - n If you would like this item number to be visible to only Hub users that you specifically designate (including users from other companies), then set this column to yes. Otherwise, set this column to no. A value of no means that anyone on the Hub will be able to see that this item exists.

- This column controls the visibility of the item name and number only. Demand and supply information that you post to the Hub for this item will always be secured (visible only to the trading party to which you publish), regardless of the setting of this secured item attribute.
- 2. Owner**
- If you set the secured item attribute to yes, then fill in your Hub user name here. Initially, you will be the only one who will be able to assign item cross-references for this item. You will be able to grant this authority to other users.
 - If you set the secured item attribute to no, then leave this column blank.
- 3. Sellable Item**
- If you would like others to be able to request an availability check on the Hub for this item, set this column to yes. This has the effect of making the item visible in the Hub catalog (from which an availability check request is launched).
 - If you would like others to be able to procure this item through a catalog spot purchase, set this column to yes.
 - Otherwise, set this column to no.
- 4. Minimum Inventory Quantity**
- If you are not a buyer participating in Vendor Managed Inventory or a seller participating in Customer Managed Inventory collaboration with this item, leave this column blank.
 - If you are a seller participating in Collaborative Customer Managed Inventory, the value in this field is used to indicate the desirable minimum inventory level that your buyer should maintain for you. The sum of your onhand quantity on site and any outstanding intransit quantities that your buyer is shipping to you should be greater than or equal to this minimum inventory quantity. Whenever the sum of onhand quantity and outstanding intransit quantity is less than this minimum inventory quantity, the item's planner will receive a "CMI Replenishment" notification.
 - If you are a buyer participating in Collaborative Vender-Managed Inventory, the value in this field is used to indicate the desirable minimum inventory level that your seller should maintain for you. The sum of your consigned onhand on site and any outstanding intransit quantities that your seller is shipping to you should be more than or equal to this minimum inventory quantity. Whenever the sum of onhand quantity and outstanding intransit quantity is less than this minimum inventory quantity, the item's planner will receive a "VMI Replenishment" notification.

5. Maximum Inventory Quantity

- If you are not a buyer participating in Vendor-Managed Inventory or a seller participating in Customer-Managed Inventory collaboration with this item, leave this column blank.
- If you are a seller for Collaborative Customer-Managed Inventory, the value in this field is used to indicate the desirable maximum inventory level that your buyer should maintain for you. The sum of your onhand quantity on site and any outstanding intransit quantities that your buyer is shipping to you should be less than or equal to this maximum inventory quantity. Whenever the sum of onhand quantity and outstanding intransit quantity exceeds this maximum inventory quantity, the item's planner will receive a "CMI Excess" notification.
- If you are a buyer for Collaborative Vendor-Managed Inventory, the value in this field is used to indicate the desirable maximum inventory level that your seller should maintain for you. The sum of your consigned onhand on site and any outstanding intransit quantities that your seller is shipping to you should be less than or equal to this maximum inventory quantity. Whenever the sum of actual onhand quantity and outstanding intransit quantity exceeds this maximum inventory quantity, the item's planner will receive a "VMI Excess" notification.

Uploading the Completed Item Template

To upload a complete item template, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. Click the "Bulk Load Items" link.
4. Select the type of file to be uploaded.
 - .txt (tab-delimited text file)
 - .xml
 - .zip (compressed .txt or .xml file in zip format).
5. Click the "Browse" button to select the template file.
6. Specify if you want to automatically stop the bulk load if there are too many errors
 - Yes - Stop the bulk load if more than <n> lines have errors.
 - No - Complete the bulk load regardless of the number of errors

7. Click "Start Load Now."
8. To monitor the progress of the item upload process, click the "Admin" tab, then click the "View Bulk Load Status" link. After a bulk load completes successfully, you must review and publish the associated content so that it appears on Hub.
 - a. To review and publish content, select the radio button for the job you wish to review and click the "Review and Publish" button.
 - b. You can then choose to Publish or Discard. Note that you can only publish jobs that have the status Completed, Completed with Errors, Failed Publication, or Failed Discard. You should review and correct any rejected lines before publishing the job.

Note: If a job is completed with errors and if you publish it with uncorrected rejected lines, all successful lines (including any items and price list lines) will be published and the rejected lines will be deleted from the catalog staging area. If you have not already corrected the rejected lines, you can view them online and decide whether to fix the errors online or submit a new bulk load for these lines.

- c. To view the errors on an item file upload, select the job, and click the "View Errors" button.

Step 3: Assigning Users To Items

You need to have the Product Development User role in order to assign users to items. This task has two purposes:

1. Designate specific users to receive Supply Chain notifications for an item.
2. For a secured item, allow a user from another trading partner to see the item to establish a cross-reference to the item.

See Setting Up Users and Items in chapter 1 for more information about setting up Hub roles.

There is a further item-user level of security surrounding the item-user assignment. If the item was designated as a Secured Item when uploaded to the Hub, you must either be the owner of the item or have been assigned the Design Engineer role for the item. Note that this is a item-user level role that is distinct from the user-level roles that can be assigned to by your Company Administrator. The owner of an item is by default a Design Engineer for the item. Only the Design Engineer for an item can designate other users within the Hub to be Design Engineers for the item.

Assigning Users to Items Manually

To assign users to items manually, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. On the **Admin** page, under Items, click the "View Items" link.
4. Search for the item.
5. Click on the item's name in the search results.
6. Click the "People" button.
7. On the item's **People** Page, click "Add."
8. Select a Hub user.
9. Select an item-user level role for this user. The choices are Supply Chain Planner and Design Engineer.
 - Selecting Supply Chain Planner means that the user will receive notifications that pertain to the item.

Note: If there is no Supply Chain Planner assigned to an item, supply chain notifications regarding that item are sent to the Company Administrator.

- Selecting Design Engineer means that the user will have visibility to the item in the Hub, and will be able to establish a cross-reference to the item.

Assigning Users to Items Through Bulk Upload

Alternatively, you can upload item people assignments by preparing a suitably formatted tab-delimited text file off-line and then uploading that file to the Hub.

To assign users to items through bulk uploading, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. On the **Admin** page, click the "Bulk Load Item-User Assignments" link.
4. Download template for this bulk upload - ItemRoleGrantTemplate.zip which includes:
 - General instructions for saving your file in the correct .txt format for loading.
 - A .txt file that can be opened and edited in Excel or another spreadsheet.
 - Excel spreadsheet examples illustrating how to load items and users roles.
5. Fill in the template as per the instructions and save it as a tab delimited .txt file.
6. Click the "Browse" button to select the template file.
7. Click "Start Load Now."
8. To monitor the progress of the item-user bulk upload process, click the "Admin" tab, and under Items, click the "Item User Bulk Load Status" link. The **Bulk Load Status** page tells you the status of your entire job. The status readings are:
 - Completed - All of your bulk load lines were loaded successfully.
 - Completed with errors - There are errors in your bulk load lines. You will need to correct your file and run the bulk load process again.
 - Failed - The bulk load job failed to load. None of your bulk load lines were loaded. You will need to correct your file and run the bulk load process again.
 - Pending - Your bulk load job is waiting to be loaded.

Setting up the Initial Supply Chain Hub

- Running - Your bulk load job is in progress.

Note: If the status is Pending or Running, you can check the status again by clicking the "Reload" or "Refresh" button of your browser.

Step 4: Cross Referencing Items

You need to have the Product Development User role to perform item cross-referencing.

See Setting Up Users and Items in chapter 1 for more information about setting up Hub roles.

Let's call the item that you wish to make a reference from the source item and the item that you want to make a reference to the target item. After you have the appropriate item-user role assigned to you for the source item, i.e. Design Engineer, you can cross reference the item through the UI or through bulk upload.

Cross Referencing Items Manually

To cross reference items manually, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. On the **Admin** page, under Items, click the "View Items" link.
4. Search for the source item and click on its name in the search results.
5. Click the "Alternate Item Identifiers" link.
6. On the item's **Alternate Item Identifiers** page, click "Add."
7. On the **Add Item Identifier** page, select the Trading Partner and Trading Partner Item Number of the target.
8. Click "Done" or "Add Another."

Cross Referencing Items Through Bulk Upload

Alternatively, you can upload item cross-references by preparing a suitable formatted tab-delimited text file off-line and then uploading that file to the Hub.

To cross reference items through bulk uploading, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. On the **Admin** page, under Items, click the "Bulk load Item Cross - References" link.
4. A spreadsheet template is available for download from this page. Download ItemCrossRefTemplate.zip which includes:

- General instructions for saving your file in the correct .txt format for loading.
 - A .txt file that can be opened and edited in Excel or another spreadsheet.
 - Excel spreadsheet examples illustrating how to load items and cross references.
5. After you fill out the alternate item identifiers spreadsheet template, click "Browse" to select it.
 6. Click "Start Load Now."
 7. To monitor the progress of the item cross reference bulk upload process, click the "Admin" tab, and under Items, click the "Item Cross- Reference Bulk Load Status" link. The **Bulk Load Status** page tells you the status of your entire job. The status readings are:
 - Completed - All of your bulk load lines were loaded successfully.
 - Completed with errors - There are errors in your bulk load lines. You will need to correct your file and run the bulk load process again.
 - Failed - The bulk load job failed to load. None of your bulk load lines were loaded. You will need to correct your file and run the bulk load process again.
 - Pending - Your bulk load job is waiting to be loaded.
 - Running - Your bulk load job is in progress.

Note: If the status is Pending or Running, you can check the status again by clicking the "Reload" or "Refresh" button of your browser.

Setup Notes for Cross Referencing Items

- a. You can reference all trading partner items that are unsecured or that you have access to.
- b. When you establish an item cross-reference, it applies for your entire company or trading partner.
- c. Item cross-references are bi-directional. If a Seller cross-references Seller Item A to a Buyer's Buyer Item B, the Buyer does not have to cross reference Buyer Item B to Seller Item A.
- d. It is anticipated that in normal practice, Sellers will be responsible for establishing item cross-references.

Step 5: Cross Referencing Trading Partners

You need to have the Company Administrator role in order to perform this task.

See Setting Up Users and Items for more information about setting up Hub roles.

You can map the codes or names that you use for your trading partners to their names as registered in the Hub. When you upload XML or flat file documents containing demand/supply data to the Hub, the Hub uses this mapping to determine to whom you are posting the data. It then secures the data so that only the intended trading partner sees them.

Trading partner cross-reference is the mechanism for accomplishing the above mapping. You must establish a trading partner cross-references for every trading partner that you intend to collaborate with.

To cross reference trading partners, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. On the **Admin** page, under Trading Partners, click the "Set Trading Partner Cross-References" link.
4. On the **Data Mapping** page, click the "Trading Partner" radio button, then click "Edit Mapping."
5. Search for your trading partner by name (as registered on the Hub).
6. In the search results row containing your trading partner, in the "My Company to Hub" column, enter your company's internal code for your trading partner. This enables the Hub to parse all incoming demand/supply documents from your company and identify the intended receiving companies.
7. The column "Hub to My Company" is intended to enable the reverse mapping of Hub company name to your company's internal code, for use in outbound XML transaction documents. The values in the "My Company to Hub" and the "Hub to My Company" columns should generally be the same, unless the outbound documents are routed to a different transaction system than the source of the inbound transaction documents.
8. Click "Apply Changes."

Setup Notes for Cross Referencing Trading Partners

- a. A trading partner cross-reference applies to the company (affiliate company or parent company) in which it is defined.

- b.** Trading partner cross-referencing is a mandatory step. Even if you do not have standardized "codes" for your trading partners and wish simply to use the trading partner names as registered in the Hub in your XML or flat file demand/supply documents, you must still create cross-references for all of your trading partners, using their Hub -registered names as the values in the "My Company to Hub" and "Hub to My Company" columns.
- c.** Both the parties which are collaborating need to establish Trading partner references. Consider two trading partners, OEM1 and SUP1. Before collaborating,

 - OEM1 must establish on the Hub a code for SUP1. This code (example: S1) is OEM1's trading partner (TP) cross-reference for SUP1.
 - Also, SUP1 must establish on the Hub a code for OEM1. This code (example: M1) is SUP1's trading partner (TP) cross-reference for OEM1.
- d.** Trading partner cross-references may be bulk loaded. After Step 5 above, click "Export." Fill in the resulting trading partner cross-reference template file, then click "Import" to upload the trading partner cross-references defined in your file.

Preparing for Collaborations

After you set up items, users, trading partner cross references, and item cross references, next you need to set up collaboration terms and invite your trading partner to collaborate.

To prepare for collaborations, complete the following:

1. Determine the type of collaboration
2. Set up collaboration terms and invite trading partners to collaborate
3. View the terms of a collaboration invitation
4. Respond to a collaboration invitation
5. Check the status of a collaboration

Note: Depending on the role of the user in the collaboration process, the user may need to perform more than one step. Also, the user may not need to perform all of the steps. It depends on whether the user is an invitee or an invited partner.

Step 1: Determining the Type of Collaboration

The five supported types of inter-enterprise collaboration processes on the Supply Chain Hub are:

1. Collaborative Demand Planning

In Collaborative Demand Planning, both buyer and seller trading parties post demand forecasts to Oracle Supply Chain Hub (OSCH). When discrepancies exist between buyer and seller forecasts, OSCH sends notifications to buyer and seller so that the discrepancies can be driven down to zero as rapidly as possible.

The outcome of Collaborative Demand Planning is a reliable demand forecast which requires less adjustment in the future. The extended supply chain will have fewer changes to react to, and the "bull-whip effect" (in which small changes in one tier of a supply chain are magnified greatly in upstream supply chain tiers) is minimized.

Collaborative Demand Planning is particularly suitable for business relationships in which both the buyer and the seller hold unique information that can drive demand. For example, in the retail sector, a store (buyer) and a manufacturer (seller) may both plan promotions that will drive demand. The store and the manufacturer may use Collaborative Demand Planning to provide each other with visibility to their separate forecasts (each based on internal promotion information) and then drive the two forecasts to convergence.

2. Collaborative Supply Planning

In Collaborative Supply Planning, a buyer posts demand schedules to OSCH. A seller posts corresponding supply schedules. Discrepancies between the buyer and the seller are flagged by OSCH, which sends notifications to the buyer and seller so that the discrepancies can be driven down to zero as rapidly as possible. The outcome of Collaborative Supply Planning is visibility to and speedy resolution of supply chain constraints.

3. Vendor Managed Inventory

In Vendor Managed Inventory, a seller owns and manages inventory at a buyer location. In this collaborative process, the buyer posts onhand quantities to the Hub. The seller posts intransit quantities to the Hub. When onhand at the buyer location plus intransit is less than a pre-specified minimum (replenishment trigger point), the Hub sends notifications to the buyer and seller, so that replenishment by the seller can be initiated in a timely manner.

4. Customer Managed Inventory

In Customer Managed Inventory, a buyer owns and manages inventory at a seller location. This arrangement is seen in contract manufacturing, where a buyer owns and coordinates the shipment of raw materials to a contract manufacturer (the seller), who then processes the raw material and ships product to the buyer. In this collaborative process, the seller posts onhand quantities to the Hub. The buyer posts intransit quantities to the Hub. When onhand at the seller location plus intransit is less than a pre-specified minimum (replenishment trigger point), the Hub sends notifications to the buyer and seller, so that replenishment by the buyer to the seller location can be initiated in a timely manner.

5. Production Sequencing

In Collaborative Production Sequencing, a company uploads a production sequence to the Hub. This sequence is made visible to the company's Tier 1 supplier. Using a supply chain bill uploaded to the Hub by the Tier 1 supplier, OSCH also translates Tier 1's sequenced requirement into the Tier 2 supplier's sequenced requirements. Tier 1 provides a supply chain bill that enables the explosion of Tier 0's sequenced requirement to Tier 1 and Tier 2 simultaneously. This capability enables multiple tiers of an extended supply chain to have instant visibility to the sequenced production requirements at the top of the supply chain. These multiple tiers can then ship inventory in the desired production sequence, drastically reducing the inventory levels within the extended supply chain.

Step 2: Setting Up Collaboration Terms and Inviting Partners to Collaborate

You must set up collaboration terms and invite trading partners. Only trading partners who have established and agreed upon formal collaboration relationships may communicate supply chain information to each other.

To set up collaboration terms and invite trading partners, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. On the **Admin** page, under Collaboration Management, click the "New Collaboration" link.

Note: Trading partners may collaborate using multiple collaboration types (collaborative demand planning and collaborative supply planning) and exchange a combination of actual and what-if data. Each individual collaboration (trading partner pair/collaboration type/actual what-if combination) requires a separate named plan. Trading partners may collaborate on an unlimited number of plans.

4. Establish the type of collaboration that you wish to undertake with your trading partner. Under Select the Collaboration Type, select one of the following:
 - Collaborative demand planning
 - Collaborative supply planning
 - Vendor managed inventory
 - Customer managed inventory
 - Production sequencing
5. Enter a plan name.

Note: The plan name is an arbitrary name (10 characters maximum) that you and your trading partner use to refer to the specific collaboration relationship that you are in the process of setting up.

6. Select a plan type (production - yes or production - no), then click "Next." The plan type specifies whether the supply chain information to be exchanged under this relationship will be actual data (production - yes) or what-if data (production - no). For Vendor Managed Inventory, Customer Managed Inventory, and Production Sequencing collaborations, the plan type should be set to production - yes.
7. Search for and select your trading partner, then click "Next." From the drop-downs menus, specify, between you and your trading partner, who is the buyer and who is the seller for this particular plan.
8. Optionally, specify a trading partner contact for this plan. Click "Next."
 - The contact is the specific employee of your trading partner who will need to respond to the collaboration invitation that you are currently constructing.
 - The format of the name is Last-Name, First-Name (You must know this. It cannot be queried.)
 - The contact must be a registered Hub user.
 - If you do not specify the contact, it defaults to the Company Administrator of your trading partner.

Note: Additional trading partners can be added to the same plan by repeating steps 6 and 7.

9. Select a calendar to be used for the collaboration.
 - The "7-0" calendar has seven working days. (Monday - Sunday)
 - The "5-2" calendar has a working schedule of Monday-Friday on, Saturday-Sunday off. Demands and supplies that fall on Saturday or Sunday, or demands and supplies that are uploaded into OSCH on a Saturday or Sunday will be ignored.
 - The effect of selecting a calendar is to dictate whether all seven weekdays appear in the bucket demand/supply screens of Oracle Supply Chain Hub, and also whether weekend demands and supplies are considered in the calculation of Supply Chain exceptions.
10. Set the collaboration horizon. The collaboration horizon date is the date by which the current collaboration plan is expected to end. Attempts to load supply chain information to OSCH for the current plan with dates beyond the Collaboration Horizon date will be rejected.

11. Specify the time aggregation for the generation of Supply Chain exceptions. These settings apply only to Collaborative Demand Planning and Collaborative Supply Planning. These settings enable Supply Chain exceptions to be calculated using flexible time bucket granularity: finer granularity near-term, when more precise exceptions are required; coarser granularity long-term to avoid excessive exception counts.

Note: This is explained in detail through an example in the Setup Notes section at the end of this task.

12. Enter the Purge parameter, and click "Next."
 - This is a technical parameter that limits the amount of data stored in the Oracle Supply Chain Hub database tables.
 - After you or your trading partner decide to end this collaboration by setting the status of the plan to "closed," the information pertaining to this plan will be purged from the database after the number of days specified here.
13. Specify the demand threshold.
 - This parameter is applicable for Collaborative Demand Planning only; it is ignored for other types of plans.
 - It tells OSCH how much of a percentage difference between buyer forecast and seller forecast ($|(\text{buyer forecast} - \text{seller forecast}) / \text{buyer forecast} | \times 100$) constitutes an exception.
14. Specify the supply threshold.
 - This parameter is applicable for Collaborative Supply Planning only; it is ignored for other types of plans.
 - It tells OSCH how much of a percentage difference between total demand and total supply ($|(\text{total supply} - \text{total demand}) / \text{total demand} | \times 100$) constitutes an exception.
15. Enter the target for number of exceptions for this collaboration at any time.
 - This parameter is applicable for Collaborative Demand Planning, Collaborative Supply Planning, Vendor Managed Inventory, and Customer Managed Inventory; it is ignored for other types of plans.
 - It is displayed for comparison alongside the actual measurement of number of exceptions when you access the performance measurement (Supply Chain Analysis) functionality of Oracle Supply Chain Hub.

- 16.** Enter the target for convergence latency, and click "Next."
- This parameter is applicable for Collaborative Demand Planning and Collaborative Supply Planning; it is ignored for other types of plans.
 - Convergence latency is the time between when demand/supply information is first posted to the plan and when the number of exceptions for the plan drops down to zero.
 - For continuing collaborations, it is the time between the first posting of demand/supply information to the plan after the number of exceptions reaches zero and the next time the number of exceptions reaches zero.
 - This target value displayed for comparison alongside the actual measurement of convergence latency when you access the performance measurement (Supply Chain Analysis) functionality of Oracle Supply Chain Hub.
- 17.** Review the collaboration plan parameters that you have entered, and click "Submit."
- This will send a collaboration invitation notification to your trading partner. Notifications are sent both to a Hub internal address and a designated email address.
 - After they accept the invitation (you will be notified), you and your trading partner can begin to post supply/demand information for this plan to the Hub.

Setup Notes for Time Aggregation

Example: 60 days, 12 weeks, 7 months.

For each of the first 60 days bucket (starting from the first date in the entire date range of the demand/supply), trigger exception notifications for Collaborative Supply Planning if the total demand does not match the total supply (to the specified tolerance, see Step 13) within any one of the 60 days. After the 60th day, compare the total demand and total supply on a week-by-week basis and trigger exception notifications only when the aggregate totals for a week are mismatched. After the 12 weeks, compare the total demand and total supply on a month-by-month basis and trigger exception notifications only when the aggregate totals for a month are mismatched. (The above behavior is the same for Collaborative Demand Planning, except that exception notifications are triggered when a buyer forecast does not match seller forecast to the specified tolerance.)

For example, a week starts on Monday and ends on Sunday. If the end of the daily time buckets falls in the middle of a week, then Oracle Supply Chain Hub automatically adds in extra days so that the first of the weekly time buckets can start on a Monday. Using the above example, the 60th day is Wednesday 02-Aug-2001 and the planning calendar is a "5-2" calendar (Saturdays and Sundays off). OSCH automatically adds in Thursday 03-Aug-2001

and Friday 04-Aug-2001, so that the first of the 12 weeks can start on Monday 07-Aug-2001.

Bucketing starts from the system date (system date is today's date) forwards, so if you are in the middle of the week, the buckets don't start from the Monday of the week, instead it starts on the system date. Extra buckets are added when the end date of the date range falls in the middle of the week or month. The exception computation in these extra buckets is carried out in the same way as that in the regular buckets.

A month is a calendar month: for example, 01-Aug-2001 through 31-Aug-2001. If the end of the weekly time buckets falls in the middle of a month, OSCH automatically adds in extra weeks (including a short, truncated week if necessary) to allow the first monthly period to start on the first day of a calendar month. Once again using the above example, the last of the 12 weeks ends on Sunday 29-Oct-2001. OSCH automatically adds in a truncated week of Monday 30-Oct-2001 through Tuesday 31-Oct-2001, so that the first of the seven months can start on Wednesday 01-Nov-2001.

For the example mentioned above, the baby week considers data coming in weekly or daily buckets that fall within the range (i.e., Monday to Tuesday). Exception notifications are not generated for mismatches that occur beyond the end of the monthly time bucket period.

Step 3: Viewing the Terms of a Collaboration Invitation

After you receive a collaboration invitation notification, you should check on the terms of the collaboration before deciding whether to agree or decline the invitation.

To view collaboration terms, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. On the **Admin** page, under Collaboration Management, click the "View Plans" link.
4. You will be shown a list of plans that your company participates in.
5. Click on the plan name of the invitation for which you want to view the collaboration terms.

Step 4: Responding to a Collaboration Invitation

After viewing a collaboration, you need to check your notifications and then respond to a collaboration invitation. A collaboration appears in both your e-mail inbox and as a notification in your "My Hub" tab.

To check your notifications and respond to a collaboration, complete the following:

1. Click the "My Hub" icon at the top of the page.
2. In the table on the right top corner, you will find All Open Notifications. All new invitation will be listed here. Look for a notification titled, "Supply Chain Collaboration invitation from ..."
3. Optionally, under Hub Transactions table on the left hand side, you can click the "Manage My List" link.
4. Click the notification title to view the notification detail. Notifications pertaining to collaboration invitations appear under the subject heading "Supply Chain Collaboration invitation from <Trading Partner Name>." Click the subject heading to see the notification detail.
5. Note the plan name from the notification detail, and view the terms of the plan (the collaboration invitation). Links inside the notification alert you to View Plan Parameters.
6. After viewing the terms:
 - If you agree to the terms, click the "Agree" button in the invitation notification detail.
 - If you do not agree, click the "Decline" button in the notification detail.
 - You can also click "Reassign" to transfer the invitation accept/decline decision to someone else in your company.
7. Supply and demand information can be loaded to the Hub for the plan only after you click "Accept."
8. After you accept the invitation, your trading partner gets a notification that Supply Chain Collaboration invitation accepted by <Trading Partner Name>. You can now post data to the collaboration plan.

Figure 2-1 Notification Details

The screenshot shows a web interface for an exchange. At the top left is the text "Exchange Name". To the right are navigation icons: Home, Log Off, My Exchange, Shopping Cart, Conference, and Help. Below this is a blue header bar. The main content area is titled "Notification Details (Normal Priority)". The notification details are as follows:

To: SYMONDS652
Date: 30-03-2001
Subject: Supply Chain Collaboration invitation from Slazenger Manufacturing9

Dear Symonds Reddy3,

You have been invited to participate in CMI collaboration identified by bug1707278 with Slazenger Manufacturing9 on 6.2 Dev env by Slazenger Reddy9.
To view the plan parameters, please click on the link shown below.
[View Plan Parameters](#)

You may choose to accept or decline the invitation by choosing the appropriate response below.

6.2 Dev env helps you to collaborate with your customers and suppliers and remove constraints from your supply chain.

You can navigate to [Supply Chain Introduction](#) to take a guided tour of the services available on 6.2 Dev env. We will continue to update you periodically as we add exciting services that will help you leverage the Internet to conduct business. We look forward to contributing to the success of your business!

6.2 Dev env

.....

If you want to reassign the notification so someone else can respond on your behalf, press the Reassign button.

Step 5: Checking the Status of a Collaboration

You can update or check the status of your collaboration. Updating and checking the status of your collaboration serves the following purposes:

- It enables you to see the detailed terms of the collaboration (for example, who is the buyer/who is the seller, the target ceiling value for number of exceptions).
- It enables you to see where you are in the collaborative process. Has your collaboration invitation been accepted by your trading partner? Has your trading partner viewed your last data posting? Is your trading partner now expecting a response from you?
- It enables you to notify your trading partner that you have taken an action (for example, posted and finalized new demand/supply data on the Hub, terminated the collaboration) that requires their attention.

To check the status of your collaboration, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. On the **Admin** page, under Collaboration Management, click the "View Plans" link.
4. On the **View Plans** page, select the plan for which you are participating in. Beside each plan is a Plan Status that indicates the overall state of the plan. You cannot change this value. The specific values of the overall Plan Status and their meanings are:
 - Waiting for Acceptance - a collaboration invitation has been issued. An accept/decline response is pending.
 - Declined - the collaboration invitation was declined. No collaboration can take place.
 - Ready for Collaboration - the collaboration invitation was accepted. Only now can data be posted to the plan.
 - In Progress - the trading partners are in the midst of collaboration: posting demand/supply data to each other.
 - Collaboration Complete - both trading partners have placed a stamp of approval on the outcome of the collaboration (by changing their trading partner-plan statuses to "Approved").
 - Closed - one of the trading partners has decided to terminate the collaboration (by changing the trading partner's trading partner-plan status to "Closed"). Data can no longer be posted to this plan, nor can it be reversed.

5. Click on a specific plan name to view detailed status and collaboration parameter information about that plan. Under the Plan Organizations heading, trading partner (TP)-plan statuses for your company and for your trading partner are shown. You can also select a new value for your company's TP-plan status from the drop-down menu and then implement the change by clicking "Apply Changes."

Setup Notes for Checking the Status of a Collaboration

1. The changing of your company's TP-plan status to Published is automatic when you use the flat file upload or XML upload. With the flat file upload, the status changes to Published each time you do an upload.
2. With the XML upload, the status is embedded in the document, and you have the option of performing several loads with a null or empty status and then one final load with a Published status to trigger a response from your trading partner.
3. You need to change the plan status using the user interface only if you have changed supply/demand manually. Other than TP-plan status, you cannot modify the parameters of a plan once it has been created.

Table 2-3 Trading Partner Plan Statuses

Your Company's Status	Your Trading Partner's Status	What This Means	What You Can Change Your Company's Status To
Waiting for acceptance	Pending	You have invited your trading partner to collaborate. Your trading partner has not responded yet.	Closed - this will halt the invitation process and permanently prevent data from being posted to this plan.
Waiting for acceptance	Declined	Your trading partner has declined your invitation	Closed
Ready for collaboration	Ready for collaboration	Your trading partner has accepted your invitation. Data can now be posted to this plan No data has yet been posted	Closed

Table 2-3 Trading Partner Plan Statuses

Your Company's Status	Your Trading Partner's Status	What This Means	What You Can Change Your Company's Status To
Published	Waiting for review	<p>You have posted data to the Hub using flat file upload, XML or manual entry through the UI. You are now awaiting your trading partner's response.</p> <p>In the case of a flat file upload and an XML upload, the act of posting the data automatically changed your company's TP-plan status to Published. In the case of manual entry using the UI, you had to come to this screen and manually change your company's TP-plan status to Published.</p> <p>Every time you change your status to Published, a notification goes out to your trading partner.</p> <p>Your trading partner has not yet acknowledge receipt of your data.</p>	<p>Closed</p> <p>Approved - you indicate to your trading partner that you are satisfied with the current outcome of the collaboration, and that you do not expect any further response from them unless circumstances change.</p> <p>Published - even though you were the last to post data, you posted amended data before your trading partner had a chance to respond. Republishing sends a new notification to your trading partner to indicate that you have posted new data.</p>
Published	In review	Your trading partner has clicked the "Acknowledge" button in the notification that was sent to them when you changed your company's TP-plan status to Published.	<p>Closed</p> <p>Approved</p> <p>Published</p>
Waiting for review	Published	Your trading partner has responded, and is now awaiting your response. You have not acknowledged receipt of their data.	<p>Closed</p> <p>Approved</p> <p>Published</p>

Table 2-3 Trading Partner Plan Statuses

Your Company's Status	Your Trading Partner's Status	What This Means	What You Can Change Your Company's Status To
In review	Published	You have acknowledged receipt of your trading partner's data.	Closed Approved Published
Approved	<Any Value>	You have indicated to your trading partner that you are satisfied with the current outcome of the collaboration, and that you do not expect any further response from them unless circumstances change.	Published - circumstances have changed, and you have posted new data to the Hub that you would like your trading partner to respond to. Closed
Closed	<Any Value>	You have decided to terminate the plan. Not further data can be posted to this plan.	No changes permitted.

Posting Data to the Hub

Supply Chain Hub supports a variety of data formats. Posting data to the Hub includes:

- Exporting data formats from the hub, including order types
- Posting demands and supplies to the Hub

Exporting Data Formats From the Hub

You can view, send, and receive supply and demand data in a variety of formats on the Supply Chain Hub, such as:

- flat file / spreadsheet (stored as a tab delimited .txt document)
- XML
- EDI (for example, 830 - forecasts, 862 - shipments, 866 - production sequence)

Figure 2-1 Supply Chain Collaboration

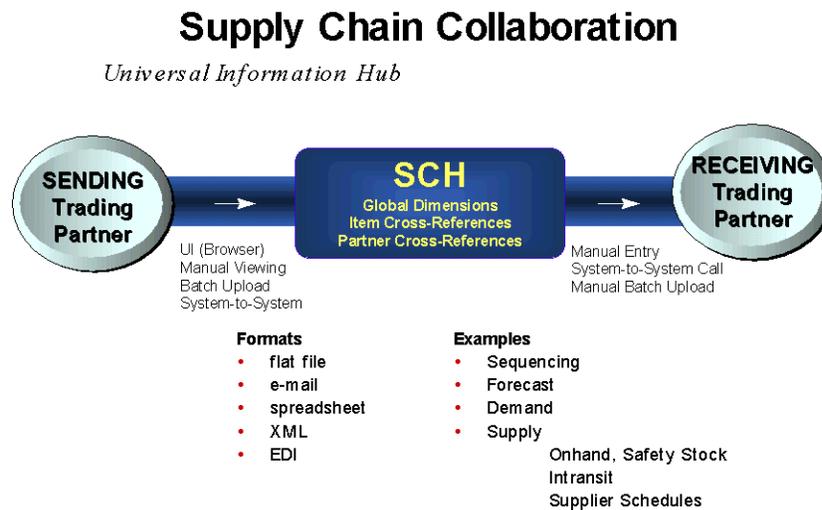


Table 2-4 Supply Chain Hub Order Types

Order Type	Description
Actual production	Seller's committed supply schedule consisting of numbered sales orders in response to buyer's total demand.
Actual production for committed demand	Seller's committed supply schedule consisting of numbered sales orders in response to buyer's committed demand.
Actual production for forecast	Seller's committed supply schedule consisting of numbered sales orders in response to buyer's forecast demand.
Committed demand	Purchase order demand sent by buyer to seller.
Forecast	Projected demand calculated by the buyer and sent by buyer to seller.
Intransit	<ul style="list-style-type: none"> • In Collaborative Supply Planning/Vendor Managed Inventory, this is the quantity that has been shipped from the seller site but has not yet arrived at the buyer site. • In Customer Managed Inventory, the quantity shipped from buyer or third-party supplier site but has not yet arrived at the seller site.
Onhand	Quantity physically in inventory at either the buyer or the seller site. Buyers and sellers post the quantities in inventory at their own sites.
Historical sales	What actually gets sold at a retail location is commonly referred to as sell-through sales or POS (point-of-sale) data. Such data is the best indicator of how well a product is performing at the check out register, and as such is valuable information for supply chain planners. By evaluating the sell through data posted by a retailer, a manufacturer can determine how best to allocate inventory across its retailer base. Historical sales, in OSCH will enable users to provide visibility to sell through sales data.
Planned production	Seller's projected supply schedule consisting of planned orders in response to buyer's total demand.
Planned production for committed demand	Seller's projected supply schedule consisting of planned orders in response to buyer's committed demand.
Planned production for forecast	Seller's projected supply schedule consisting of planned orders in response to buyer's forecast demand.
Safety stock	Desired inventory quantity above and beyond the supplies required to exactly satisfy total demand. This is calculated outside of the Hub and is posted to the Hub for informational purposes only. It is not used for triggering and exceptions.
Seller forecast	Project demand calculated by the seller and sent by seller to buyer. Use this order type in Collaborative Demand Planning, in which it is compared to the buyer's Forecast, and discrepancies between the two are driven to zero.

Table 2-4 Supply Chain Hub Order Types

Order Type	Description
Supplier capacity	The maximum number of units that a seller can produce for a buyer within a time bucket. This is allocated capacity. If a supplier C has total capacity 100 units and two customers, A and B, C would have to decide to allocate, say, 70 units to A and 30 units to B, and then post supplier capacity of 70 units for A and 30 units for B to the Hub. This is currently an informational quantity only is not used for triggering any exceptions.
Purchase order	Purchase order from buyer to seller indicating the item, quantity and need by date.
Sales order	Sales order from the seller to the buyer in response to the purchase order indicating the item, quantity and ship by date.
Shipment notice	Advanced shipment notice from seller to buyer indicating item, quantity, and scheduled date.
Shipment receipt	Used in order visibility, this is posted by the carrier or the dealer who received the shipment.

In collaborative demand planning, the Hub supports exporting transaction data to a tab-delimited flat file from the **Order Detail** page.

To export data formats from the Hub, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Planning" tab.
3. On the **Planning** page, under Demand Planning, click the "View Forecast/Seller Forecast - Buyer" or the "View Forecast/Buyer Forecast - Seller" link.
4. On the **Demand Planning** page, specify any search criteria and click "Go."
5. Click "Export."

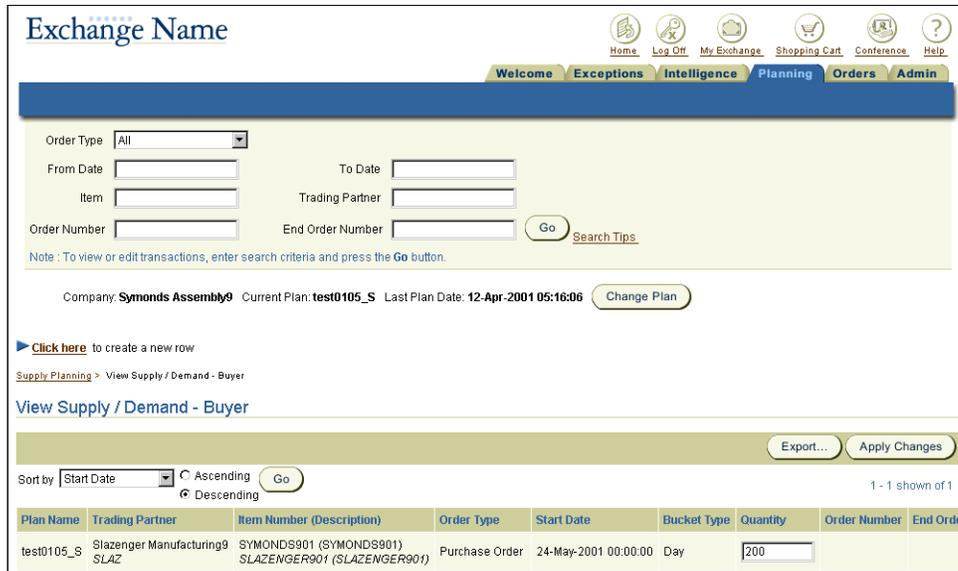
In collaborative supply planning, the Hub supports exporting transaction data to a tab-delimited flat file from the **Order Detail** page.

To export transaction data from the Hub, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Planning" tab.
3. On the **Planning** page, under Supply Planning, click the "View Supply/Demand - Buyer" or the "View Supply/Demand - Seller" link.
4. On the **Supply Planning** page, specify any search criteria and click "Go."

5. Click "Export."

Figure 2–1 View Supply or Demand



Setup Notes for Exporting Data Formats from the Hub

- n In Collaborative Demand Planning, exception notifications are generated when (Buyer) Forecast differs from Seller forecast.
- n In Collaborative Supply Planning, exception notifications are generated when Total demand differs from Total supply.
- n Total demand = Forecast + Committed demand
- n Total supply = Actual production + Actual production for forecast + Actual production for committed demand + Planned production + Planned production for forecast + Planned production for committed demand
- n It is assumed that if a trading partner uses the more detailed variants of Actual production (Actual production for forecast, Actual production for committed demand), then the trading partner will not use the more aggregate Actual production order type, and vice versa. The same assumption holds for Planned

production versus (Planned production for forecast, Planned production for committed demand).

Posting demands and supplies to the Hub

There are three methods of getting information into Oracle Supply Chain Hub:

- Posting demands and supplies to the Hub manually
- Posting demands and supplies to the Hub using XML
- Posting demands and supplies to the Hub using flat file bulk upload

For all collaborative processes and all order types, the demand and supply data uploaded through flat file must be in a tab-delimited text file. This template could be downloaded from the "Admin" tab, under Demand/Supply, click the "Load Demand/Supply" link. On the **Load Transaction** page, click the "Click here if you need to download a spreadsheet template first" link. This enables you to download *Template.zip* which includes instructions for file upload in *readme.html* and sample files for loading data in different collaborations.

There are two parts to the tab delimited text file - the header portion and line level of the upload file. The upload file format is described below.

Header portion of the upload file

- Plan Name
- Sync Indicator
- Horizon Start Date
- Horizon End Date
- Status

Plan Name: Every demand and supply posted to the Hub must be associated with a plan name, which is the name of the collaboration relationship between a Buyer and Seller which was specified in the invitation process. Only one plan name is permitted per flat file upload. For order status visibility data, no plan name is required.

From the plan name, the Hub looks up the collaboration type (for example: collaborative demand planning, collaborative supply planning) and the trading partners involved (and as well as who plays the role of buyer and who plays the role of seller) and performs validation to ensure that only the authorized trading partners can post demands/supplies for the plan, and that each posts only demand/supply (order) types that are appropriate to its role as buyer or seller.

Sync Indicator: This is required and must be one of the following:

- **A: Add (*Simple insert*)** - When a document contains the "A" indicator, OSCH will check to see if the item already exists on the Hub. If it does not exist, then the

record is inserted. If it does exist, then OSCH will delete records with the same plan name, publisher org, item, order type, start date, bucket type, subscriber, order number, and end order number before inserting the record in the document to prevent duplicates.

- **C: Change** (Update rows depending on the item, start date, bucket type and order type) - When a document contains the sync indicator set to C, before a record is inserted OSCH checks if a record already exists with the same plan name, publisher org, subscriber org, item, start date, order type, order number, and end order number. If there is then the quantity and bucket type are updated. If there are no records matching the search, a new record is inserted on the exchange.
- **D: Delete** (Delete all rows for an item) - If a document contains the sync indicator set to D, the distinct items are selected from the document. For each item selected, all records belonging to the plan, publisher and item combination are deleted from the exchange. If the item that needs to be deleted is not present in the exchange an error message to that effect is sent to the user. If order number and end order number are specified then only those records that match the item, order number, and end order number criterion are deleted. If Horizon Start Date and Horizon End Date are specified with the D option, then only matching records within the date range are deleted.
- **R: Replace** (First delete all rows for the item and then insert the new rows coming in the document) - If a document contains the sync indicator set to R, the distinct items are selected from the document. For each item selected, all records belonging to the plan, publisher, item, order type, order number, and end order number are deleted. This step is performed for all the items listed in the document before inserting the new lines. This ensures that multiple lines with the same item can be sent in the document. In the event that the item is not found on the exchange, we simply insert the new record into the exchange tables.
- **Purge** (Purge all records for the plan name) - Purge is accomplished using the "P" indicator with no line rows. If only a header row exists with a "P" then all records in the Exchange with that plan name are deleted. If there are no records to purge, then the user is notified.

Horizon Start Date: This field is optional. The required format is YYYYMMDD HHMMSS. There is a single space between "YYYYMMDD" and "HHMMSS." If no value is entered, then the field is automatically populated with 01-Jan-1900.

Horizon End Date: This field is optional. The required format is YYYYMMDD HHMMSS. There is a single space between "YYYYMMDD" and "HHMMSS." If no value is entered, then the field is automatically populated with 31-Dec-2999.

Posting Data to the Hub

Status: This field is optional and can have one of two values, draft or published. If the user wants their trading partner to be notified then this field must be set to published. A value of draft in this field will have the same effect as leaving it blank.

Line Level of the upload file

Complete the following fields:

Table 2-5 Line Level Fields

1. Item number	2. Ship From Party Site Code
3. Order Type	4. Ship To Party
5. Quantity	6. Ship To Party Site Code
7. Start Date	8. Ship To Address
9. End Date	10. Tracking Number
11. Bucket Type	12. Bill of Lading Number
13. Subscriber Name	14. Carrier
15. Order Number	16. Vehicle #
17. End Order Number	18. Container Type
19. Comments	20. Container Qty
21. Publisher Name	22. Publisher Party Address
23. Order Release Number	24. Subscriber Party Address
25. Order Line Number	26. End Document Release Number
27. Order Date	28. End Document Line Number
29. Ship Date	30. End Order Publisher
31. Dock Date	32. End Order Document Type
33. Ship From Party	

These are some of the important fields at the line level of the upload file. The relevance of each field corresponds to the collaboration type chosen - and would be optional for that collaboration.

Item Number: This is your item number, as previously loaded into the Hub Catalog.

Order Type: Only one plan name and one order type is permitted per flat file upload. This must be one of the order types mentioned in this document. This field is case sensitive, all capitalization and spaces matter, so please be careful.

The rules for which order types go with which collaborative roles within each collaboration type are summarized below:

Table 2-6 Collaborative Roles

Collaboration Type	Collaborative Role	Permissible Order Type
Collaborative Demand Planning	Buyer	n Forecast
		n Purchase order
		n Historical sales
Collaborative Demand Planning	Seller	n Seller forecast
		n Sales order
		n Shipment notice
Collaborative Supply Planning	Buyer	n Committed demand
		n Forecast
		n Onhand
		n Purchase order
		n Historical Sales
Collaborative Supply Planning	Seller	n Intransit
		n Supplier capacity
		n Actual production
		n Actual production for forecast
		n Actual production for committed demand
		n Planned production
		n Planned production for forecast
		n Planned production for committed demand
		n Sales order
		n Shipment notice
Vendor Managed Inventory	Buyer	n Onhand
Vendor Managed Inventory	Seller	n Intransit
Customer Managed Inventory	Buyer	n Intransit
Customer Managed Inventory	Seller	n Onhand

Quantity: This is the demand or supply quantity.

Start Date: The required format is YYYYMMDD HHMMSS. There is a single space between "YYYYMMDD" and "HHMMSS."

End Date: The required format is YYYYMMDD HHMMSS. There is a single space between "YYYYMMDD" and "HHMMSS."

Bucket Type: The supported bucket types are: Day, Week, Month. Note the capitalization, as the validation is case-sensitive.

Note: Illustrative example at the end of the section.

Subscriber Name: This is the trading partner cross-reference name that your Company Administrator has established for your trading partner (the company that you wish to show data to) through the following navigation:

1. Click the "Admin" tab.
2. On the **Admin** page, under Trading Partners, click the "Set Trading Partner Cross-References" link.

After going through the above navigation and searching for your trading partner, the value to place in this field is the value in the column My Company to #exchange#.

Order Number: This field is optional. The order number of the transaction being uploaded goes here. For example, if a Buyer were to post a purchase order demand (purchase order number P123) upon a Seller, the order type would be set to "Committed demand" and the Order Identifier would be set to "P123."

End Order Number: This field is optional. This is the order number of the downstream order to which the transaction being uploaded is pegged. If a Seller were to post a sales order supply (sales order number S456) in response to a Buyer purchase order (number P123), the order type would be set to either "Planned production" or "Planned production for committed demand," the Order Identifier would be set to the "S456," and the End Order Identifier would be set to "P123."

Comments: This field is optional. You can enter comments.

Setup Notes for Posting Demands and Supplies to the Hub

Before supplies and demands can be uploaded to OSCH, the following steps must be completed:

1. Buyer uploads items to the Hub catalog.
 - a. Click the "Admin" tab.
 - b. On the **Admin** page, under Items, click the "Bulk Load Items" link.
 2. Seller uploads items to the Hub catalog.
 3. Buyer establishes trading partner cross-reference for seller.
 - a. Click the "Admin" tab.
 - b. On the **Admin** page, under Trading Partners, click the "Set Trading Partner Cross-References" link.
 4. Seller establishes trading partner cross-reference for buyer.
 5. Seller establishes item cross-references to indicate which of the buyer's items correspond to which of the seller's items. This step is multi-directional, the buyer can also establish a cross-reference. If the item is restricted, item-people assignments have to be done prior.
 - a. Click the "Admin" tab.
 - b. On the **Admin** page, under Items, click the "View Items" link. Then click "Item Search and Select," the "Alternate Item Identifiers" link.
 - c. Optionally, you can bulk load cross-references.
- See Chapter 2 for more information about bulk loading cross-referenced items.
6. Buyer/seller invites seller/buyer to participate in a collaborative demand planning plan or a collaborative supply planning plan.
 7. Seller/buyer accepts the invitation.
 8. Only one order type is permitted per flat file upload.
 9. Only one plan name is permitted per flat file upload.

Setup Notes for Time Buckets

CASE 1: As an input of

Start Date	End Date	Quantity	Bucket Type
20010713 000000	20010717 000000	300	Day

means

Date	Quantity
20010713 000000	300
20010714 000000	300
20010717 000000	300

because:

- Daily quantities are automatically replicated between the start and end dates.
- Saturdays and Sundays are automatically excluded (in accordance with the chosen OSCH 5-2 calendar.)

CASE 2: As an input of

Start Date	End Date	Quantity	Bucket Type
20010713 000000	20010723 000000	300	Week

means

Date	Quantity
20010710 000000	300
20010717 000000	300

because:

- Weeks start on Monday and end on Sunday.
- Weekly quantities are assumed to fall on the first day (Monday) of the week.
- The first week included is the week containing Start Date.

- The last week included is the week containing End Date.

CASE 3: As an input of

Start Date	End Date	Quantity	Bucket Type
20010731 000000	20010801 000000	300	Month

means

Date	Quantity
20010701 000000	300
20010801 000000	300

because:

- Months are calendar months.
- The first month that is included is the month containing Start Date.
- The last month that is included is the month containing End Date.

Posting Demands and Supplies to the Hub Manually

You can post demand or supply information to the Hub manually. You can only change the quantity for demands/supplies that are already in the Hub. You cannot change their dates, add new demands/supplies, or delete demands/supplies using the user interface. You edit demand/supply manually using the **Demand/Supply Detail** page. The navigation to get to this page depends on the collaboration type and your collaborative role (buyer or seller).

Table 2-7 Collaboration Types

Collaboration Type	Role	Change	Navigation
Demand Planning	Buyer	Forecast, Historical sales	Planning/Demand Planning/View Bucketed Forecast/Seller Forecast - Buyer
Demand Planning	Seller	Seller forecast	Planning/Demand Planning/View Forecast/Buyer Forecast - Seller
Supply Planning	Buyer	<ul style="list-style-type: none"> • Forecast • Committed demand • Onhand • Historical sales 	Planning/Supply Planning/View Supply/Demand - Buyer
Supply Planning	Seller	<ul style="list-style-type: none"> • Intransit • Supplier capacity • Actual production • Actual production for forecast • Actual production for committed demand • Planned production • Planned production for forecast • Planned production for committed demand 	Planning/Supply Planning/View Demand/Supply - Seller
Vendor Managed Inventory	Buyer	Onhand	Planning/Inventory Planning/Vendor Managed Inventory - Buyer
Vendor Managed Inventory	Seller	Intransit	Planning/Inventory Planning/Vendor Managed Inventory - Seller
Customer Managed Inventory	Buyer	Intransit	Planning/Inventory Planning/Customer Managed Inventory - Buyer
Customer Managed Inventory	Seller	Onhand	Planning/Inventory Planning/Customer Managed Inventory - Seller

Setup Notes for Posting Demands and Supplies to the Hub Manually

1. On the **Demand/Supply Detail** page, specify any relevant search criteria (for example, plan name, trading partner, date range, order type), then click "Go." The individual demand/supply orders that match the search criteria will be displayed. You may edit the quantities, and then click "Apply Changes" to save your edits.
2. It is possible to drill down to the **Demand/Supply Detail** page from the **Bucketed Demand/Supply** pages. For example, in Collaborative Supply Planning, as a buyer, clicking on an individual forecast number in the **Bucketed Demand/Supply** page (Planning/Supply Planning/Bucketed View - Buyer) calls up the **Demand/Supply Detail** page, with the search criteria for plan name, order type, and date range pre-populated, so that you see only the individual demand/supply orders that comprise the forecast number that you selected.
3. For Collaborative Demand Planning and Collaborative Supply Planning only, after completing your manual edits, you must update your company's plan status to "Published" to signal to your trading partner that it is their turn to post information.

Posting Demands and Supplies to the Hub Using XML

Oracle Supply Chain Hub enables participant trading partners to establish and maintain robust electronic relationship among them by communicating transaction documents in XML through the Hub. The Hub is capable of receiving as well as sending industry standards compliant XML documents for most of the business transactions, making it a perfect suit for both intra- and inter-enterprise integration.

Any marketplace participant can upload various data and transaction documents to the Hub. Based upon publishers and viewers of such documents, inbound XML transactions can be classified into four categories.

- Demand Inbound
- Supply Inbound
- Sequence Schedule Demand Inbound/Outbound
- Real-time Inventory Availability/Pricing Check Inbound

Demand Inbound: You use demand inbound transactions in Collaborative Demand Planning, Collaborative Supply Planning, and Supply Chain Order Visibility functionality. It incorporates all types of demand data within your plan.

Supply Inbound: You use supply inbound transactions to load data for Collaborative Supply Planning functionality on the Hub. It incorporates all types of supply data for your plan.

Sequence Schedule Demand Inbound/Outbound: Oracle Supply Chain Hub supports the sharing of scheduling data among participant companies. Typically, the buyer company provides a sequence schedule to the seller company. The system sends a sequence schedule transaction to individual suppliers as sequence schedule outbound transactions.

Real-time Inventory Availability Check Inbound: This transaction enables Oracle Exchange to allow buyers to obtain availability and updated pricing information from suppliers.

Oracle Supply Chain Hub uses Oracle Message Broker product and Advanced Queuing feature of Oracle 8i Database to receive XML files. These parsing process is handled by Oracle XML gateway.

Upload data formats in Supply Chain Hub

Table 2-8 Data Formats

Transaction Document	ASCII Flat File Upload	XML Upload
Forecast	Yes	Yes
Seller Forecast	Yes	Yes
Historical Sales	Yes	Yes
Committed Demand	Yes	Yes
Onhand	Yes	Yes
Intransit	Yes	Yes
Supplier Capacity	Yes	Yes
Safety Stock	Yes	Yes
Actual Production	Yes	Yes
Actual Production for Forecast	Yes	Yes
Actual Production for Committed Demand	Yes	Yes
Planned Production	Yes	Yes
Planned Production for Committed Demand	Yes	Yes
Planned Production for Forecast	Yes	Yes
Purchase Order	Yes	Yes
Sales Order	Yes	Yes
Shipment Notice	Yes	Yes
Shipment Request	Yes	Yes
Production Sequence Schedule	No	Yes

See Appendix A for more information about sample XML transaction data.

Demand inbound file in XML format

XML communication of the following demand inbound transaction files are supported by Oracle Supply Chain Hub.

- Forecast
- Seller forecast
- Historical Sales
- Purchase Order

See Appendix A for more information about the specific detail elements of the XML demand transaction file.

Supply inbound file in XML format

Oracle Supply Chain Hub supports the following XML communications for supply inbound transaction files:

- Committed demand
- Onhand quantity
- Intransit quantity
- Supplier capacity
- Actual production
- Actual production for forecast
- Actual production for committed demand
- Planned production
- Planned production for forecast
- Planned production for committed demand
- Sales order
- Shipment notice

See Appendix B for more information about the specific detail elements of the XML supply transaction file.

Sequence Schedule transaction file in XML format

OSCH supports both inbound and outbound sequence schedule transaction files using an XML communication format. The purpose of a sequence schedule document is to enable the Hub to process that information among trading partners, thereby authorizing a sequenced shipment of parts for a specific trading partner and address. Commonly, the sequence schedule is generated by a work in process application and transmitted to an order or material planning application.

XML transaction documents carrying schedule information are identified by use of key word SYNC as VERB and PSQI as NOUN.

The structure of a sequence schedule transaction document contains following components:

1. **SEQSCHDHD** - Information that applies to the entire sequence schedule. This data type is required.
2. **PARTNER** - Partner information; name, currency, payment method, etc. This data type is required.
3. **ADDRESS** - Partner location information. This data type is optional.
4. **CONTACT** - Name, telephone and other information to contact people associated with the PARTNER. This data type is optional.
5. **SEQSCHDDT** - Date and time information
6. **SEQSCHDLN** - The item ordered along with quantity, delivery date and other schedule information. At least one occurrence of this data type is required for each occurrence of the SEQSCHDHD. This data type is required.

See Appendix C for more information about the specific detail elements of the XML sequence schedule transaction file.

Real-time Inventory Availability/Pricing Check:

For performing a real-time inventory or updated price check, Oracle Supply Chain Hub communicates with suppliers' servers based on buyers' request. This gives rise to two sets of transactions namely:

Availability inquiry from Hub to Supplier

- n This transaction document is used by the Hub to request Available-To-Promise information from the supplier. Suppliers server need to process this XML document and pass the Item, Quantity, Need-By-Date, etc. to the internal ATP process.

Availability response from supplier to Hub

- ⁿ This transaction document is used by the supplier to send the response to Availability inquiry by Hub. Supplier should provide fulfillment date (date by which it can ship each quantity requested by the buyer), and optionally the updated price through this XML document.
- ⁿ In order to map the response information to the correct request, it is required that LOGICALID under SENDER section and ITEM under the DATAAREA be the same as in the inquiry document sent by the Hub.

See Appendix D for more information about sample transactions for availability inquiry and availability response.

Posting Demands and Supplies to the Hub Using Flat File Bulk Upload

In collaborative demand planning, transaction data export to a tab-delimited flat file is supported from the **Order Detail** page.

To post demands to the Hub using flat file bulk uploading, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Planning" tab.
3. On the **Planning** tab, under Demand Planning, click the "View Forecast/Seller Forecast - Buyer" or "View Forecast/Buyer Forecast - Seller" link.
4. On the **Demand Detail** page, specify any relevant search criteria (for example, plan name, trading partner, date range, order type), then click "Go." The individual demand/supply orders that match the search criteria are displayed.
5. Click "Export."

In collaborative supply planning, transaction data export to a tab-delimited flat file is also supported from the **Order Detail** page.

To post supplies to the Hub using flat file bulk uploading, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Planning" tab.
3. On the **Planning** tab, under Supply Planning, click the "View Supply/Demand - Buyer" or "View Demand/Supply - Seller" link.
4. On the **Supply Detail** page, specify any relevant search criteria (for example, plan name, trading partner, date range, order type), then click "Go." The individual demand/supply orders that match the search criteria are displayed.
5. Click "Export."

Viewing Formats

Depending on your needs, you can customize a view. Supply Chain Hub contains the following view preferences:

- n Detailed or Vertical Views
- n Horizontal or Bucketed views
- n User preferences - defining demand/supply viewing formats
- n Graphical Options

Detailed Views or Vertical Views

In collaborative demand planning and collaborative supply planning, in the **Demand/Supply Detail** page, you can select a plan or specify any relevant search criteria (for example, plan name, trading partner, date range, order type), then click "Go." The individual demand/supply orders that match the search criteria will be displayed.

Horizontal or Bucketed Views

In collaborative demand planning and collaborative supply planning, you can view demands and supplies in time-bucketed form.

1. Click the "Planning" tab.
2. On the **Planning** page, under Demand Planning, click the "View Bucketed Forecast/Seller Forecast - Buyer" link.
3. Or on the **Planning** page, under Demand Planning, click the "View Bucketed Forecast/Buyer - Seller" link.
4. Or on the **Planning** page, under Supply Planning, click the "View Bucketed Supply/Demand - Buyer" link.
5. Or on the **Planning** page, under Supply Planning, click the "View Bucketed Demand/Supply - Seller" link.

Figure 2-1 Bucketed View

Exchange Name

Home Log Off My Exchange Shopping Cart Conference Help

Welcome Exceptions Intelligence Planning Orders Admin

View Item/Category and Seller

using Preference Set and Graphing Option

From Date

Limit To Under-supply Exceptions Over-supply Exceptions [Search Tips](#)

Note : To ensure rapid response, please enter search criteria

Company: **Symonds Assembly** Current Plan: **SYNKSP3** Last Plan Date: **23-Apr-2001 03:06:02**

[View Supply / Demand - Buyer](#) > [View Bucketed Forecast / Seller Forecast - Buyer](#) > [View Bucketed Supply / Demand - Buyer](#)

View Bucketed Supply / Demand - Buyer

Select material shortages and ...

Sort by Ascending Descending 1 - 2 shown of 2

Seller	Item	26-Mar-2001	27-Mar-2001	28-Mar-2001	29-Mar-2001	30-Mar-2001	02-Apr-2001	03-Apr-2001	04-Apr-2001	05
Nike Manufacturing	SYMONDS900 (SYMONDS900) NIKE900 (NIKE900)									
Nike Manufacturing	SYMONDS909 (SYMONDS909) NIKE909 (NIKE909)									

User Preferences - Defining Demand/Supply Viewing Formats

In Collaborative Demand Planning and Collaborative Supply Planning, you can view demands and supplies in time-bucketed form. Display preferences for all of these views can be invoked by selecting the appropriate Preference Set name from the drop-down menu at the top of each of these views.

To define a display preference:

1. Click the "Admin" tab.
2. On the **Admin** page, under Collaboration Management, click the "User Preferences" link.
3. On the **Supply Chain User Preference Sets** page,
 - a. You can select an existing preference set from the drop-down list and click Load Set. This allows you to modify the parameters of an existing preference set and then either save those back to the same preference set or to a new preference set. Otherwise, just type over the values in the fields below. You have the option of either writing over an existing preference set with your changes or saving your changes to a new preference set.

- b.** Set the Display Time Buckets. A setting of 60 days, 12 weeks, seven months means that you will see the first 60 working days of demand/supply in daily buckets, followed by the next 12 weeks of demand/supply in weekly buckets, followed by monthly buckets for the remainder of the demand/supply data.
 - n** A week starts on Monday and ends on Sunday. If the end of the daily time buckets falls in the middle of a week, then #Exchange# automatically adds in extra days so that the first of the weekly time buckets can start on a Monday. In the above example, say that the 60th day is Wednesday 02-Aug-2000 and the planning calendar is a "5-2" calendar (Saturdays and Sundays off). OSCH automatically adds in Thursday 03-Aug-2000 and Friday 04-Aug-2000, so that the first of the 12 weeks can start on Monday 07-Aug-2000.
 - n** A month is a calendar month: for example, 01-Aug-2000 through 31-Aug-2000. If the end of the weekly time buckets falls in the middle of a month, OSCH automatically adds in extra weeks (including a short, truncated week if necessary) to allow the first monthly period to start on the first day of a calendar month. In the above example, say that the last of the 12 weeks ends on Sunday 29-Oct-2000. #Exchange# automatically adds in a truncated week of Monday 30-Oct-2000 through Tuesday 31-Oct-2000, so that the first of the 7 months can start on Wednesday 01-Nov-2000.
- c.** Set the Product Aggregation.
 - n** Item means show demand/supply at the individual item level.
 - n** Category (Level 1) means show demand/supply at the product family level. Demand/supply are summed by category and only the category demand/supply totals are displayed.
- d.** Set the Company Aggregation.
- e.** Select the Order Types to be displayed: Please use ctrl-click to select multiple order types. The complete list of available order types is:
 - n** Onhand
 - n** Intransit
 - n** Historical sales
 - n** Forecast
 - n** Seller forecast
 - n** Committed demand

- „ Purchase orders
 - „ Running total historical sales
 - „ Running total forecast
 - „ Running total demand
 - „ Supplier capacity
 - „ Safety stock
 - „ Actual production
 - „ Actual production for forecast
 - „ Actual production for committed demand
 - „ Planned production
 - „ Planned production for forecast
 - „ Planned production for committed demand
 - „ Sales orders
 - „ Running total supply
- f.** To use a preference set for Collaborative Demand Planning, the order types selected should be Forecast and Seller forecast. This is not enforced.
- g.** To use a preference set for Collaborative Supply Planning, Buyer and Seller should first agree (off-line) on the set of order types for which they would like to share data, and then each should select the agreed-upon order types from the list in defining their own preference sets.
- h.** Select the default sort order: Valid sort keys are:
- „ Item/Category
 - „ Item Description/Category Description
 - „ Trading Partner.
- i.** Save the preference set: Click the "Save Set" button at the top of the page. You have the option of either replacing an existing preference set with your changes or saving your changes to a new preference set.

Graphical Options

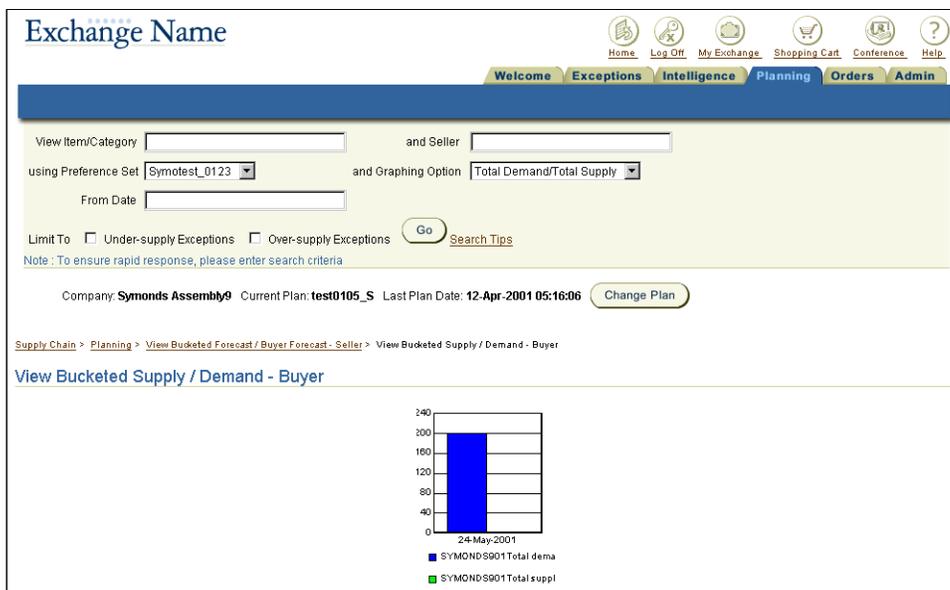
There are three graphing options for viewing in the horizontal or bucketed view. These are:

- n Total Demand / Total supply
- n Customized graph
- n No graph

Total Demand/Total Supply graph

In the graphing option tab, choose total demand/total supply option. This would generate a graph of the total demand to the total supply for the plan specified.

Figure 2–2 Total Demand/Total Supply Graph



Custom graphing option

By selecting the custom graph option, the user would be able to specify which items he wanted charted together. You can select the information to be graphed by checking the boxes you want to graph in the horizontal view. After checking the boxes, click "Generate custom graph." Here is an example where Forecast, Running total demand, and Running total forecast are graphed together.

No graph

The system does not display a graph of any kind.

3

Initial Setup of Collaborations

Topic covered in this chapter include:

- [Setting Up Collaborations](#) on page 3-2

Setting Up Collaborations

There are the five supported types of inter-enterprise collaboration processes on the Supply Chain Hub. These are:

- Collaborative Demand Planning
- Collaborative Supply Planning
- Vendor Managed Inventory
- Customer Managed Inventory
- Production Sequencing

What are the pre-requisites before you begin collaborating with your trading partner?

1. (Required) Obtain the required Hub roles. You need to have the proper Hub roles assigned to you to access the functions within the Supply Chain application. You also need the proper roles to load items, establish item cross-references, and perform other essential Supply Chain setup tasks.
2. (Required) Load your items.
3. (Required) Establish item cross-references. This step enables Oracle Supply Chain Hub to map demands and supplies that you specify in terms of your own item numbers to demands and supplies in terms of your trading partner's item numbers (when your trading partner views the data that you have posted to the Hub). Conversely, when your trading partner posts demand or supply information for you on the Hub, item cross-referencing enables you to view that information in terms of your own item numbers.
4. (Required) Establish trading partner cross-references. Create the relationship between the codes that you use as designators for your trading partners in your internal systems (and in flat files and XML documents that you upload to Hub) and the trading partner names as they are registered on the Hub.
5. (Optional) Assign users to items. Users that are assigned to items receive notifications generated by Oracle Supply Chain Hub about those items. If no users are assigned to an item that is the subject of a Supply Chain notification, the notification goes to the company administrator of the appropriate trading party.

For an item designated during the item load process as a secured item, you need to explicitly assign users from your trading partner to the item. Only then will your trading party be able to establish an item cross-reference to your item.

6. (Required) Buyer/seller invites seller/buyer to participate in a collaborative demand planning plan or a collaborative supply planning plan or the other types of plans as mentioned above.
7. (Required) Seller/buyer accepts the invitation.

Collaborative Demand Planning

The audience for this section are consultants, supply chain planners, buyers, sellers, purchasing managers, and sourcing managers.

Competitive pressures are driving businesses to become more responsive to changing customer demand. By working together, customers and suppliers can strike the balance between carrying enough inventory to fulfill consumer demand while limiting inventory buildups.

True collaboration in the demand planning process is often elusive because of the cross-functional issues of joint planning and information objectives as well as the lack of tools and technologies to connect and integrate groups that forecast demand with the planning and supporting operational systems. To meet this business requirement, Oracle Supply Chain Hub offers Collaborative Demand Planning that can break down the organizational barriers for collaboration in managing demand. Collaborative Demand Planning provides visibility to information, speeds up the information flow, electronically monitors processes, converts large volumes of data into personalized views of meaningful information, and electronically alerts participants to exceptions.

Collaborative Demand Planning is particularly suitable for business relationships in which both buyers and sellers hold unique information that can drive demand. For example, in the retail sector, a store (buyer) and a manufacturer (seller) may both plan promotions that will drive demand. The store and the manufacturer may use Collaborative Demand Planning on the Supply Chain Hub to provide each other with visibility to their separate forecasts (each based on internal promotion information) and then drive the two forecasts to convergence.

The outcome of Collaborative Demand Planning is a reliable demand forecast which requires less adjustment in the future. The extended supply chain has fewer changes to react to, and the "bull-whip effect" (in which small changes in one tier of a supply chain are magnified greatly in upstream supply chain tiers) is minimized.

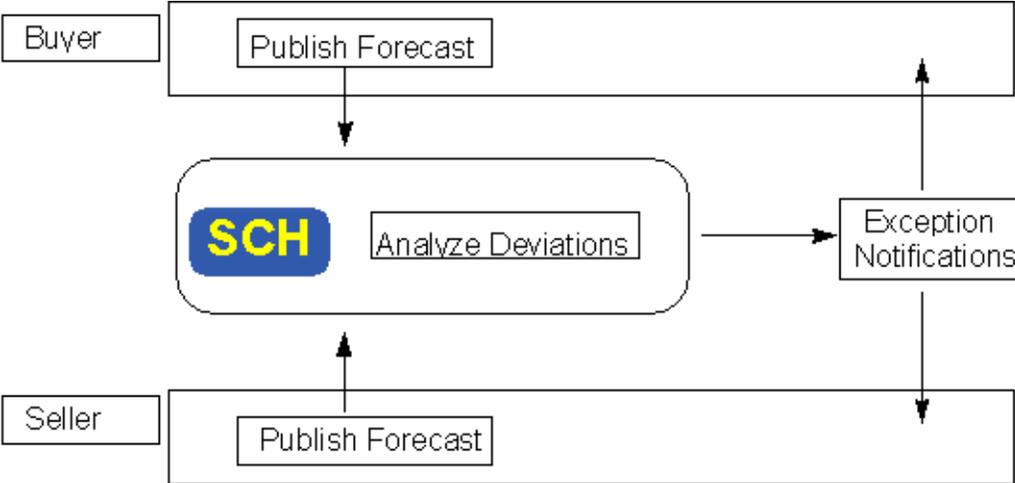
Industries such as Consumer Product Goods (CPG) and Retail, High-Technology, Electronics, and Telecommunications are accelerating their move to more demand-driven, pull environments to respond to customer demand. Other industries and businesses are about

to follow, making forward-looking demand management more important than history-based forecasting.

In Collaborative Demand Planning, both buyer and seller trading parties post demand forecasts to Oracle Supply Chain Hub (OSCH). Notifications are sent when the actual forecast deviates more than a specified percentage from the reference forecast so that the discrepancies can be driven down to zero as rapidly as possible. An overview of the process is as follows.

- 1. Buyer invites seller (or vice versa) to a demand planning collaboration.
- 2. Trading partner accepts the invitation.
- 3. Buyer posts forecast. (The buyer can also post historical sales to the seller in a demand planning collaboration.)
- 4. Seller posts seller's forecast.
- 5. SCH flags discrepancies and notifies trading partners.
- 6. Buyer/seller adjust forecast to resolve discrepancies.

Figure 3-1



Considerations for collaborative demand planning are as follows:

Permissible order types

Demand planning supports the following order types:

Table 3-1 Demand Plan Permissible Order Types

Collaboration Type	Collaborative Role	Permissible Order Type
Collaborative Demand Planning	Buyer	Forecast, Historical sales
Collaborative Demand Planning	Seller	Seller forecast

Define tolerances

These are the tolerances that need to be defined in the invitation process for Collaborative Demand Planning. These help identify forecast mismatches and enables discrepancies to be driven down to zero as rapidly as possible.

1. Demand threshold

- n Demand threshold calculates how much of a percentage difference between buyer forecast and seller forecast ($|(\text{buyer forecast} - \text{seller forecast})/\text{buyer forecast}| \times 100$) constitutes an exception.
- n Exception Count for collaborative demand planning is the number of time buckets (possibly mix of daily, weekly, monthly time buckets, as defined during the collaboration invitation process) in which absolute value of $(1 - (\text{Seller forecast}/\text{Forecast})) > \text{Demand Threshold}$.

2. Exceptions target upper limit.

- n This is an indicative number for the total number of exceptions that the users expect from the demand planning collaboration. This is specified during the invitation process
- n The exceptions target upper limit is displayed for comparison alongside the actual measurement of number of exceptions when you access the Exceptions functionality of Oracle Supply Chain Hub.

3. Convergence latency upper limit

- n Convergence latency is the time between when demand/supply information is first posted to the plan and when the number of exceptions for the plan drops down to zero.

- For continuing collaborations, it is the time between the first posting of demand/supply information to the plan after the number of exceptions reaches zero and the next time the number of exceptions reaches zero.
- The convergence latency upper limit is specified by the user during the invitation process. This number is indicative of what the user expects the convergence latency to be in that specific collaboration.
- This target value is displayed for comparison alongside the actual measurement of convergence latency when you access the performance measurement (Intelligence) functionality of Oracle Supply Chain Hub.

Note: Exception target upper limit and Convergence latency upper limit are only indicative figures and do not influence the OSCH software behavior. They are used to only to provide reference values during display of performance metrics.

Business Process

The steps in Collaborative Demand Planning are as follows: (These assume that the steps described in preparing for collaboration and inviting trading partners to collaborate have taken place.)

1. Buyer and Seller define preference sets that specify how they will view data on the Hub.
2. Buyer uploads forecast to the Hub, tagged with the name of a "plan" that represents the specific collaborative relationship that the buyer has set up with the seller or that the seller has set up with the buyer. This can be done through XML, bulk load of flat files (Admin>Demand/Supply/Load demand/supply), or if a forecast already exists in the Hub, the buyer can manually update the forecast. The buyer can also post historical sales to the seller in a demand planning collaboration.
3. Buyer updates their company's plan status to "Published" to provide the seller an opportunity to post data to the Hub.
4. The seller uploads a forecast to the Hub. The seller updates their company's plan status to "Published" to provide the seller with an opportunity for the buyer to post data to the Hub.

To view buyer and seller forecasts as a buyer, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Planning" tab.

3. On the **Planning** page, under Demand Planning, click the "View Bucketed Forecast/Seller Forecast - Buyer" link.
4. Buyer selects appropriate plan to view.
5. Buyer selects appropriate preference set to use.
6. Buyer clicks "Go."
7. Buyer drills down to order detail by clicking on the bucketed forecast quantities, the item names or the trading partner names.

To view The seller views buyer and seller forecasts on the Hub.

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
 2. Click the "Planning" tab.
 3. On the **Planning** page, under Demand Planning, click the "View Bucketed Forecast/Buyer Forecast - Seller" link.
 4. Seller selects appropriate plan to view.
 5. Seller selects appropriate preference set to use.
 6. Seller clicks "Go."
 7. Seller drills down to order detail by clicking on the bucketed forecast quantities, the item names or the trading partner names.
5. The Hub compares the buyer forecast to the seller forecast, and triggers exception notifications to the buyer and seller.
 - For Collaborative Demand Planning, an exception is generated whenever absolute value of $(1 - (\text{Seller forecast}/\text{Forecast})) > \text{demand threshold}$ in any of the daily, weekly, monthly time buckets defined during the collaboration invitation process. The demand threshold is defined during the collaboration invitation process.
 6. The buyer and seller view notifications to find out about collaborative demand planning exceptions, drilling down from notification detail to forecast detail as necessary.
 7. Based on the exceptions encountered, the buyer and seller revise forecasts and continue to post those to the Hub.
 8. The buyer and seller closely monitor the performance of the collaboration.
 9. At any time, the buyer or seller may designate their company's plan status as "Approved." This indicates that either the buyer or seller is satisfied with the results of the collaboration and does not expect further input from the other trading party.

However, as the external situation changes over time, either buyer or seller may resume posting data to the Hub and soliciting responses from the other party.

10. At any time, the buyer or seller may designate their company's plan status is "Closed." This permanently disables the plan from further update and ends the collaboration. After a designated number of days, the transaction data related to the plan is purged from the Hub database.

Notifications

The Supply Chain Hub communicates information between buyers and sellers on new invitations, status of the data uploaded for the collaboration, and forecast mismatches to buyers and sellers via Notifications.

Notifications consist of general notifications and forecast mismatch notifications (also called as exceptions). The exceptions explains the forecast mismatch notifications in greater detail. This section covers the general notifications.

To view notifications generated for the demand planning collaboration, complete the following:

1. Click the "My Hub" icon at the top of the screen.
2. In the table on the right top corner, you will find All Open Notifications. All new invitations are listed here.
3. Optionally, you can click the "Manage my list" link under Hub Transactions table on the left hand side. Click the notification title to view the notification detail.
4. Notifications pertaining to Collaborative Demand Planning to the buyers/seller appear here. These are:
 - a. Supply Chain Collaboration invitation from <Trading Partner>
 - b. Supply Chain Collaboration invitation accepted by <Trading Partner Name>
 - c. The following plan <Plan Name> requires your input
 - d. Status of the file uploaded on <Date> for Plan <Plan Name>
 - e. Supply Chain Exceptions for Plan <Plan Name>
5. Links inside the notification alert you to general classes of problems that you have. Click on the links to proceed to a screen where you will be able to see problem detail. This procedure isolates areas where you need to resolve problems and promotes timely decision-making across the extended supply chain.

Exceptions (Planning/Demand Planning/Exceptions)

Exceptions are notifications that call your attention to issues that require resolution. It is considered an exception if the actual process does not match with the required process. These ensure that decision-making within the extended supply chain is focused, occurs in a timely manner, and makes the supply chain more responsive.

Forecast Mismatch exceptions (notifications) that are generated in Collaborative Demand Planning for the given plan, item and time bucket combination. There are two ways of accessing the forecast mismatch information - through a message in the My Hub section (explained in the previous section) or through the Exceptions UI.

- For Collaborative demand planning, exceptions fall under the group Forecast Mismatch. The following are the exception types for this category:

As a buyer, the exception types are:

- * Suppliers Forecast is Less than Your Forecast
- * Suppliers Forecast is Greater than your Forecast

As a supplier, the exception types are:

- * Customers Forecast is Greater than Your Forecast
- * Customers Forecast is Less than Your Forecast

- For Collaborative Demand Planning, an exception is generated whenever absolute value of $(1 - (\text{Total seller forecast}/\text{Total forecast})) > \text{Demand Threshold}$ in any of the daily, weekly, monthly time buckets defined during the collaboration invitation process. The demand threshold is defined during the collaboration invitation process.
- The exception count is the total number of time buckets (possibly mix of daily, weekly, monthly time buckets, as defined during the collaboration invitation process) in which absolute value of $(1 - (\text{Total seller forecast}/\text{Total forecast})) > \text{Demand Threshold}$.

To view the exceptions, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Planning" tab.
3. On the **Planning** page, under Demand Planning, click the "Exceptions" link.
4. Select the plan name for which you want to see the exceptions.
5. You will see the forecast mismatch exception group summary which shows you the count for the number of exceptions in this category. Click the "Exception group name" link. You will see the exception types and counts for this category.

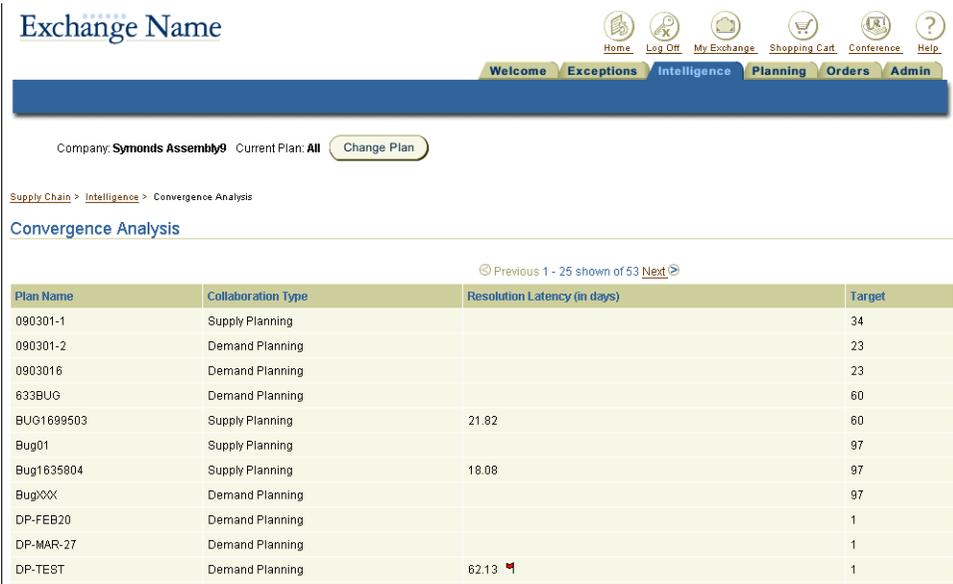
6. Click the "Exception type" link to proceed to the page where you can view the orders related to this exception with following details:
 - n Supplier (Customer)
 - n Bucket start date
 - n Bucket end date
 - n Item number
 - n Item description
 - n Total supply in time bucket
 - n Total demand in time bucket
 - n Threshold

Intelligence

To view the intelligence information for demand planning collaborations, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Intelligence" tab.
3. On the **Intelligence** page, under Collaboration, click "Convergence Analysis." The system displays the convergence analysis based on the Convergence Latency value specified during the invitation process.
4. You can click the "Change Plan" button to view the convergence latency for a specific plan.

Figure 3-1 Intelligence



Example of Demand Planning Collaboration

In this example, Vision Corp. and Allied Manufacturing have a demand planning collaboration for items Vision Pad DX and Vision Pad LX.

- The trading partner and item cross references are established for both parties, and the users are identified as:
 - Buyer: Vision Corp., visionbuyer1, AS66312 Vision Pad LX
 - Seller: Allied Manufacturing, alliedseller1, PD45101 PDA/DX, PD45102 PDA/LX
- The name of the plan is Demand_VC1 and the preference set being used is Demand_VC1_week.
- There are no forecast mismatches for the week of March 12 and March 19.
- For the item AS66311, the buyer forecast is greater than the seller forecast from the week of March 26 - and is visually represented by a red flag. A notification is also sent to the buyer and seller contracts for the items.

Setting Up Collaborations

5. For the item AS66312, the buyer forecast is less than the seller forecast for the week of April 9, and is represented by a white flag. In addition a notification is also generated.
6. An exception is generated whenever absolute value of $(1 - (\text{Seller forecast}/\text{Forecast})) > \text{Demand Threshold}$ in any of the daily, weekly, monthly time buckets defined during the collaboration invitation process.

Figure 3–2 Bucketed Forecast/Seller Forecast - Buyer

Exchange Name

Home Log Off My Exchange Shopping Cart Conference Help

Welcome Exceptions Intelligence Planning Orders Admin

View Item/Category and Seller

using Preference Set and Graphing Option

From Date

Limit To Under-supply Exceptions Over-supply Exceptions [Search Tips](#)

Note : To ensure rapid response, please enter search criteria

Company: **Symonds Assembly** Current Plan: **PK_DEM5** Last Plan Date: **02-Apr-2001 07:03:37**

[Supply Chain](#) > [Planning](#) > View Bucketed Forecast/ Seller Forecast - Buyer

View Bucketed Forecast / Seller Forecast - Buyer

Select material shortages and ...

Sort by Ascending Descending 1 - 1 shown of 1

Seller	Item	03-Apr-2001	04-Apr-2001	05-Apr-2001	06-Apr-2001	09-Apr-2001	10-Apr-2001	11-Apr-2001
Slazenger Manufacturing	SYMONDS900 (SYMONDS900) SLAZENGER900 (SLAZENGER900)							

Collaborative Supply Planning

The audience to this section are consultants, supply chain planners, buyers, sellers, purchasing managers, and sourcing managers.

Oracle Supply Chain Hub offers Collaborative Supply Planning that breaks down the organizational barriers for collaboration in managing demand and supply. Collaborative Supply Planning helps enterprises carry out collaborative supply chain planning activities with their business partners. Thus, the system uses relevant input from business partners to generate optimized plans based on data from the supply network.

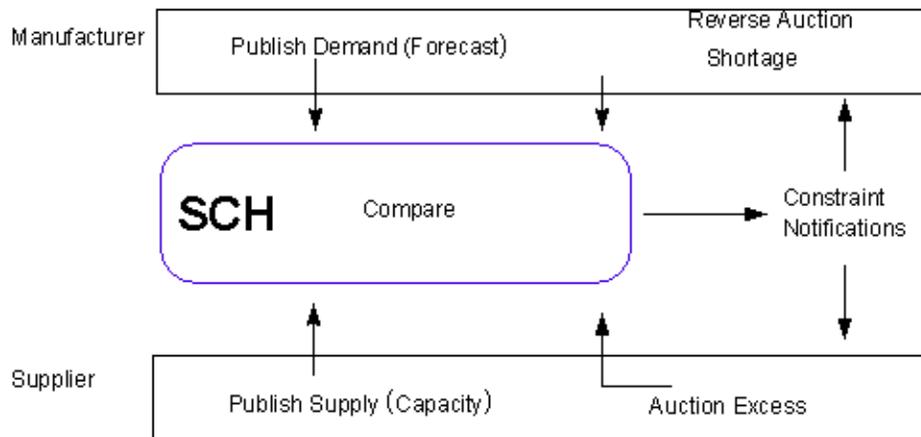
Collaborative Supply planning can provide visibility to information, speed up the information flow, electronically monitor processes, convert large volumes of data into personalized views of meaningful information, and electronically alert participants to exceptions.

Within Collaborative Supply Planning the manufacturer and supplier exchange information on the material requirements of the manufacturer, the supply schedules of the supplier and they collaborate on exceptions. This type of collaboration enables both the manufacturer and supplier to create more accurate supply network and production plans. The plans can be updated regularly based on information shared over the Internet. This is a business-to-business workflow, with data exchanged dynamically that is designed to decrease inventory. The outcome of Collaborative Supply Planning is identification and speedy resolution of any supply chain constraints.

In Collaborative Supply Planning, both buyer and seller trading parties post supply forecasts to Oracle Supply Chain Hub (OSCH). Notifications are sent when the actual forecast deviates more than a specified percentage from the reference forecast so that the discrepancies can be driven down to zero as rapidly as possible. An overview of the process is as follows:

1. Buyer invites seller (or vice versa) to a Supply planning collaboration.
2. Trading partner accepts the invitation.
3. Buyer posts demand data.
4. Seller posts supply schedules.
5. SCH flags discrepancies and notifies trading partners.
6. Buyer/seller adjust information to resolve discrepancies.
7. The buyer can generate a reverse negotiation (auction) in case of an item shortage
8. The seller can generate an auction for an-item-excess.

Figure 3-3



Permissible order types

Supply planning supports the following order types:

Table 3-2 Supply Plan Permissible Order Types

Collaboration Type	Collaborative Role	Permissible Order Type
Collaborative Supply Planning	Buyer	Committed demand
		Forecast
		Onhand
		Purchase order
		Historical sales
Collaborative Supply Planning	Seller	In transit
		Supplier capacity
		Actual production
		Actual production for forecast
		Actual production for committed demand
		Planned production
		Planned production for forecast
		Planned production for committed demand
		Sales order
		Shipment notice

Define tolerances

Tolerances need to be defined in the invitation process for Collaborative Supply Planning. These help identify forecast mismatches and enable discrepancies to be driven down to zero as rapidly as possible.

1. Supply threshold

- Supply threshold is a target percentage difference between total demand and total supply. A value $(| \text{total demand} - \text{total supply} | / \text{total demand} \times 100)$ that is beyond the target constitutes an exception.
- Exception Count for collaborative supply planning is the number of time buckets (possibly mix of daily, weekly, monthly time buckets, as defined during the collaboration invitation process) in which absolute value of $(1 - (\text{total supply} / \text{total demand})) > \text{Supply Threshold}$.

2. Exceptions target upper limit.
 - n An indicative number for the total number of exceptions that you expect from the Supply planning collaboration. You specify this during the invitation process.
 - n The exceptions target upper limit is displayed for comparison alongside the actual measurement of number of exceptions when you access the exceptions functionality of Oracle Supply Chain Hub.
3. Convergence latency upper limit
 - n Convergence latency is the time between when supply/supply information is first posted to the plan and when the number of exceptions for the plan drops down to zero.
 - n For continuing collaborations, it is the time between the first posting of supply/supply information to the plan after the number of exceptions reaches zero and the next time the number of exceptions reaches zero.
 - n The convergence latency upper limit is specified by the user during the invitation process. This number indicates what you expect the convergence latency to be in that specific collaboration.
 - n This target value is displayed for comparison alongside the actual measurement of convergence latency when you access the performance measurement (Intelligence) functionality of Oracle Supply Chain Hub.

Note: Exception target upper limit and Convergence latency upper limit only indicate figures and do not influence the SCH software behavior. You only use these to provide reference values during display of performance metrics.

Business Process

The steps in Collaborative Supply Planning are as follows: (These assume that the steps described in preparing for collaboration and inviting trading partners to collaborate have taken place.)

1. The buyer and seller define preference sets that specify how they will view data on the Hub.
2. The buyer uploads a forecast to the Hub, tagged with the name of a "plan" that represents the specific collaborative relationship that the buyer has set up with the seller or that the seller has set up with the buyer. This can be through XML upload, bulk load of flat files, or if a forecast already exists in the Hub, the buyer can manually update the

forecast through the Hub user interface. The buyer updates the buyer company's plan status to "Published," to inform the seller that it is now the seller's turn to post data to the Hub.

3. The buyer can upload data for the following order types and make them visible to the seller:
 - Forecast
 - Committed demand
 - Onhand
 - Purchase order
4. The seller uploads supply data to the Hub. The seller updates the seller company's plan status to "Published," to inform the buyer that it is now the buyer's turn to post data to the Hub.
5. The seller can upload data for the following order types and make them visible to the buyer.
 - Onhand
 - Planned production
 - Planned production for forecast
 - Planned production for committed demand
 - Actual production
 - Actual production for forecast
 - Actual production for committed demand
 - Supplier capacity
 - Safety stock
 - Intransit
 - Sales order
 - Shipment notice

To view demand and supplies as a buyer, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Planning" tab.

3. On the **Planning** page, under Supply Planning, click the "View Bucketed Supply/Demand - Buyer" link.
4. Buyer selects appropriate plan to view.
5. Buyer selects appropriate preference set to use.
6. Click "Go."
7. Drill down to the order detail information by clicking on the bucketed demand quantities, the item names or the trading partner names.

The seller views demands and supplies on the Hub using the following procedure:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
 2. Click the "Planning" tab.
 3. On the **Planning** page, under Supply Planning, click the "View Bucketed Demand/Supply - Seller" link.
 4. Buyer selects appropriate plan to view.
 5. Buyer selects appropriate preference set to use. (The preference set indicates the preferred time buckets for viewing, any permissible combination of order types and running totals of demand, supply, and historical sales.)
 6. Click "Go."
 7. Drill down to the order detail information by clicking on the bucketed forecast quantities, the item names or the trading partner names.
-
6. The Hub compares buyer total demand to seller total supply and triggers exception notifications to the buyer and seller based on the tolerance set up. For Collaborative Supply Planning, an exception is generated whenever absolute value of $(1 - (\text{Total Supply}/\text{Total Demand})) > \text{Supply Threshold}$ in any of the daily, weekly, monthly time buckets defined during the collaboration invitation process. The supply threshold is also defined during the collaboration invitation process.
 7. The buyer and seller view notifications to find out about collaborative supply planning exceptions, drilling down from notification detail to demand/supply detail as necessary.
 8. Based on the exceptions encountered, the buyer and seller revise demands and supplies and continue to post those to the Hub.
 9. The buyer and seller closely monitor the performance of the collaboration.

10. As a seller you can auction the excess material. In the bucketed view, select the item and click the "Create Negotiation" button, the system links you to the MarketPlace Exchange. Please refer to the MarketPlace guidelines for participating in Negotiations.
11. As a buyer you can create an auction for material shortages. In the bucketed view, select the item and click the "Create Negotiation" button, the system links you to the MarketPlace Exchange. Please refer to the MarketPlace guidelines for participating in Negotiations.
12. At any time, the buyer or seller may designate their company's plan status as "Approved." This indicates that the buyer or seller is satisfied with the results of the collaboration and does not expect further input from the other trading party. However, as the external situation changes over time, either the buyer or the seller may resume posting data to the Hub and soliciting responses from the other party.
13. At any time, the buyer or seller may designate their company's plan status as "Closed." This permanently disables the plan from further update and ends the collaboration. After a designated number of days, the transaction data related to the plan is purged from the Exchange database.

Notifications

The Supply Chain Hub communicates information between buyers and sellers on new invitations, status of the data uploaded for the collaboration, and demand/supply mismatches to buyers and sellers through notifications.

Notifications consist of general notifications and exceptions (material excess, material shortage). The exceptions section explains the demand/supply mismatch notifications in greater detail.

To view notifications generated for the supply planning collaboration, complete the following:

1. Click the "My Hub" icon at the top of the screen.
2. In the table on the right top corner, you will find All Open Notifications. All new invitation will be listed here.
3. Optionally, you can click the "Manage my list" link under Hub Transactions table on the left hand side. Click the notification title to view the notification detail.
4. Notifications pertaining to Collaborative Supply Planning to the buyers/seller appear here. These are:
 - a. Supply Chain Collaboration invitation from <Trading Partner>
 - b. Supply Chain Collaboration invitation accepted by <Trading Partner Name>

- c. The following plan <Plan Name> requires your input
 - d. Status of the file uploaded on <Date> for Plan <Plan Name>
 - e. Supply Chain Exceptions for Plan <Plan Name>
5. Links inside the notification alert you to general classes of problems that you have. Click on the links to proceed to a screen where you can see problem detail. This procedure isolates areas where you need to resolve problems and promotes timely decision-making across the extended supply chain.

Exceptions (Planning/Supply Planning/Exceptions)

Exceptions are notifications that call user's attention to issues that require resolution. It is considered an exception if the actual process does not match with the required process. These ensures that decision-making within the extended supply chain is focussed, occurs in a timely manner, and makes the supply chain more responsive.

Material shortage or material excess exceptions (notifications) are generated in Collaborative Supply Planning for the given plan, item and time bucket combination. There are two ways of accessing the demand/supply mismatch information - through a message in the My Hub section (explained in the previous section) or through the Exceptions UI. To access exceptions through the user interface, complete the following:

- n For Supply Planning, exceptions are of two types - Material Shortage and Material Excess.
 - Material shortage exception types are:
 - * Customers demand within time bucket is greater than your supply
 - * Suppliers supply within time bucket is less than your demand
 - Material excess exception types are:
 - * Customers demand within time bucket is less than your supply
 - * Suppliers supply within time bucket is greater than your demand
- n Exceptions are generated as follows:
 - * Total demand within time bucket = forecast + committed demand + purchase order.
 - * Total supply within time bucket = actual production + actual production for committed demand + actual production for forecast + planned production +

planned production for forecast + planned production for committed demand + sales order.

- * You can use either the order type committed demand or the order type purchase order, but not both.
- * You can use either (actual production) or (actual production for committed demand and/or actual production for forecast), but not both.
- * You can use either (planned production) or (planned production for committed demand and/or planned production for forecast), but not both.

To view exceptions, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Planning" tab.
3. On the **Planning** page, under Supply Planning, click the "Exceptions" link.
4. Select the plan name for which you want to see the exceptions
5. You will see two groups here - Material Shortage and Material Excess and the group summary which show you the count for number of exceptions in these categories.
6. Click the "Exception group name" link. You can view the exception types and counts for this category.
7. Click the "Exception type" link to proceed to a page where you are able to see the orders related to this exception with following details.
 - Supplier (Customer)
 - Item Number
 - Item Description
 - Total Supply in time bucket
 - Total Supply in time bucket
 - Bucket Start Date
 - Bucket End date

Intelligence

To view intelligence information for supply planning collaborations, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Intelligence" tab.
3. On the **Intelligence** page, under Collaboration, click "Convergence Analysis." The system displays the convergence analysis based on the Convergence Latency value specified during the invitation process.
4. You can click the "Change Plan" button to view the convergence latency for a specific plan.

Example of Supply Planning Collaboration

In this example, Vision Corp., Allied Manufacturing and Industrial Dressler have a Supply planning collaboration for items Vision Pad DX and Vision Pad LX.

1. The trading partner and item cross references are established for both parties, and the users are identified as:
 - Buyer: Vision Corp., visionbuyer1, AS66311 Vision Pad DX, AS66312 Vision Pad LX
 - Seller 1: Allied Manufacturing, allieseller1, PD45101 PDA/DX
 - Seller 2: Industrial Dressler, industrialseller1, PD31101 PDA/DX, PD31101 PDA/LX
2. The name of the plan is Supply_VC1 and the preference set being used is Supply_VC1 month.
3. There are no supply/demand mismatches for the item AS6311 (Vision Corp) and PD45101 (Allied) in all the time buckets.
4. For the item AS66311 (Vision Corp) and PD31101 (Industrial Dressler), the demand is greater than the supply in all the months and is visually represented by a red flag. The buyer is able to connect to an auction by clicking on the symbol **A (Add to auction)** for the Material shortage. Material shortage notifications are also sent to both parties
5. For the item AS66312 (Vision Corp) and PD31102 (Industrial Dressler), the demand is less than the supply in all the months and is visually represented by a red flag. In the suppliers view, the seller is able to connect to a reverse auction by clicking on the symbol **A (Add to auction)** for the Excess material. Material Excess notifications are also sent to both parties
6. An exception is generated and the exception count is incremented whenever absolute value of $(1 - (\text{Seller forecast}/\text{Forecast})) > \text{Supply Threshold}$ in any of the daily, weekly, monthly time buckets defined during the collaboration invitation process.

Figure 3–1 Bucketed Supply/Demand - Buyer View

The screenshot displays the 'Exchange Name' web application interface. At the top, there is a navigation bar with icons for Home, Log Off, My Exchange, Shopping Cart, Conference, and Help. Below this is a secondary menu with tabs for Welcome, Exceptions, Intelligence, Planning, Orders, and Admin. The main content area features a search form with fields for 'View Item/Category' and 'and Seller', a 'Preference Set' dropdown (set to 'Inpreference'), and a 'Graphing Option' dropdown (set to 'Total Demand/Total Supply'). There is also a 'From Date' field and a 'Go' button. A note below the search form reads: 'Note : To ensure rapid response, please enter search criteria'. Below the search form, the current company is identified as 'Symonds Assembly' with the current plan 'NKPWSYSP1' and last plan date '23-Apr-2001 05:00:24'. A 'Change Plan' button is also present. The breadcrumb trail shows: 'Supply Chain > Planning > View Bucketed Forecast / Seller Forecast - Buyer > View Bucketed Supply / Demand - Buyer'. The main heading is 'View Bucketed Supply / Demand - Buyer'. Below this is a 'Select material shortages and ...' section with a 'Create Negotiation' button. The 'Sort by' dropdown is set to 'Item', with 'Ascending' selected. The table below shows one row of data for 'Nike Manufacturing' with the item 'SYMONDS900 (SYMONDS900) / NIKE900 (NIKE900)' and columns for dates from 23-Apr-2001 to 30-Apr-2001. The page indicates '1 - 1 shown of 1'.

Exchange Name

Home Log Off My Exchange Shopping Cart Conference Help

Welcome Exceptions Intelligence Planning Orders Admin

View Item/Category and Seller

using Preference Set and Graphing Option

From Date

Limit To Under-supply Exceptions Over-supply Exceptions [Search Tips](#)

Note : To ensure rapid response, please enter search criteria

Company: **Symonds Assembly** Current Plan: **NKPWSYSP1** Last Plan Date: **23-Apr-2001 05:00:24**

[Supply Chain](#) > [Planning](#) > [View Bucketed Forecast / Seller Forecast - Buyer](#) > [View Bucketed Supply / Demand - Buyer](#)

View Bucketed Supply / Demand - Buyer

Select material shortages and ...

Sort by Ascending Descending 1 - 1 shown of 1

Seller	Item	23-Apr-2001	24-Apr-2001	25-Apr-2001	26-Apr-2001	27-Apr-2001	30-Apr-2001
Nike Manufacturing	SYMONDS900 (SYMONDS900) NIKE900 (NIKE900)						

1 - 1 shown of 1

Vendor Managed Inventory

The audience for this section are consultants, supply chain planners, buyers, sellers, purchasing managers, and sourcing managers.

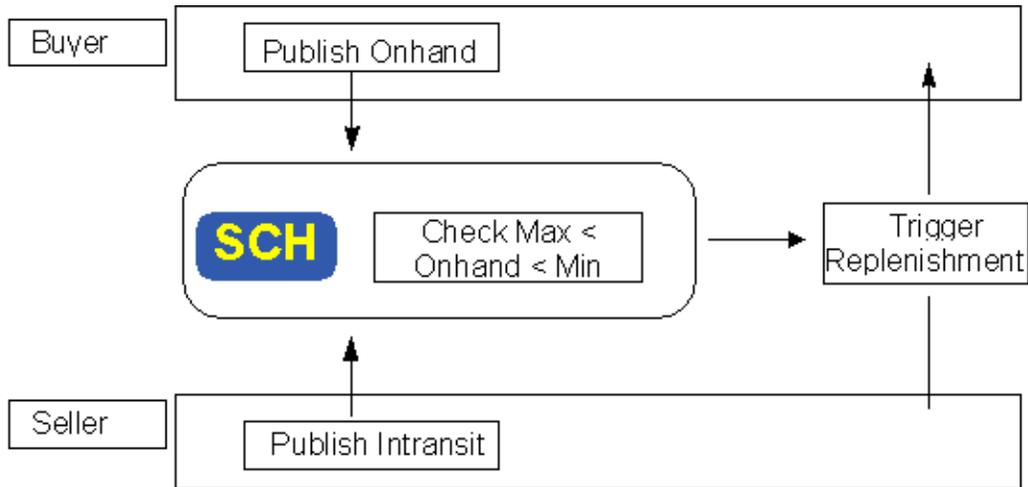
The challenges facing manufacturers and their suppliers is developing efficient processes that minimize slack time, minimize inventory buffering, meet demand variability, shorten delivery lead times and maintain high service level requirements of the industry. The current processes are not efficient due to:

- Large supplier bases
- Repetitive order requisitioning
- Multi-transactions & processing
- Non-transparency in information flows
- Non-matching consumption and order fulfillment cycles.

In Vendor Managed Inventory, a seller owns and manages inventory at a buyer location. The buyer posts onhand information and seller posts intransit information. When onhand quantity at the buyer location plus intransit quantity is less than a pre-specified minimum (replenishment trigger point), the Hub sends notifications to the buyer and seller, so replenishment by the seller can be initiated in a timely manner. An overview of the process is as follows:

1. Buyer invites seller (or vice versa) to a VMI collaboration.
2. Invitee accepts.
3. Buyer posts onhand quantities to the Hub.
4. Seller posts intransit quantities to the Hub.
5. SCH flags discrepancies for item shortage (replenishment required) and item excess and notifies trading partners.
6. Buyer/seller takes appropriate actions and adjusts information to resolve discrepancies

Figure 3-2



Permissible order types

VMI supports the following order types:

Table 3-3 Vendor Managed Inventory Permissible Order Types

Collaboration Type	Collaborative Roles	Permissible Order Types
Vendor Managed Inventory	Buyer	Onhand
Vendor Managed Inventory	Seller	Intransit

Define tolerances for VMI

Exceptions target upper limit is defined in the invitation process for Vendor Managed Inventory.

To define tolerances for vendor managed inventory, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.

3. On the **Admin** page, under Collaboration Management, click the "New Collaboration" link.
4. The Exceptions target upper limit indicates the total number of exceptions that you expect from the VMI collaboration. This is specified during the invitation process.
5. You can view the exceptions target upper limit for comparison alongside the actual measurement of number of exceptions when you access the exceptions functionality of Oracle Supply Chain Hub.
6. In Vendor Managed Inventory, an exception is generated when: Buyer Onhand + In transit (to Buyer) < Item minimum.
7. An over-supply exception is also generated when Buyer Onhand + Intransit (to buyer) > Item maximum.

Note: An exception target upper limit indicates a figure and does not influence the SCH software behavior. It is used to only to provide reference values during display of performance metrics.

Business Process

The steps to use Vendor Managed Inventory are as follows. (These assume that the steps described in preparing for collaboration and inviting trading partners to collaborate have taken place.)

1. The buyer uploads onhand to the Hub, tagged with the name of a "plan" that represents the specific collaborative relationship that the buyer has set up with the seller. This can be through an XML upload, bulk load of flat files, or manual update through the Hub user interface (available only after an initial upload has taken place.)
2. The buyer specifies item minimum and item maximum for the item, during the catalog upload process.
3. Seller uploads intransit information to the Hub. This can be through an XML upload, bulk load of flat files, or manual update through the Hub user interface (available only after an initial upload has taken place.)

To view vendor managed inventory as a buyer or seller, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Planning" tab.

To view as a buyer, complete the following:

- * On the **Planning** page, under Inventory Management, the buyer can view buyer onhand, item minimum, item maximum and intransit quantities to buyer quantities on the Hub.

To view as a seller, complete the following:

- * On the **Planning** page, under Inventory Management, the seller can view buyer onhand, item minimum, item maximum and intransit quantities to buyer quantities on the Hub.
4. The Hub compares the sum of the onhand and intransit quantities to the item minimum and item maximum, and generates exception notifications to the buyer and seller when necessary.
 5. For Vendor Managed Inventory, an exception is generated when:
 - a. Buyer Onhand + Intransit (to buyer) < Item minimum
 - VMI Item Shortage at Your Site
 - VMI item Shortage at Customer Site, Replenishment required
 - b. Buyer Onhand + Intransit (to buyer) > Item maximum
 - VMI Item Excess at Your Site
 - VMI item Excess at Customer Site
 6. Buyers and sellers can view notifications to find out vendor managed inventory exceptions, drilling down from notification detail to VMI detail as necessary.
 7. Buyers and sellers can continue to revise onhand and intransit information and continue to post those to the Hub.
 8. Buyers and sellers closely monitor the performance of the collaboration.
 9. At any time, the buyer or seller may designate their company's plan status as "Closed." This permanently disables the plan from further update and ends the collaboration. After a designated number of days, the transaction data related to the plan is purged from the Hub database after the number of days specified in the invitation.

Notifications

The Supply Chain Hub communicates information between buyers and sellers on new invitations, status of the data uploaded for the collaboration, and VMI discrepancies to buyers and sellers through notifications.

Notifications consist of general notifications and VMI exception notifications (which are covered in the next section).

To view general notifications for vendor managed inventory, complete the following:

1. Click the "My Hub" icon at the top of the screen.
2. In the table on the right top corner, you will find All Open Notifications. All new invitation will be listed here.
3. Optionally, you can click on the "Manage my list" link under Hub Transactions table on the left hand side. Click the notification title to view the notification detail.
4. Notifications pertaining to Collaborative Planning to the buyers/seller appear here. These are:
 - a. Supply Chain Collaboration invitation from <Trading Partner>
 - b. Supply Chain Collaboration invitation accepted by <Trading Partner Name>
 - c. The following plan <Plan Name> requires your input
 - d. Status of the file uploaded on <Date> for Plan <Plan Name>
 - e. Supply Chain Exceptions for Plan <Plan Name>
 - f. Item Replenishment Required for Plan <Plan Name>
5. Links inside the notification alert you to general classes of problems that you have. Click the links to proceed to a page where you can see problem details. This procedure isolates areas where you need to resolve problems and promotes timely decision-making across the extended supply chain.

Exceptions (Planning/Inventory Planning/Vendor Managed Inventory - Exceptions)

Exceptions are notifications that call your attention to issues that require resolution. It is considered an exception if the actual process does not match with the required process. These ensures that decision-making within the extended supply chain is focused, occurs in a timely manner, and makes the supply chain more responsive.

Material Shortage and Material Excess exceptions are generated for a Vendor Managed Inventory Collaboration. There are two ways of accessing the mismatch information - through a message in the My Hub section (explained in the previous section) or through the Exceptions UI.

To view exceptions, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Planning" tab.

3. On the **Planning** page, under Inventory Planning, click the "Vendor Managed Inventory - Exceptions" link.
4. For Vendor Managed Inventory, exceptions are of two types - Material Shortage and Material Excess. These are generated as explained:

Material Shortage: $\text{Buyer Onhand} + \text{Intransit (to Buyer)} < \text{Item minimum}$

- * VMI Item Shortage at Your Site
- * VMI item Shortage at Customer Site, Replenishment required

Material Excess: $\text{Buyer Onhand} + \text{Intransit (to Buyer)} > \text{Item Max}$

- * VMI Item Excess at Your Site
- * VMI item Excess at Customer Site

5. Select the plan name to see the exceptions
6. You will see two groups here - Material Shortage and Material Excess and the group summary which shows you the count for number of exceptions in these categories.
7. Click the "Exception group name" link. You can view the exception types and counts for this category.
8. For material shortage exceptions, click the link to proceed to a page where you can view the orders related to this exception with following details:
 - Customer/supplier
 - Item number
 - Item description
 - Total intransit quantity
 - Total onhand quantity
 - Quantity
 - Item min quantity.
9. For material excess exceptions, click the link to proceed to a page where you can view the orders related to this exception with following details:
 - Customer/supplier
 - Item number
 - Item description
 - Total intransit quantity

- Total onhand quantity
- Total quantity
- Item max quantity.

Example of Vendor Managed Inventory Collaboration

In this example, Vision Corp., Allied Manufacturing and Industrial Dressler have a VMI collaboration for items Vision Pad DX and Vision Pad LX.

1. The trading partner and item cross references are established for both parties, and the users are identified as:
 - Buyer: Vision Corp., vision buyer1, AS66311 Vision Pad DX, AS66312 Vision Pad LX
 - Seller: Industrial Dressler, industrialseller1, PD31101PDA/DX, PD31101 PDA/LX
2. The name of the plan is VMI_VC1.
3. For the item AS66311 (Vision Corp) and PD31101 (Industrial Dressler), the Onhand + Intransit is greater than the maximum specified and is visually represented by a white flag or Material Excess. The buyer is able to drill down to details by clicking on the onhand quantity. Material excess notifications are also sent to both parties.
4. For the item AS66312 (Vision Corp) and PD31102 (Industrial Dressler), Onhand + Intransit is less than the minimum specified and is visually represented by a red flag or Material shortage. In the suppliers view, the seller is to drill down to details by clicking on the intransit quantity. Material Shortage notifications are also sent to both parties.

Figure 3-1

The screenshot shows the 'Exchange Name' interface. At the top right, there are navigation icons for Home, Log Off, My Exchange, Shopping Cart, Conference, and Help. Below these are tabs for Welcome, Exceptions, Intelligence, Planning, Orders, and Admin. The main area contains search filters: 'View by Item' and 'and Seller' input fields, a 'Limit To' section with checkboxes for 'Replenish Exceptions' and 'Excess Exceptions', and a 'Go' button. Below the filters, it displays 'Company: Symonds Assembly', 'Current Plan: VMI_test1', and 'Last Plan Date: 24-Mar-2001 10:53:14' with a 'Change Plan' button. A breadcrumb trail reads: 'Supply Chain > Planning > View Bucketed Forecast / Seller Forecast - Buyer > View Bucketed Supply / Demand - Buyer > View Inventory Status'. The main heading is 'View Inventory Status'. Below this, there are sorting options: 'Sort by Item' (dropdown), 'Ascending' (radio), and 'Descending' (radio), with a 'Go' button. The page indicates '1 - 2 shown of 2'. The table below shows inventory data for two items from Slazenger Manufacturing.

Seller	Item	Status		Expected Replenishment Qty	ASN#	Inbound Intransit	Expected Receipt Date	Onhand	On Pos
		MIN	MAX						
Slazenger Manufacturing	SYMONDS908(SYMONDS908) SLAZENGER908(SLAZENGER908)			0				1000	200
Slazenger Manufacturing	SYMONDS909(SYMONDS909) SLAZENGER909(SLAZENGER909)			9900				100	200

Customer Managed Inventory

The audience for this section are consultants, supply chain planners, buyers, sellers, purchasing managers, and sourcing managers.

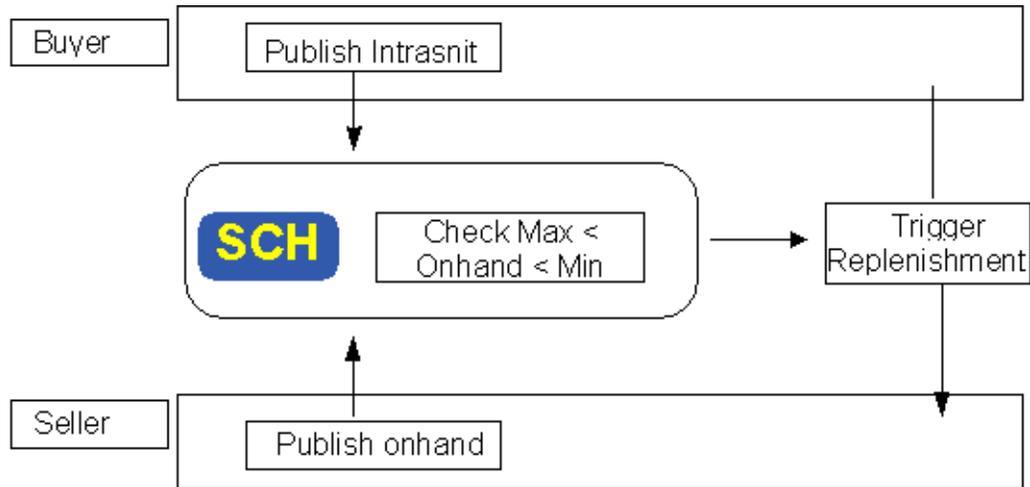
Customers looking for help in controlling costs and keeping their manufacturing facilities running smoothly can use the Customer Managed Inventory collaboration on the Supply Chain Hub. In Customer Managed Inventory, a buyer (distributor) owns and manages inventory at a seller location. This arrangement is seen in contract manufacturing, where a buyer owns and coordinates the shipment of raw materials to a contract manufacturer (the seller), who then processes the raw material and ships product to the buyer.

In Customer Managed Inventory collaboration, the buyer is responsible for planning and sending a schedule of planned replenishments to the supplier. The buyer would view the onhand inventory at the sellers location and send replenishment quantities to the supplier.

In Customer Managed Inventory, the buyer owns and manages inventory at the sellers location. The seller posts onhand information and buyer posts intransit information. When onhand at the sellers location plus intransit is less than a pre-specified minimum (replenishment trigger point), the Hub sends notifications to the buyer and seller, so that replenishment by the seller can be initiated in a timely manner. An overview of the process is as follows:

1. Buyer invites seller (or vice versa) to a CMI collaboration.
2. Invitee accepts.
3. Seller posts onhand quantities to the Hub.
4. Buyer posts intransit quantities to the Hub.
5. SCH flags discrepancies for Item shortage (replenishment required) and item excess and notifies trading partners.
6. Buyer/seller adjust information to resolve discrepancies.

Figure 3-2



Permissible order types

CMI supports the following order types:

Table 3-4 Customer Managed Inventory Permissible Order Types

Collaboration Type	Collaborative Role	Permissible Order Type
Customer Managed Inventory	Buyer	„ Intransit
Customer Managed Inventory	Seller	„ Onhand

Define tolerances for CMI

Exceptions target upper limit is defined in the invitation process for Customer Managed Inventory.

To define tolerances for customer managed inventory, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. On the **Admin** page, under Collaboration Management, click the "New Collaboration" link.

4. The Exceptions target upper limit indicates the total number of exceptions that you expect from the CMI collaboration. This is specified during the invitation process.
5. The system displays the exceptions target upper limit for comparison alongside the actual measurement of number of exceptions when you access the Exceptions functionality of Oracle Supply Chain Hub.
6. In Customer Managed Inventory, an exception is generated when: Seller Onhand + In transit (to seller) < Item minimum.

Note: Exception target upper limit only indicates a figure and does not influence the SCH software behavior. It is used to only to provide reference values during display of performance metrics.

Business Process

The steps to use Customer Managed Inventory collaboration are as follows: (These assume that the steps described in preparing for collaboration and inviting trading partners to collaborate have taken place.)

1. The buyer specifies an item minimum and an item maximum for the item, during the catalog upload process.
2. The buyer uploads intransit information to the Hub, tagged with the name of a "plan" that represents the specific collaborative relationship that the buyer has set up with the seller. This can be through an XML upload, bulk load of flat files, or manual update through the Hub (available only after an upload has been made.)
3. The seller uploads onhand information to the Hub. This can be through an XML upload, bulk load of flat files, or manual update through the Hub (available only after an upload has been made.)
4. The buyer views the sellers onhand, item minimum, item maximum, and intransit quantities on the Hub.
5. The seller views the buyers onhand, item minimum, item maximum, and intransit quantities on the Hub.
6. The Hub compares the sum of the onhand and intransit quantities to the item minimum and item maximum, and generates exception notifications to the buyer and seller when necessary.
7. For Customer Managed Inventory, an exception is generated when:
 - a. Seller Onhand + Intransit (to Seller) < Item minimum

- d. Status of the file uploaded on <Date> for Plan <Plan Name>
 - e. Supply Chain Exceptions for Plan <Plan Name>
 - f. Item Replenishment Required for Plan <Plan Name>
5. Links inside the notification alert you to general classes of problems that you have. Click the links to proceed to a page where you can view problem details. This procedure isolates areas where you need to resolve problems and promotes timely decision-making across the extended supply chain.

Exceptions (Planning/Inventory Planning/Customer Managed Inventory - Exceptions)

Exceptions are notifications that call your attention to issues that require resolution. It is considered an exception if the actual process does not match with the required process. These ensures that decision-making within the extended supply chain is focussed, occurs in a timely manner, and makes the supply chain more responsive.

Material Shortage and Material Excess exceptions that are generated for a Customer Managed Inventory Collaboration. There are two ways of accessing the mismatch information - through a message in the My Exchange section (explained in the previous section) or through the Exceptions UI.

To view exceptions for customer managed inventory, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Planning" tab.
3. On the **Planning** page, under Inventory Planning, click the "Customer Managed Inventory - Exceptions" link.
4. For Customer Managed Inventory, exceptions are of two types - Material Shortage and Material Excess. These are generated as explained:

Material Shortage: Buyer Onhand + Intransit (to Buyer) < Item minimum

- * CMI Item Shortage at Your Site
- * CMI item Shortage at Supplier Site, Replenishment required

Material Excess: Buyer Onhand + Intransit (to Buyer) > Item Max

- * CMI Item Excess at Your Site
- * CMI item Excess at Supplier Site

5. Select the plan name to see the exceptions.

6. You can view two groups here - Material Shortage and Material Excess and the group summary which shows you the count for number of exceptions in these categories.
7. Click the "Exception group name" link. You can view the exception types and counts for this category.
8. For material shortage exceptions, click the link to proceed to a page where you can view the orders related to this exception with following details:
 - Customer/supplier
 - Item number
 - Item description
 - Total intransit quantity
 - Total onhand quantity
 - Total quantity
 - Item min quantity
9. For material excess exceptions, click the link to proceed to a page where you can view the orders related to this exception with following details:
 - Customer/supplier
 - Item number
 - Item description
 - Total intransit quantity
 - Total onhand quantity
 - Total quantity
 - Item max quantity

Example of Customer Managed Inventory Collaboration

In this example, Vision Corp., Allied Manufacturing and Industrial Dressler have a CMI collaboration for items Vision Pad DX and Vision Pad LX.

1. The trading partner and item cross references are established for both parties, and the users are identified as:
 - Buyer: Vision Corp., visionbuyer1, AS66311 Vision Pad DX, AS66312 Vision Pad LX

Setting Up Collaborations

1. Seller: Industrial Dressler, industrialseller1, PD31101PDA/DX, PD31101 PDA/LX
2. The name of the plan is CMI_VC1.
3. For the item AS66311 (Vision Corp) and PD31101 (Industrial Dressler), the Onhand + Intransit is greater than the maximum specified and is visually represented by a white flag or Material Excess. The seller is able to drill down to details by clicking on the onhand quantity and can make changes. Material excess notifications are also sent to both parties.
4. For the item AS66312 (Vision Corp) and PD31102 (Industrial Dressler), Onhand + Intransit is less than the minimum specified and is visually represented by a red flag or Material shortage. In the buyers view, the seller is to drill down to details by clicking on the intransit quantity and can make changes. Material Shortage notifications are also sent to both parties.

Figure 3–1

Exchange Name

Home Log Off My Exchange Shopping Cart Conference Help

Welcome Exceptions Intelligence Planning Orders Admin

View by Item
and Seller

Limit To Replenish Exceptions Excess Exceptions [Search Tips](#)

Company: **Symonds Assembly** Current Plan: **SYNKCMI2** Last Plan Date: **07-Apr-2001 01:00:10**

[Supply Chain](#) > [Planning](#) > [View Bucketed Forecast/ Seller Forecast - Buyer](#) > [View Bucketed Supply/ Demand - Buyer](#) > [View Inventory Status](#) > [View Seller Inventory Status](#)

View Seller Inventory Status

Sort by Ascending Descending

1 - 3 shown of 3

Seller	Item	Status	Suggested Replenishment Qty	ASN#	OutBound Intransit	Expected Receipt Date	Seller O
		MIN MAX					
Nike Manufacturing	SYMONDS900(SYMONDS900) NIKE900(NIKE900)		0	CMI_order1	2000	2001-05-30 00:00:00.0	500
	SYMONDS900(SYMONDS900)						

Production Sequencing

The audience for this section are consultants, supply chain planners, purchasing managers, and sourcing managers.

Businesses are planning and forecasting and production plants are sequencing and scheduling, but because the two have different objectives, they often lack the coordination needed to foster an efficient, successful business. Getting the plant and the business to work together is a big challenge. The supply chain solution needs to coordinate with the suppliers with information on actual plant sequencing to balance customer service, optimize the use of production capacity and minimize inventory. Plant scheduling and production sequencing will only be successful if the software is implemented as part of an overall business project with executive visibility.

Oracle Supply Chain Hub offers the functionality of Collaborative Production Sequencing which enables multiple tiers of an extended supply chain to have instant visibility to the sequenced production requirements at the top of the supply chain. These multiple tiers can then ship inventory in the desired production sequence, drastically reducing the inventory levels within the extended supply chain.

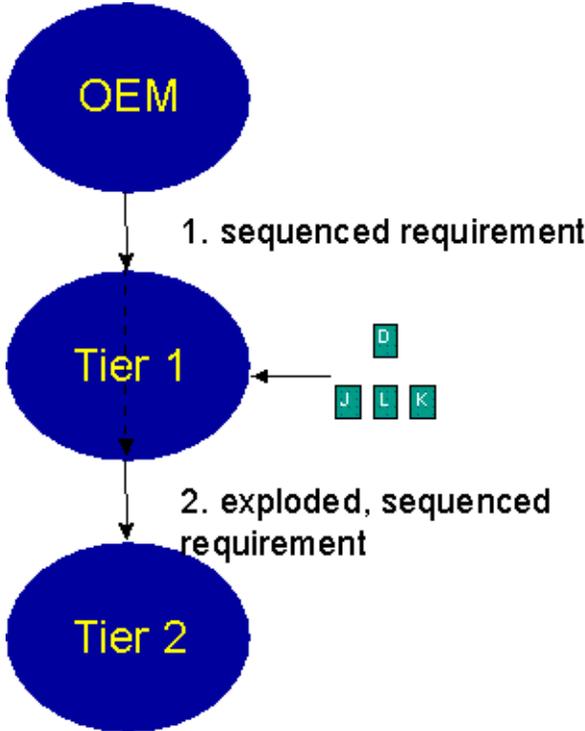
In Collaborative Production Sequencing on the Supply Chain Hub, a manufacturer uploads a production sequence to the Hub. This sequence is made visible to the buyer's Tier 1 supplier. Using a supply chain bill uploaded to the Hub by the Tier 1 supplier, OSCH also translates Tier 1's sequenced requirement into Tier 2's sequenced requirement. Tier 1 provides a supply chain bill that enables the explosion of Tier 0's sequenced requirement to Tier 1 and Tier 2 simultaneously.

Production sequencing is applicable to industries such as semiconductor manufacturing, automotive, assembly of heavy engineering industrial machinery like tractors, Consumer Packaged Goods (CPG) operations, chemical and petrochemical industries, refinery business where it is essential to sequence all plant events in real-time and coordinate with planning and forecasting to optimize production capacity.

The following is an overview of Collaborative Production Sequencing:

1. Tier 0 trading partner must share a production sequencing plan with Tier 1 partner; Tier 1 must share a production sequencing plan with Tier 2 trading partner.
2. Tier 1 uploads a supply chain bill to the Hub
3. Tier 0 uploads a production sequence.
4. Supply Chain Hub explodes the Tier 0 sequence into Tier 1 and Tier 2 sequences.
5. Both Tier 1 and Tier 2 have visibility to the production sequence and can meet the demand in that sequence.

Figure 3-2



Business Process

The steps in Collaborative Production Sequencing are as follows: (Tier 0 trading partner must share a production sequencing plan with Tier 1 partner; Tier 1 must share a production sequencing plan with Tier 2 trading partner. This is through the invitation process. The business process assumes that the steps described in preparing for collaboration and inviting trading partners to collaborate have taken place.)

- 1. Tier 1 uploads a supply chain bill to the Hub (explained in subsequent sections.)
- 2. Tier 0 uploads a production sequence. (explained in the subsequent sections).
- 3. Supply Chain Hub explodes the Tier 0 sequence into Tier 1 and Tier 2 sequences.
- 4. Tier 1 has immediate visibility to the sequence.

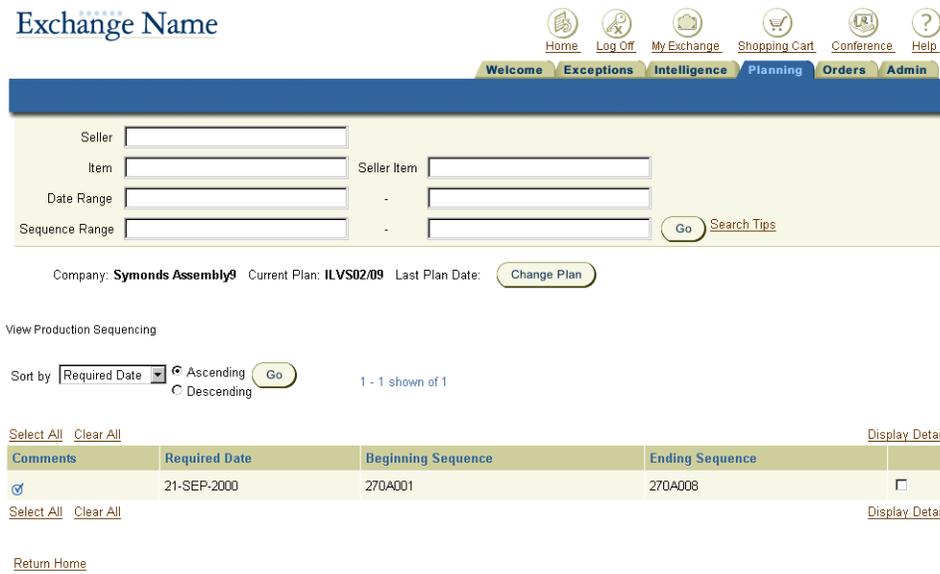
- Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
 - Click the "Planning" tab.
 - On the **Planning** page, under Production Sequencing, click the "View Production Sequencing - Buyer" link.
 - Or on the **Planning** page, under Production Sequencing, click the "View Production Sequencing - Seller" link.
5. Tier 2 has immediate visibility to the sequence.
- Click the "Planning" tab.
 - On the **Planning** page, under Production Sequencing, click the "View Production Sequencing - Seller" link.
6. At any time, Tier 0, Tier 1 or Tier 2 may designate their company's plan status as "Closed." This permanently disables the plan (either the Tier 0-Tier 1 plan or the Tier 1-Tier 2 plan) from further update and ends either the Tier 0-Tier 1 collaboration or the Tier 1-Tier 2 collaboration. After a designated number of days, the transaction data related to the plan is purged from the Hub database.

See Appendix B for information about using XML to upload a production sequence.

To view and export a production sequence:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Planning" tab.
3. On the **Planning** page, under Production Sequencing, click the "View Production Sequencing - Buyer" link
4. Or on the **Planning** page, under Production Sequencing, click the "View Production Sequencing - Seller" link.
5. Click "Go."
6. To export the production sequence to a tab-delimited text file, click "Export."

Figure 3–3 Production Sequencing View



You will need to upload a supply chain bill only if you are a Tier 1 supplier. The supply chain bill that you upload contains two critical pieces of information:

Bill of material. The assembly item that you deliver in sequence to Tier 0, and the component items from your BOM for the assembly item that you in turn would like to receive in sequence from Tier 2.

Sourcing. The Tier 2 supplier for each of the component items identified above.

The only method for loading a supply chain bill is bulk load of a flat file through the Hub.

To load a supply chain bill:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. On the **Admin** page, under Supply Chain Bill, click the "Load Supply Chain Bill" link. The Supply Chain Bill data should be in a tab-delimited text file with the following format. The rules which govern each of the above columns are explained below:
 - n Assembly Item

- Inventory Item
- Usage
- Quantity
- BOM
- Effective Date
- BOM Disable Date
- Supplier Name
- Intransit Lead
- Sourcing Effective Date
- Sourcing Disable Date

Assembly Item: This is your part number for the item that you supply in sequence to Tier 0. It must already be loaded into the Hub Catalog. The Supply Chain Bill being loaded is for this item.

Inventory Item: This is your part number for the assembly item component that you want to be supplied to you in sequence by Tier 2. It must already be loaded into the Hub Catalog. If more than one assembly item component is supplied to you in sequence, you can have multiple rows in the supply chain bill for the assembly item.

Usage Quantity: Number of inventory items per assembly item.

BOM Effective Date: This is the date from which the uploaded BOM will be valid. The required format is DD-MON-YYYY HHMMSS. There is a single space between "DD-MON-YYYY" and "HH24:MM:SS."

BOM Disable Date: This is the date beyond which the uploaded BOM is not valid. The required format is DD-MON-YYYY HHMMSS. There is a single space between "DD-MON-YYYY" and "HH24:MM:SS." The date of your upload is validated to ensure that it falls between the BOM effective and BOM disable dates. If it falls outside this range, Supply Chain Hub generates a notification and reject the supply chain bill.

Supplier Name: This is your cross-reference name for the Tier 2 supplier that supplies the Inventory Item in Column 2. The value to place here can be found using the navigation

- Click the "Admin" tab.
- On the **Admin** page, under Trading Partners, click the "Set Trading Partner Cross-References" link.

Intransit Lead Time: This is the shipping lead time, specified in days.

Sourcing Effective Date: The required format is DD-MON-YYYY HH24:MM:SS.

Sourcing Disable Date: The required format is DD-MON-YYYY HH24:MI:SS. There is a single space between "DD-MON-YYYY" and "HH24:MM:SS".

The date of your upload is validated to ensure that it falls between the sourcing effective and sourcing disable dates. If it falls outside this range, Supply Chain Hub generates a notification and rejects the supply chain bill.

You must be a Tier 1 trading partner who has already loaded one or more supply chain bills.

To view a source bill:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Planning" tab.
3. On the **Planning** page, under Production Sequencing, click the "View Supply Chain Bill" link.
4. Click "Go."

To export the supply chain bill to a tab-delimited text file, click "Export."

4

Initial Setup of Additional Features

Topic covered in this chapter include:

- [Setting Up Additional Features](#) on page 4-2

Setting Up Additional Features

The audience to this section are consultants, supply chain planners, buyers, sellers, purchasing managers, and sourcing managers.

Current enterprise focus is on improving the flow of information and velocity of goods globally throughout the supply chain while reducing production, distribution, and inventory costs. There is a real need for micro-level, real-time event, and exception information. Supply chain visibility and exception based management play a critical role for creating better supply chain visibility, coordination, collaboration, and greater inter- and intra-enterprise connectivity that includes suppliers and customers.

Oracle Supply Chain Hub offers the order visibility feature which enables trading partners to track the status of order fulfillment along the entire supply chain. This is particularly useful for complex fulfillment scenarios which involve more than two trading partners. For example, in a drop ship scenario, a customer places an order with a manufacturer, who outsources the order to a supplier, who in turn directly ships to the customer.

Supply Chain Hub acts as a central repository of order information and an easily accessible portal for providing visibility for order information to all trading partners. The role played by Supply Chain Hub is critical because it links together order information from the disparate ERP systems of the trading partners involved; the information that it holds is not present in its entirety in any one ERP system.

Currently, in the above scenario, the customer is not able to see how far along the chain its orders are. The customer only communicates with the manufacturer and is not be able to see if the supplier has yet shipped, or what the expected dates will be. The order visibility feature enables all members of the supply chain to monitor their orders and documents up and down the supply chain.

The features of order visibility on the Supply Chain Hub includes:

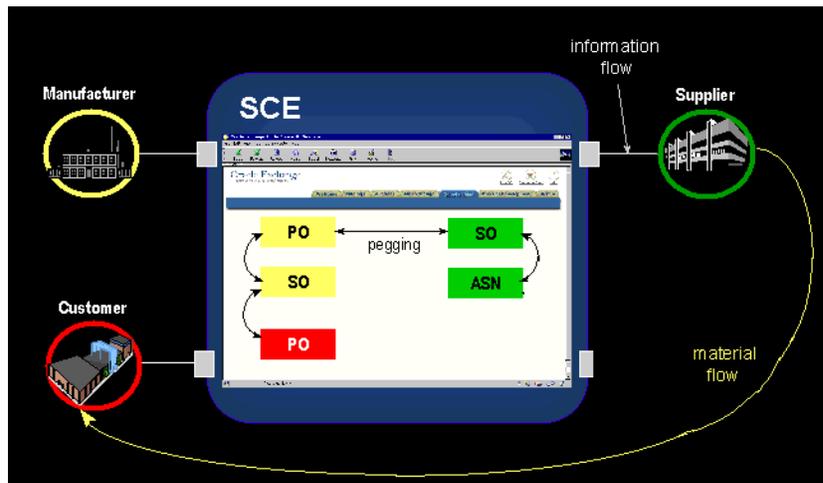
- Security
- Vertical Listing of Orders
- Pegging Tree
- Carrier Tracking
- Exception based management

Order Visibility

With order visibility, dealers, end manufacturers, and suppliers can post, view, and track orders on the Supply Chain Hub. An overview of the process is as follows:

1. A dealer can post a purchase order for a manufacturer on the Hub (PO1).
2. The manufacturer can post a sales order (SO1) for dealer on the Hub, which is the manufacturer's statement of supply (quantity, delivery date) in response to the purchase order. The manufacturer's sales order must be pegged to the dealer's purchase order (PO1).
3. The manufacturer then posts purchase order (PO2) for the supplier on the Hub. The manufacturer's purchase order to the supplier must be pegged to its sales ADA Applications Development # order (SO1) dealer.
4. A supplier can post a sales order or the ship schedule (SO2) for the manufacturer on the Hub. The supplier's sales order must be pegged to the manufacturer's purchase order (PO2).
5. A supplier can post an advance ship notification or shipment notice (ASN) for the manufacturer on the Hub. The supplier's ASN must be pegged to the manufacturer's purchase order (PO2).

Figure 4–1



Business Process

Setup

OEM

1. OEM sets up Trading Partner Cross referencing with its suppliers and dealers.
2. OEM loads its items onto the hub.
3. OEM assigns its item users.

Dealer

1. Dealer sets up Trading Partner Cross referencing with OEM.
2. Dealer loads its items into the hub.
3. Dealer sets up Item Cross referencing with OEM's Items (can do a bulk upload of cross referencing).

Supplier

1. Supplier sets up Trading Partner Cross referencing with OEM.
2. Supplier loads its items onto the hub.
3. Supplier assigns Item users.
4. Supplier sets up Item Cross referencing with OEM's Items (can do a bulk upload of cross referencing).

Collaboration

It is not necessary to set up a plan for dealer direct collaboration. The system handles dealer direct collaborations through a default plan specified as a " " (blank) in the Excel loads. This default plan would be distinct from the existing supply/demand plans. The default plan holds various documents from trading partners.

Item Cross Reference

Some trading partners like dealers and carriers can not maintain items and their associated cross references. They can still publish, view, and edit documents on the Hub using their trading partner's item numbers. The following hierarchy would be used to determine whose item cross reference to use in a document being posted on the Hub.

1. Posting Party
2. Publishing Party

3. Subscriber Party

Permissible order types

In collaborative order visibility, the system loads data by the trading parties for the following order types:

Table 4-1 Order Visibility Permissible Order Types

Order Type	Description
Purchase order	Purchase order from buyer to seller indicating the item, quantity and need by date.
Sales order	Sales order from the seller to the buyer in response to the Purchase order indicating the item, quantity and ship by date.
Shipment notice	Advanced shipment notice from seller to buyer indicating item, quantity, and scheduled date.
In transit	This is the quantity that has been shipped from the seller site and is posted after the shipment notice has been sent.
Shipment receipt	Used in order visibility, this is posted by the carrier or the dealer who received the shipment.

The following transactions can be uploaded in any sequence:

1. A dealer can post a purchase order for an end manufacturer on the Supply Chain Hub.
2. An end manufacturer can post a sales order for dealer on the Hub. The end manufacturer's sales order must be pegged to the dealer's purchase order.
3. An end manufacturer can post a purchase order for a supplier on the Hub. The end manufacturer's purchase order to the supplier must be pegged to its sales order to the dealer.
4. A supplier can post a sales order (ship schedule) for the end manufacturer on the Hub. The supplier's sales order must be pegged to the end manufacturer's purchase order.
5. A supplier can post an advance ship notification (shipment notice) for the end manufacturer on the Hub. The supplier's ASN must be pegged to end manufacturer's purchase order.

Upload Files Format: Load Orders/Documents

To load files for order visibility:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. On the **Admin** page, under Demand/Supply, click the "Load Demand/Supply" link. The upload file format for Order Visibility is given below.

Header portion of the upload file

1. **Plan Name:** This should be left blank for order visibility. There is no necessity to setup a plan for dealer direct collaboration. The system handles dealer direct collaboration through a default plan that is specified as a " " (blank) in the Excel loads.
2. **Sync Indicator:** Must be one of the following:
 - n **A: Add (Simple insert)** - When a document contains the "A" indicator, OSCH will check to see if the item already exists on the Hub. If it does not exist, then the record is inserted. If it does exist, then OSCH deletes records with the same plan name, publisher org, item, order type, start date, bucket type, subscriber, order number, and end order number before inserting the record in the document to prevent duplicates.
 - n **C: Change** (Update rows depending on the item, start date, bucket type and order type) - When a document contains the sync indicator set to 'C', before a record is inserted OSCH checks if a record already exists with the same plan name, publisher org, subscriber org, item, start date, order type, order number, and end order number. If there is then the quantity and bucket type are updated. If there are no records matching the search, a new record is inserted on the exchange.
 - n **D: Delete** (Delete all rows for an item) - If a document contains the sync indicator set to 'D', the distinct items are selected from the document. For each item selected, all records belonging to the plan, publisher and item combination are deleted from the Hub. If the item that needs to be deleted is not present in the Hub, an error message to that effect is sent to you. If the order number and end order number are specified, then only those records that match the item, order number, and end order number criterion are deleted.
 - n **R: Replace** (First delete all rows for the item and then insert the new rows coming in the document) - If a document contains the sync indicator set to 'R', the distinct items are selected from the document. For each item selected, all records belonging to the plan, publisher, item, order type,

Setting Up Additional Features

Table 4-2 Line Level Fields

Field	Purchase Order	Sales Order	Shipment Notice
End Date	The required format is YYYYMMDD HHMMSS. There is a single space between "YYYYMMDD" and "HHMMSS." HHMMSS is optional.	The required format is YYYYMMDD HHMMSS. There is a single space between "YYYYMMDD" and "HHMMSS." HHMMSS is optional.	The required format is YYYYMMDD HHMMSS. There is a single space between "YYYYMMDD" and "HHMMSS." HHMMSS is optional.
Bucket Type	For a supply chain order visibility, this column is not relevant and should be left blank.	For a supply chain order visibility, this column is not relevant and should be left blank.	For a supply chain order visibility, this column is not relevant and should be left blank.
Subscriber Name	This is the trading partner for whom the PO is intended, i.e. the party receiving the PO.	This is the trading partner for whom the SO is intended, i.e. the party receiving the SO.	This is the trading partner for whom the ASN is intended, i.e. the party receiving the shipment notice.
Subscriber Name Continued	The subscriber name is the cross referenced name established by the Company administrator (Admin/Data Mapping/ Trading Partner/ Edit Mapping) or it can be the complete name of the trading partner as listed on the Hub.	The subscriber name is the cross referenced name established by the Company administrator (Admin/Data Mapping/ Trading Partner/ Edit Mapping) or it can be the complete name of the trading partner as listed on the Hub.	The subscriber name is the cross referenced name established by the Company administrator (Admin/Data Mapping/ Trading Partner/ Edit Mapping) or it can be the complete name of the trading partner as listed on the Hub.
Order Number	PO number. This has to be specified for pegging. For example, if a seller were to post a sales order (S456) supply in response to a buyer's purchase order (P123), the order type would be set to the S456, and the End Order Number would be set to P123 for the buyer/seller to see the pegging tree.	SO number. This has to be specified for pegging. For example, if a seller were to post a sales order (S456) supply in response to a buyer's purchase order (P123), the order type would be set to the S456, and the End Order Number would be set to P123 for the buyer/seller to see the pegging tree.	The order number to which the ASN is pegged to. This is mandatory for SDS tracking. For example, if a seller were to post a sales order (S456) supply in response to a buyer's purchase order (P123), the order type would be set to the S456, and the End Order Number would be set to P123 for the buyer/seller to see the pegging tree.
Comments	The user can enter comments.	The user can enter comments.	The user can enter comments.
Publisher ID#	The Hub ID of the owner of the PO/SO/ASN. This needs to be specified in case the data is uploaded by a proxy party.	The Hub ID of the owner of the PO/SO/ASN. This needs to be specified in case the data is uploaded by a proxy party.	The Hub ID of the owner of the PO/SO/ASN. This needs to be specified in case the data is uploaded by a proxy party.
Order Release Number	The release number of the order being processed.	The release number of the order being posted	Not used.

Table 4-2 Line Level Fields

Field	Purchase Order	Sales Order	Shipment Notice
Order Line Number	The line number of the line in the order being posted.	The line number of the line in the order being posted.	ASN line number (if used)
Order Date	The date the PO was created. The required format is YYYYMMDD HHMMSS. There is a single space between "YYYYMMDD" and "HHMMSS." HHMMS is optional.	The date the SO was created. The required format is YYYYMMDD HHMMSS. There is a single space between "YYYYMMDD" and "HHMMSS." HHMMS is optional.	The date the ASN was created. The required format is YYYYMMDD HHMMSS. There is a single space between "YYYYMMDD" and "HHMMSS." HHMMS is optional.
Ship Date	This date corresponds to the required ship date for purchase orders or the promised ship date for sales orders. The required format is YYYYMMDD HHMMSS. There is a single space between "YYYYMMDD" and "HHMMSS."	This date corresponds to the required ship date for purchase orders or the promised ship date for sales orders. The required format is YYYYMMDD HHMMSS. There is a single space between "YYYYMMDD" and "HHMMSS."	Load automatically populates this field on the basis of the schedule date. Any data specified for this field by you is ignored.
Dock Date	Not used.	Not used.	This field corresponds to the date on which the material on the order will be received/delivered. The required format is YYYYMMDD HHMMSS.
Ship From Party	The party which will be shipping the goods. If left blank, load automatically populates this with subscriber.	The party which will be shipping the goods. If left blank, load automatically populates this with publisher.	The party which will be shipping the goods. If left blank, load automatically populates this with publisher.
Ship From Party Site Code	The ship from party site code (for example, Plant ID) from which the goods are actually shipped.	The ship from party site code (for example, Plant ID) from which the goods are actually shipped.	The ship from party site code (for example, Plant ID) from which the goods are actually shipped.
Ship To Party	The party to which the goods are shipped. If left blank, load automatically populated this with publisher.	The party to which the goods are shipped. If left blank, load automatically populated this with subscriber.	The party to which the goods are shipped. If left blank, load automatically populated this with subscriber.
Ship To Party Site Code	The ship to party site code from which the goods are actually shipped.	The ship to party site code from which the goods are actually shipped.	The ship to party site code from which the goods are actually shipped.

Setting Up Additional Features

Table 4-2 Line Level Fields

Field	Purchase Order	Sales Order	Shipment Notice
Ship To Address	The address to which the goods are actually shipped (could be different from that of ship to party site code.) If left blank, load automatically populates this with ship to party site code's default address.	The address to which the goods are actually shipped (could be different from that of ship to party site code.) If left blank, load automatically populates this with ship to party site code's default address.	The address to which the goods are actually shipped (could be different from that of ship to party site code.) If left blank, load automatically populates this with ship to party site code's default address.
Tracking Number	Not used.	Not used.	Used for Order Visibility and connecting to carrier sites.
Bill of Lading	Not used.	Not used.	Used for Order Visibility
Carrier	Requested carrier to be used (optional)	Expected carrier to be used (optional)	Carrier used in shipment (optional)
Vehicle #	Not used.	Not used.	License plate number of vehicle used in shipment
Container Type	Not used.	Not used.	Container type used in shipment (optional)
Container Quantity	Not used.	Not used.	Number of containers used in shipment (optional)
Publisher Party Address	Publisher's address. If left blank, load automatically populates this with publisher's address.	Publisher's address. If left blank, load automatically populates this with publisher's address.	Publisher's address. If left blank, load automatically populates this with publisher's address.
Subscriber Party Address	Subscriber's address. If left blank, load automatically populates this with subscriber's address.	Subscriber's address. If left blank, load automatically populates this with subscriber's address.	Subscriber's address. If left blank, load automatically populates this with subscriber's address.
End Order Release Number	Order release number to which this order is pegged. For example, on a PO from Ford to the supplier, the end order release number would be the SO release number sent by Ford to the Dealer.	Order release number to which this order is pegged. For example, on a PO from Ford to the supplier, the end order release number would be the SO release number sent by Ford to the Dealer.	Order release number to which this order is pegged. For example, on a PO from Ford to the supplier, the end order release number would be the SO release number sent by Ford to the Dealer.

Table 4-2 Line Level Fields

Field	Purchase Order	Sales Order	Shipment Notice
End Order Line Number	Order line number to which this order is pegged.	Order line number to which this order is pegged.	Order line number to which this order is pegged.
End Order Publisher	Name of the party who owns the order to which the PO is being pegged. The name used for end order publisher is the cross referenced name established by the company administrator (Admin/Data Mapping/ Trading Partner/Edit Mapping) or it can be the complete name of the trading party as listed on the Hub.	Name of the party who owns the order to which the SO is pegged. If it is itself, then the field may be left blank. For example, when PO2 is sent from OEM to supplier, pegged to the SO1 sent by the OEM to the dealer, the end order publisher is the OEM himself and this field can be left blank. The name used for end order publisher is the cross referenced name established by the company administrator (Admin/Data Mapping/ Trading Partner/Edit Mapping) or it can be the complete name of the trading party as listed on the Hub.	Name of the party who owns the order to which the ASN is pegged. If it is itself, then the field may be left blank. For example, when ASN is sent from the supplier to the OEM, pegged to the SO2 sent by the supplier to the OEM, the end order publisher is the supplier himself. The name used for end order publisher is the cross referenced name established by the company administrator (Admin/Data Mapping/ Trading Partner/Edit Mapping) or it can be the complete name of the trading party as listed on the Hub.
End Order Doc Type	Order type to which this order is pegged. Only if this is the first PO from the dealer to the OEM, then the field may be blank. If it is the PO2 from the OEM to the supplier, pegged to the SO1 sales order sent to the dealer, then the end order type is a sales order.	End order type is a purchase order.	End order type is a sales order.

Permissions for view orders/documents

There is security so you can only see your orders and documents. Thus one dealer can not see another dealer's data.

A proxy party is a 3rd party who may be independent of the buyer or seller. For example, the carrier of goods could be a proxy party, and therefore should be able see the transaction information between the main buyer-seller parties because he is also involved in the fulfillment of that order. The proxy party can publish information on behalf of the seller. For example, the carrier would be able to post the advance shipment notice on behalf of the supplier.

- The proxy party and the publisher of a document will have view, edit, change, delete permissions for that document.
- The subscriber of a document will have view access for that document.
- The ship to, ship from, and carrier parties of a document will have restricted view access for that document. Restricted view will exclude sensitive information in the document like pricing.

View Orders (Vertical Listing) and exporting data

You can view all their orders and documents in a vertical listing from the “Orders” tab.

Query Criteria

You can limit the display of the orders by filling in any of the possible query criteria: order type, order number, line number, publisher, ship from party, schedule date, dock date, item, release number, proxy party, subscriber, ship to party, or ship date.

Vertical Listing

The display includes 33 fields which describe attributes of the orders/documents. These fields are: order type, order number, release number, line number, order date, item number and description, quantity, schedule date, ship date, dock date, publisher, subscriber, ship from party, ship from party site code, ship to party, ship to party site code, ship to address, proxy party, tracking number, bill of lading number, carrier, vehicle number, container type, container quantity, publisher address, subscriber address, last update date, end order number, end order release number, end order line number, end order party, end order type, and comments.

Download documents from the Hub

You can download to your system, any document being viewed in the **View Orders/Documents** page (you can download only the fields showing up in the UI). In the Vertical Listing page, click the “Export” button

Pegging

The pegging window enables you to track orders from the dealer purchase order to the supplier shipment (ASN).

Viewing Pegging Information

To view pegging information:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Orders" tab.
3. On the **Orders** page, you can view the data up and down the pegging tree by clicking on the Order number / end order number field in the UI. You can view the pegging info as a drill-down from the **View Orders/Documents** page.
4. Click on either the order number or the end order number link in the supply demand vertical view to list all orders up the pegging tree and all orders down the pegging tree.

Entering Pegging Information For pegging to work optimally, all of the end order-related info should be posted on the document. At minimum, the following data must be sent:

- End Order Party
- End Order Document Type
- End Order Number
- End Order Line Number
- End Order Release Number (where applicable)

If the end order line is not sent, then the default rule assumes that the item in the document is the same as the one being referenced in the end order document. The pegging tree shows all the lines associated with this item in the end order release number.

Displaying the Pegging Window The pegging window can be used to track orders up and down the pegging tree. For example, you can peg up to the dealer's purchase order to the end manufacturer, and down to the supplier's shipment.

The information that is displayed includes:

Table 4-3 Pegging Window Fields Displayed

• Order Type	• Order Number
• Item	• Publisher
• Subscriber	• Quantity
• Schedule Date	• Ship Date
• Expected Delivery Date	• Carrier
• Bill of Lading Number	• Tracking Number

The applicable information is displayed for each order in the pegging tree. The orders are automatically pegged to each other based on the end order numbers, etc.

From the pegging window, dealers can infer how far their purchase order information has traversed through the supply chain (for example, if there is no Supplier SO displayed, a dealer could infer that the supplier has not yet committed to meeting the dealer's demand).

Throughout the supply chain, dealers can detect any date and/or quantity mismatches against their purchase orders. They can track whether their order has been shipped on time, whether it will arrive by the need by date, and whether the right quantity has been shipped.

The pegging window also provides links to track a shipment through its carrier's web site.

Tracking

The dealer, the supplier, and the manufacturer can view a shipment's current status by consulting a carrier's tracking web page. The status is accessible in two ways:

- By clicking on the tracking number or bill of lading number of an advanced shipment notice in the pegging window, or
- By clicking on the tracking number in the vertical view on the "View Orders/Documents" page.

Either method will open a new browser window which displays the carrier's tracking web page.

Note: This approach is susceptible to failure if the transportation carrier changes its tracking web page.

Currently the list of carriers supported on Oracle Supply Chain Hub are as follows:

Table 4-4 Carriers

Carrier	URL	Method	Notes
American Freightways	http://www.americanfreightways.com/	Post and Get	Supports URL encoding
Eagle Air	http://www.eagleusa.com/	Post and Get	Supports URL encoding
Emery Worldwide	http://www.emeryworld.com/	Post and Get	Supports URL encoding
FedEx ground (formerly RPS)	http://www.fedex.com/	Get	Supports URL encoding
Golden State Overnight	http://www.shipgso.com/	Get	Supports URL encoding

Table 4-4 Carriers

Carrier	URL	Method	Notes
Roadway Express	http://www.roadway.com/	Post and Get	Supports URL encoding
Surfair	http://www.surfair.com/	Post and Get	Supports URL encoding
Yellow Freightways	http://www.yellowfreight.com/	Get	Supports URL and XML. See appendix.

Only the following carriers need additional setup steps (the other carriers that are supported have already been setup). To track using these carriers, you must obtain the carrier's reference number (pro, airbill, tracking) from your purchasing department:

Table 4-5 Carriers with Additional Setup

Carrier	URL	Method	Notes
Bax Global	http://www.baxglobal.com/	Get	Support URL encoding
Clark Brothers	http://www.clarkbros.com	Post	Can be handled by JSP and javascript
Motor Cargo	http://www.motorcargo.com	Get	Supports URL encoding

Order visibility exceptions

Exceptions are notifications that call your attention to issues that require resolution. It is considered an exception if the actual process does not match with the required process. These ensure that decision-making within the extended supply chain is focused, occurs in a timely manner, and makes the supply chain more responsive.

The exceptions related to order visibility are grouped under the following exception groups and exception types:

1. Late Orders

- Replenishment to customer scheduled after need by date.
- Replenishment from supplier scheduled after need by date.
- Replenishment to customer is past due.
- Replenishment from supplier is past due.

2. Material Shortage

- Fulfillment quantity shortfall for your customer's purchase order.
- Fulfillment quantity shortfall from your supplier for your purchase order.

3. Response to trading partner required
 - n Need to create sales order for customer purchase order.
4. Potential Late Orders
 - n Potential late order due to upstream lateness.
 - n Your purchase order to your supplier requires lead time compression.
 - n Your customer's purchase order to you requires lead time compression.
 - n Your sales order requires lead time compression.
5. Early orders
 - n Replenishment to customer scheduled before need by date.
 - n Replenishment from supplier scheduled before need by date.
6. Material Excess
 - n Fulfillment quantity excess for your customer's purchase order.
 - n Fulfillment quantity excess from your supplier for your purchase order.
7. Trading partner response required
 - n Supplier sales order doesn't exist for your purchase order.

Example of order visibility

In this example, Vision Corp., Allied Manufacturing and Industrial Dressler are collaborating for items Vision Pad DX and Vision Pad LX. The order visibility flow is as follows:

1. The dealer posts a purchase order for a manufacturer on the Hub (SDS_PO1).
2. The manufacturer posts a sales order for dealer on the Hub which is pegged to the dealer's purchase order (SDS_SO1).
3. The manufacturer in turn posts a purchase order for the supplier on the Hub. The manufacturer's purchase order to the supplier must be pegged to its sales AD Application Development # order to the dealer (SDS_PO2).
4. A supplier can post a sales order (ship schedule) for the manufacturer on the Hub (SDS_SO2) which is pegged to the manufacturer's purchase order.

5. A supplier can post an advance ship notification (shipment notice) for the manufacturer on the Hub. The supplier's ASN must be pegged to the manufacturer's purchase order (SDS_ASN).
6. To view pegging information click the “Orders” tab. On the **Orders** page, you can view the data up and down the pegging tree by clicking on the order number/end order number field.
7. The screen below is an example of a pegging tree as viewed by a dealer. All the documents will show the schedule date, and ship date if available. The ASN will show the tracking # and/or the bill of lading #.
8. You will be able to access the details of a document/order on the pegging tree by clicking on the document's/order's highlighted link. Links on order/document numbers are highlighted only if you have view or edit permissions for that order/document. After you click on a document/order number you can view the **View Orders/Documents** page. You can return to the pegging tree by clicking on the “Back” button on the browser.

Figure 4-1

Supply Chain > Orders

[View Order Details](#)

Export... Exception Details Apply Changes

Sort by Schedule Date Ascending Go Descending Previous 1 - 25 shown of 44 Next

Select	Order Type	Order Number	Release Number	Line Number	Order Date	Item Number (Description)	Quantity	Schedule
<input type="checkbox"/>	Sales Order	SLSY0413_1				SYMONDS900(SYMONDS900)	100	null
<input type="checkbox"/>	Sales Order	SLSY0413_2				SYMONDS900(SYMONDS900)	100	null
<input type="checkbox"/>	Sales Order	Certest OMB_33	1	1	29-Apr-2001 00:00:00	SYMONDS902(SYMONDS902)	<input type="text" value="104"/>	null
<input type="checkbox"/>	Sales Order	S_O_0226			26-Feb-2001 00:00:00	SYMONDS900(SYMONDS900)	26	null
<input type="checkbox"/>	Sales Order	S_O_0226			26-Feb-2001 00:00:00	SYMONDS901(SYMONDS901)	26	null
<input type="checkbox"/>	Sales Order	SO_SCI_03				SYMONDS908(SYMONDS908)	101	null
<input type="checkbox"/>	Purchase Order	O_S_0226			26-Feb-2001 00:00:00	SYMONDS900(SYMONDS900)	<input type="text" value="226"/>	null
<input type="checkbox"/>	Purchase Order	O_S_0226			26-Feb-2001 00:00:00	SYMONDS901(SYMONDS901)	<input type="text" value="226"/>	null
<input type="checkbox"/>	Sales Order	S_O_0226			26-Feb-2001 00:00:00	SYMONDS900(SYMONDS900)	200	null

9. From the **Pegging** page, the dealer can infer how far their purchase order information has traversed through the supply chain (for e.g. if there is no supplier SO showing up yet, the dealer could infer that the supplier has not yet committed to meeting their demand as in the case of item AS66312 in the screenshot above).
10. Throughout the supply chain the dealer can detect any date and/or quantity mismatches against their purchase orders. They can track whether their order has been shipped on time or not, whether it would arrive by the need date or not and, whether the right quantity has been shipped or not (for example: item AS66312 has a scheduled date of 12-Mar-2001 while the ship date is 14-Mar-2001 indicating that the item is late.)
11. The page also provides links to track a shipment through its carrier's web site. For example, clicking on the link for [957810001](#) takes you to the carrier's site.

Exceptions

Exceptions are notifications that call your attention to issues that require resolution. It is considered an exception if the actual process does not match with the required process. These ensures that decision-making within the extended supply chain is focussed, occurs in a timely manner, and makes the supply chain more responsive.

There are 32 exceptions supported on the Supply Chain Hub and they are grouped in to eight groups. Each group corresponds to a problem category. The eight groups are:

- Late orders
- Early orders
- Potential late orders
- Material shortage
- Material excess
- Forecast mismatch
- Response to trading partner required
- Trading partner response required

The display of exceptions occurs in the context of a specific "plan" (in collaborative demand and supply planning) and a specific viewing trading party. If no plan is specified in the posting then SCH refers to a "GLOBAL" plan.

You can view statistics related to exception groups for a given plan and for a given company. You can view counts for a given plan, exception group and exception type. By

clicking on the exception group and exception type links, you can view all details to explain the exception.

Figure 4-2

The screenshot shows the Oracle Supply Chain Hub interface. At the top, there is a navigation bar with icons for Home, Log Off, My Exchange, Shopping Cart, Conference, and Help. Below this is a blue header with the text 'Exchange Name' and a navigation menu with tabs for Welcome, Exceptions, Intelligence, Planning, Orders, and Admin. The main content area shows the 'Exception Group Summary' page. It includes a breadcrumb trail 'Supply Chain > Exception Group Summary' and a sub-header 'Exception Group Summary'. Below this, it indicates '1 - 4 shown of 4' and displays a table with the following data:

Exception Group	Count
Late Orders	102
Response to trading partner required	32
Potential Late Orders	103
Trading partner response required	44

Below the table, it again indicates '1 - 4 shown of 4' and provides a 'Return Home' link. At the bottom of the page, there is a footer with copyright information: 'Copyright © 1999, 2000 Oracle Corporation. All Rights Reserved. Legal Notices and Terms of Use | Privacy Policy | Contact Us'.

Supply Chain Hub - Event Management Engine

The SCEM engine computes exceptions on a *net change netting basis*, to avoid re-computing exceptions that might have already been generated in a previous plan run. However, net change planning requires maintaining the workflow items that were launched in previous plan run, to ensure that only the most recent changes are accounted for. Exceptions are computed only for every organization and item combination that has received additional info subsequent to the last plan run.

The netting engine is a background process which usually runs every 30 minutes and updates the exception counts which trigger the notifications to be sent to the corresponding partners. The frequency at which netting engine runs can be changed. Contact your operations personnel to change this for you.

The SCEM engine consists of two programs:

1. The PDS exceptions generator - for collaborative planning exceptions (this covers the exceptions for demand planning, supply planning, vendor managed inventory, and customer managed inventory).
2. The ODS exceptions generator - for order visibility exceptions

Prerequisites for exceptions generation

It is assumed that the following are set up for the exceptions to be generated:

- n Companies defined along with administrators.
- n Users associated with the above companies with items.
- n Trading partner cross references are setup.
- n Alternate item identifiers are setup.
- n Demand, inventory and supply plans are set up for these companies
- n Item minimum, item maximum and lead times are specified at the time of uploading the item onto the Supply Chain Hub catalog.

Late Orders

The following are late order exception types:

- 1.1. Replenishment to customer scheduled after need date.
- 1.2. Replenishment from supplier scheduled after need date.
- 1.3. Replenishment to customer is past due.
- 1.4. Replenishment from supplier is past due.

Replenishment to customer scheduled after need date

- n You would be viewing this exception as the supplier of an item
- n This exception is triggered when the delivery date on your sales order is later than the need by date on the purchase order of the buyer
- n By clicking on this link, you would be able to see the detailed screen which would list the details of the Sales orders that caused the exception (and related Purchase orders from buyer). The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (delivery date for the sales order, need by date for the purchase order), order creation dates, and supplier lead times.

Replenishment from supplier scheduled after need date

- You would be viewing this exception as the buyer of an item.
- This exception is triggered when the delivery date on the supplier's sales order is greater than the need by date on your purchase order.
- By clicking this link, you would be able to see the detailed screen which would list the details of the purchase orders that caused the exception (and related sales orders from the suppliers). The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (need by date for the purchase order, delivery date for the sales order), order creation dates, and supplier lead times.

Replenishment to customer is past due.

- You would be viewing this exception as the supplier of an item.
- This exception is triggered when the system date is later than the need by date on the purchase order of the buyer.
- By clicking this link, you would be able to see the detailed screen which would list the details of the sales orders that caused the exception (and related purchase orders from buyer). The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (delivery date for the sales order, need by date for the purchase order), order creation dates, and supplier lead times.

Replenishment from supplier is past due.

- You would be viewing this exception as the buyer of an item
- This exception is triggered when the system date is later than the need by date on your purchase order.
- By clicking this link, you would be able to see the detailed screen which would list the details of the purchase orders that caused the exception (and related sales orders from suppliers). The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (delivery date for the sales order, need by date for the purchase order), order creation dates, and supplier lead times.

Material Shortage

The following are material shortage exception types:

- 2.1 Customer's demand within time bucket is greater than your supply.
- 2.2 Supplier's supply within time bucket is less than your demand.
- 2.3 Fulfillment quantity shortfall for your customer's purchase order.

- 2.4. Fulfillment quantity shortfall from your supplier for your purchase order.
- 2.5. VMI item shortage at customer site, replenishment required.
- 2.6. VMI item shortage at your site.
- 2.7. CMI item shortage at supplier site, replenishment required.
- 2.8. CMI item shortage at your site.

Note: 2.1, 2.2 have been explained in collaborative supply planning section

2.5, 2.6 have been explained in collaborative vendor managed inventory

2.7, 2.8 have been explained in collaborative customer managed inventory

This section covers exception types 2.3, 2.4

Fulfillment quantity shortfall for your customer's purchase order.

- n You would be viewing this exception as the supplier of an item
- n This exception is triggered when the item quantity on your sales order is less than the item quantity on the customer's purchase order
- n By clicking this link, you would be able to see the detailed screen which would list the details of the sales orders that caused the exception (and related purchase orders from buyer). The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (delivery date for the sales order, need by date for the purchase order), order creation dates, and supplier lead times.

Fulfillment quantity shortfall from your supplier for your purchase order.

- n You would be viewing this exception as the buyer of an item
- n This exception is triggered when the item quantity on the supplier's sales order is less than the item quantity on your purchase order
- n By clicking this link, you would be able to see the detailed screen which would list the details of the purchase orders that caused the exception (and related sales orders from supplier). The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (delivery date for the sales order, need by date for the purchase order), order creation dates, and supplier lead times.

Response to Trading Partner Required

The following are response to trading partner required exception types:

- 3.1. Need to create sales order for customer purchase order.

- You would be viewing this exception as the seller of an item
- This exception is triggered when a Sales order does not exist for a Purchase order posted by the customer
- By clicking on this link, you would be able to see the detailed screen which would list the details of the Purchase orders that caused the exception. The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (need by date for the purchase order), order creation dates, and supplier lead times.

Potential Late Orders

The following are potential late orders exception types:

- 4.1. Potential late order due to upstream lateness.
- 4.2. Your purchase order to your supplier requires lead time compression.
- 4.3. Your customer's purchase order to you requires lead time compression.
- 4.4. Your sales order requires lead time compression.

Potential late order due to upstream lateness.

- You can view this exception as any trading party (dealer, manufacturer, seller) of an item.
- This exception is triggered when the delivery date on a sales order is later than the need by date on the purchase order for that item across its entire supply chain.
- This is an important exception as it highlights the ability of our product to process information across multiple supply chain tiers. Its evaluation requires traversing down the pegging tree and exhaustively enumerating all paths (especially in the case of multiple sales orders pegged to a single purchase order).
- For example, if the delivery date on the end supplier's sales order to the manufacturer is past the need by date on the manufacturer's purchase order to the end supplier, then the dealer will have visibility to this as the system will increase the dealer's exception count for exception Potential Late Order Due to Upstream Lateness.
- By clicking this link, you would be able to see the detailed screen which would list the details of the purchase orders that caused the exception. The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (delivery date for the sales order, need by date for the purchase order), order creation dates, and supplier lead times.

Your purchase order to your supplier requires lead time compression

- You would be viewing this exception as the buyer of an item.

- ⁂ This exception is triggered when the time duration between the need by date on your purchase order and the current system date is less than the item lead time specified by the supplier.
- ⁂ By clicking this link, you would be able to see the detailed screen which would list the details of the purchase orders that caused the exception. The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (need by date for the purchase order), order creation dates, and supplier lead times.

Your customer's purchase order to you requires lead time compression

- ⁂ You would be viewing this exception as the seller of an item
- ⁂ This exception is triggered when the time duration between the Need by date on the customer's PO and the current system date is less than the Item lead time specified by you.
- ⁂ By clicking on this link, you would be able to see the detailed screen which would list the details of the Purchase orders that caused the exception. The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (need by dates for the purchase order), order creation dates, and supplier lead times.

Your sales order requires lead time compression

- ⁂ You would be viewing this exception as the seller of an item.
- ⁂ This exception is triggered when the time duration between the delivery date on your sales order and the current system date is less than the item lead time specified by you.
- ⁂ By clicking this link, you would be able to see the detailed screen which would list the details of the sales orders that caused the exception. The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (delivery date for the sales order), order creation dates, and supplier lead times.

Forecast Mismatch

The following are forecast mismatch exception types:

- 5.1. Customer's forecast is greater than your forecast.
- 5.2. Customer's forecast is less than your forecast.
- 5.3. Supplier's forecast is greater than your forecast.
- 5.4. Supplier's forecast is less than your forecast.

These are the exceptions which are triggered for a demand planning collaboration and are explained in detail in the collaborative demand planning section.

Early Orders

The following are early orders exception types:

- 6.1. Replenishment to customer scheduled before need date.
- 6.2. Replenishment from supplier scheduled before need date.

Replenishment to customer scheduled before need date.

- You would be viewing this exception as the seller of an item.
- This exception is triggered when the delivery date on the sales order is earlier than the need by date on the buyer's purchase order.
- By clicking this link, you would be able to see the detailed screen which would list the details of the sales orders that caused the exception (and related purchase orders from buyer). The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (delivery date for the sales order, need by date for the purchase order), order creation dates, and supplier lead times.

Replenishment from supplier scheduled before need date.

- You would be viewing this exception as the buyer of an item.
- This exception is triggered when the delivery date on the supplier's sales order is earlier than the need by date on your purchase order.
- By clicking this link, you would be able to see the detailed screen which would list the details of the purchase orders and the related sales orders that caused the exception. The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (delivery date for the sales order, need by date for the purchase order), order creation dates, and supplier lead times.

Material Excess

The following are material excess exception types:

- 7.1. Customer's demand within time bucket is less than your supply.
- 7.2. Supplier's supply within time bucket is greater than your demand.
- 7.3. Fulfillment quantity excess for your customer's purchase order.
- 7.4. Fulfillment quantity excess from your supplier for your purchase order.
- 7.5. VMI item excess at customer site.
- 7.6. VMI item excess at your site.
- 7.7. CMI item excess at supplier site.
- 7.8. CMI item excess at your site.

Note: 7.1, 7.2 have been explained in Collaborative Supply Planning section
7.5, 7.6 have been explained in Collaborative Vendor Managed Inventory
7.7, 7.8 have been explained in Collaborative Customer Managed Inventory
This section covers exception types 7.3, 7.4

Fulfillment quantity excess for your customer's purchase order.

- n You would be viewing this exception as the supplier of an item.
- n This exception is triggered when the item quantity on your sales order is greater than the item quantity on the customer's purchase order.
- n By clicking this link, you would be able to see the detailed screen which would list the details of the sales orders that caused the exception (and related purchase orders from buyer). The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (delivery date for the sales order, need by date for the purchase order), order creation dates, and supplier lead times.

Fulfillment quantity excess from your supplier for your purchase order.

- n You would be viewing this exception as the buyer of an item.
- n This exception is triggered when the item quantity on the supplier's sales order is more than the item quantity on your purchase order.
- n By clicking this link, you would be able to see the detailed screen which would list the details of the purchase orders that caused the exception (and related sales orders from supplier). The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (delivery date for the sales order, need by date for the purchase order), order creation dates, and supplier lead times.

Trading Partner Response Required

The following are trading partner response required exceptions:

8.1. Supplier sales order does not exist for your Purchase order
Supplier sales order does not exist for your purchase order.

- n You would be viewing this exception as the buyer of an item.
- n This exception is triggered when a sales order does not exist for a purchase order posted by you.

- By clicking this link, you would be able to see the detailed screen which would list the details of the purchase orders that caused the exception. The details include: exception types, order types, order numbers, release numbers, line numbers, items, quantities, order schedule dates (need by date for the purchase order), order creation dates, and supplier lead times.

Accessing the Exceptions

To view exceptions, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Exceptions" tab.
3. On the **Planning** page, under different collaboration, click the "Exceptions" link.
4. Click the "Horizontal/Bucketed View" link on supply planning or demand planning.
5. Click the "Detailed View" link on supply planning and demand planning.
6. Click the exception on the **Orders** page.

Display of data

The data displayed depends on the location from where you accessed the exceptions.

1. On the **Exceptions** page, you can see the exceptions for the GLOBAL plan. The displayed information includes:
 - Plan Name
 - Date on which exceptions were last calculated
 - Exception Group Name
 - Exception Count
2. If you access exceptions from the "Exceptions" link under Planning/Demand Planning, on the **Planning** page, then the exception groups and counts relevant to that collaboration are displayed through forecast mismatches. You have the option to change the plan name and view exceptions for other plans.
3. If you access exceptions from the "Exceptions" link under Planning/Supply Planning or VMI or CMI, on the **Planning** page, then the Exception groups and counts relevant to that collaboration are displayed through material shortage and material excess. You have the option to change the plan name and view exceptions for other plans.

4. If you access exceptions from the bucketed view of a plan, in demand planning or supply planning, then the exception groups and counts are displayed for that plan. The collaborative supply planning and demand planning exceptions have been explained in the earlier sections.
5. If you access exceptions from the detailed view, in demand planning or supply planning, then the exception groups and counts are displayed for all the plans you select. In the vertical view, select/check the plans that you want to see the exceptions for and click “Exception Details” button.
6. If you access exceptions from the **Orders** page, then all exceptions are displayed for all orders you select. In the orders view, select/check the orders that you want to see the exceptions for and click the “Exception Details” button. You can see exception types, order types, order numbers, order release numbers, order line numbers, items, quantities, order schedule dates, order creation dates, supplier lead times, and thresholds.

Order Promising or Real-Time Check Availability

One of the critical elements that enables companies to become highly responsive, customer-centric organizations is the ability to deliver accurate global order promising at the time of a customer order. Customers demand near real-time information for order commitment, fulfillment, and status. They demand a global perspective, which reflects their time zones and their individualized needs for a highly responsive set of planning and delivery processes. Providing inaccurate order commitment dates, which cannot be met, can be disastrous to customer credibility.

As order-promising methodology has evolved, new terms have been coined to describe advanced promising techniques. **Available to Promise** refers to the ability to promise a specific quantity of finished product based on a predefined statement of inventory that exists in current and planned supply. Available-To-Promise (ATP) can be performed against current or future available inventory, or uncommitted capacity.

Oracle Supply Chain Hub (OSCH) provides **cross-enterprise** supply chain planning capabilities and Collaborative Order Promising (ATP) is developed as an integral part of this product which shall help in the planning purposes by the exchange of relevant information about the availability of products across the supply chain.

Using the Order Promising (also known as Real-Time Availability/Pricing Check) feature of Oracle Supply Chain Hub, a buyer can check the latest availability and pricing for an item. The Hub forwards the buyer's availability inquiry as an XML document to the seller, then receives the seller's response (order shipment date and updated price) in an XML document and displays that to the buyer in real time. This collaboration enables the buyer to place realistic due dates on demands and avoid unanticipated supply chain constraints.

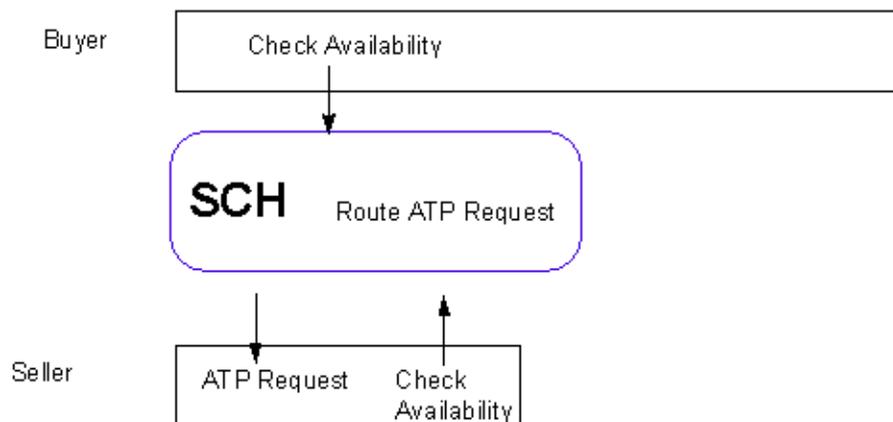
The overall business objectives are to obtain quick ATP responses from a buyer perspective and to provide quick responses to ATP from a seller perspective. This ensure that customer satisfaction of the buyer and operational efficiency of the seller are maximized.

An overview of the collaborative order promising process is as follows.

1. A buyer specifies the quantity he needs and publishes an available-to-promise request to the Hub for a specific item.
2. OSCH automatically routes the request to the supplier of that item. An outbound ATP XML message is generated from Hub to the ATP handler of the appropriate supplier. Item cross-reference is used to translate customer's item number to supplier's item number before sending XML message.
3. After the internal ATP process of the supplier completes, the supplier can publish its results to the Hub.

4. After the ATP request is returned, the buyer would then get the latest information via an inbound XML message from the Hub to the buyer. The buyer would be able to see the quantity, latest price and available by date displayed in real time in a color different than the standard shopping cart text color.

Figure 4–3



In this collaborative scenario, OSCH is acting like an ATP request broker.

Business Process

Using the order promising feature of Oracle Supply Chain Hub, a buyer can check the latest availability and pricing for an item. The Hub forwards the buyer's availability inquiry as an XML document to the seller, then receives the seller's response (order shipment date and updated price) in an XML document and displays that to the buyer in real time. This collaboration enables the buyer to place realistic due dates on demands and avoid unanticipated supply chain constraints. The steps in collaborative order promising are as follows.

To use order promising as a buyer, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Find an item.
3. Click the "Admin" tab.
4. On the **Admin** page, under Items, click the "View Items" link.

5. Select the item by checking the item's box.
6. Click "Check Availability."
7. Enter an item quantity for the inquiry.
8. Click "Submit."
9. Depending on the level of support for this feature configured by the item's supplier, you will receive a result in one of the following forms:
 - Information not available.
 - Usually ships in x days.
 - Available on 30-09-2001

If an updated price has been returned by the supplier, it is marked with a blue dot.

To use order promising as a supplier, complete the following:

1. Access the "Supply Chain" application (on the **Exchange** home page, click the "Supply Chain" link).
2. Click the "Admin" tab.
3. On the **Admin** page, under Items, click the "Catalog Authoring" link.
4. Click the "Configure Item Availability" link.
5. Select a level of support that you would like to offer for the real-time availability/pricing check feature. This is a single setting that applies to all items in your company.
6. No support. Users will be shown the following when checking availability: Information Not Available.
7. Catalog Lead Time Support. If you populate the Lead Time attribute when loading catalog content, users will be shown the following when checking availability for your items: Usually Ships in X Days.
8. Real-Time Availability Checking. If you are committed to providing accurate, real-time information, users will be show the following when checking availability for your items: the earliest date the requested order quantity can ship and an updated price if appropriate.
9. If you choose Real-Time Availability Checking in Step 2, enter a URL to which the XML availability inquiries from Hub will be directed.

10. Click “Apply Changes.”

To Set the ATP Message Handler For Inbound/Outbound XML Transactions

Suppliers should be able to customize ATP request message handler on the exchange. They may chose to have an electronic delivery of ATP requests set up between exchange and their in-house ATP system. They need to provide details regarding communication method for electronic delivery, its details like IP address for ATP system server, user id, password etc.

The transaction delivery systems are not in the scope of this document.

XML Message for ATP Transaction

There will be two XML messages for this purpose, one inbound to be received from the customer/ buyer for receiving ATP request on the exchange and the other one, outbound for sending ATP request to supplier’s ATP handler. Once ATP request is received from buyer/ customer, it is stored in a request table and a unique request id is generated at exchange for tracking purposes. The XML message for ATP transactions shall contain following information:

Table 4-6 XML Message for ATP Transaction Information

ATP Request ID	ATP Request ID
Customer ID	Customer ID
Customer Name	Customer Name
Supplier Item ID	Supplier Item ID
Supplier Item Name	Supplier Item Name
Need By Date	Need By Date
Quantity	Quantity
UOM	UOM
	Need By Date Quantity
	Fulfillment Date
	Latest Updated Price

See Appendix C for more information about using XML documents to inquire and respond as a supplier.

Example of Order Promising Collaboration

1. Search for the item, select the item, check availability and specify a quantity.
2. Order Promising Availability results

A

Sample XML File and DTD for a Demand Transaction

Topic covered in this appendix includes:

- [Sample Demand Transaction File](#) on page A-2

Sample Demand Transaction File

Oracle Demand/Supply Sample XML Data

Copyright 2000, All Rights Reserved

\$Name: 001_add_forecast_001.xml \$

Notes:

-->

<!DOCTYPE ADD_FORECAST_001 SYSTEM "000_add_forecast_002.dtd">

It is important to provide the correct name of the DTD for the document.

Control Area

```
<BSR>
  <VERB>SYNC</VERB>
  <NOUN>FORECAST</NOUN>
  <REVISION>001</REVISION>
</BSR>
```

Segment	Values	Meaning
VERB	SYNC	Synchronize
NOUN	FORECAST	Forecast

```
<SENDER>
  <LOGICALID>XGRB1109</LOGICALID>
  <COMPONENT>PRODUCTION</COMPONENT>
  <TASK>DP</TASK>
  <REFERENCEID>9534223449</REFERENCEID>
  <CONFIRMATION>1</CONFIRMATION>
  <LANGUAGE>EN</LANGUAGE>
  <CODEPAGE>CP001001</CODEPAGE>
  <AUTHID>12851</AUTHID>
</SENDER>
```

Segment	Values	Meaning
AUTHID	Hub ID of the Trading Partner, as listed under Welcome/Trading Partner	Hub ID is the ID used by the Hub to identify the Trading Partner posting the XML file.

```

<DATETIME qualifier = "CREATION" >
  <YEAR>1998</YEAR>
  <MONTH>11</MONTH>
  <DAY>21</DAY>
  <HOUR>00</HOUR>
  <MINUTE>25</MINUTE>
  <SECOND>45</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0600</TIMEZONE>
</DATETIME>

```

DATETIME section under Control Area is required for DTD conformance.

```

</CNTROLAREA>

```

Data Area

```

<DATAAREA>
  <ADD_FORECAST>

```

```

  <FCTHEADER>

```

```

<DATETIME qualifier = "CREATION" >

```

```

  <YEAR>2000</YEAR>
  <MONTH>04</MONTH>
  <DAY>01</DAY>
  <HOUR>16</HOUR>
  <MINUTE>04</MINUTE>

```

Sample Demand Transaction File

<SECOND>45</SECOND>
<SUBSECOND>0000</SUBSECOND>

<TIMEZONE>-0600</TIMEZONE>

</DATETIME>

DATETIME with qualifier CREATION refers to the document creation date and time. Oracle Hub accepts time in YYYYMMDD HHMMSS format.

<FCTHDRID>SYSLDEMI</FCTHDRID>

Segment	Values	Meaning
FCTHRID	Plan Name Null	Name of the plan where data needs to be posted. It is required that the Trading Partner has to be a member of the plan. If the Forecast Header ID is left Null, then it is considered to be a transaction for SDS.

<SYNCIND>A</SYNCIND>

Segment	Values	Meaning
SYNCIND	A C D R P	Sync Indicator A: Add a new forecast. It replaces existing lines for the same plan, publisher, subscriber, item, and date. C: Change D: Delete R: Replace P: Purge

More about SyncInd is described in data upload using flat text file section.

<FCTSTATUS>Published</FCTSTATUS>

Segment	Values	Meaning
FCTSTATUS	- Published	Status of the order
	-Empty	Published: Set this to Published to inform your trading partner that you have finalized your supply/demand data posting to the Hub, and that it is now their turn to respond. Empty: Draft version, you are still in the process of providing supply/demand data.

You can see whose turn it is to respond by going to Planning/Collaboration Management/View Plans.

<PARTNER>
<NAME index="1">SLAZENGER MANUFACTURING1</NAME>

Segment	Values	Meaning
NAME	Name of the Trading Partner for whom the data is intended for	Name of the receiving Trading Partner

<ONETIME>0</ONETIME>

Segment	Values	Meaning
ONETIME	0	Not used. Required to give a number as required to confirm with the DTD.

<PARTNRID>12849</PARTNRID>

Segment	Values	Meaning
PARTNRID	XXXX - as listed under Welcome/Trading Partner Directory	Trading Partner ID by which the Hub identifies the Trading Partner

<PARTNRTYPE>SOLDTO</PARTNRTYPE>

Segment	Values	Meaning
PARTNRTYPE	SOLDTO	Demand is intended for this Trading Partner

=====
Only key word accepted is SOLDTO.
=====

</PARTNER>

</FCTHEADER>

Forecast Line Section

Multiple forecast lines can be communicated with one forecast header. Each line is confined with tags <FCTLINE> and </FCTLINE>

<FCTLINE>

<QUANTITY qualifier="ORDERED">
 <VALUE>3</VALUE>
 <NUMOFDEC>0</NUMOFDEC>
 <SIGN>+</SIGN>
 <UOM>EACH</UOM>

Segment	Values	Meaning
QUANTITY	Quantity of Item	Quantity of the line item demanded through this forecast line.
UOM	EA	Each

</QUANTITY>

<DATETIME qualifier = "FORECASTS">
 <YEAR>2000</YEAR>
 <MONTH>07</MONTH>
 <DAY>03</DAY>
 <HOUR>00</HOUR>
 <MINUTE>25</MINUTE>
 <SECOND>45</SECOND>
 <SUBSECOND>0000</SUBSECOND>
 <TIMEZONE>-0600</TIMEZONE>
 </DATETIME>

Segment	Values	Meaning
DATETIME with qualifier FORECASTS	Date time	This DATETIME section notes the START DATE of the forecast.

<DATETIME qualifier= "FORECASTF">
 <YEAR>2000</YEAR>
 <MONTH>07</MONTH>
 <DAY>07</DAY>
 <HOUR>00</HOUR>
 <MINUTE>25</MINUTE>
 <SECOND>45</SECOND>
 <SUBSECOND>0000</SUBSECOND>
 <TIMEZONE>-0600</TIMEZONE>

Segment	Values	Meaning
DATETIME with qualifier FORECASTF		This DATETIME section notes the END DATE of the forecast.

```

<DATETIME qualifier="INVOICE">
  <YEAR>2000</YEAR>
  <MONTH>01</MONTH>
  <DAY>15</DAY>
  <HOUR>00</HOUR>
  <MINUTE>25</MINUTE>
  <SECOND>45</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0600</TIMEZONE>
</DATETIME
  
```

Segment	Values	Meaning
DATETIME with qualifier INVOICE	Date of invoice	Depending on order type, order date is passed through this field. For example, if the document is a sales order, then order date will be passed through the INVOICE DATE element.

```

<DATETIME qualifier="SHIP">
  <YEAR>2000</YEAR>
  <MONTH>01</MONTH>
  <DAY>15</DAY>
  <HOUR>00</HOUR>
  <MINUTE>25</MINUTE>
  <SECOND>45</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0600</TIMEZONE>
</DATETIME>
  
```

Segment	Values	Meaning
DATETIME with qualifier SHIP	Any date	SHIP date

```
<DATETIME qualifier="DELIVACT">
  <YEAR>2001</YEAR>
  <MONTH>01</MONTH>
  <DAY>31</DAY>
  <HOUR>00</HOUR>
  <MINUTE>25</MINUTE>
  <SECOND>45</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0600</TIMEZONE>
</DATETIME>
```

Segment	Values	Meaning
DATETIME with qualifier DELIVACT	Any date	Actual delivery date

```
<YEAR>2001</YEAR>
<MONTH>01</MONTH>
<DAY>31</DAY>
<HOUR>00</HOUR>
<MINUTE>25</MINUTE>
<SECOND>45</SECOND>
<SUBSECOND>0000</SUBSECOND>
<TIMEZONE>-0600</TIMEZONE>
</DATETIME>
<ITEM>SYMONDS102</ITEM>
```

Segment	Values	Meaning
<ITEM>	Item Number/name	Number/name of the item as defined in the Item Data Mapping

```
<FCTCORSUP>Certest_1</FCTCORSUP>
```

Segment	Values	Meaning
FCTCORSUP	End Order Number	End Order number is the order number of the parent document. For example, if the sales order is generated from a customer's purchase order, then the purchase order number is the end order number for the sales order. It is used in SDS.

<FCTLINIDEN>Certest_OMB_66</FCTLINIDEN>

Segment	Values	Meaning
FCTLINIDEN	Order identifier	Order number to which the line belongs. One file under one forecast header can be used to load lines from multiple orders. This field is optional in collaborative planning and required in the case of SDS.

<FCTORDERTYPE>Sales Order</FCTORDERTYPE>

<FCTORDERTYPE>Sales Order</FCTORDERTYPE>

<ORDERRELNUM>1</ORDERRELNUM>

<ORDERLINENUM>1</ORDERLINENUM>

Segment	Values	Meaning
FCTORDERTYPE	Purchase order Forecast Historical sales Seller Forecast Sales order Shipment notice	Order type for which document is generated. The first three types are permissible for a collaborative role of buyer while later three are permissible for the collaborative role of seller.
ORDERLINENUM	Line number	Line number

Segment	Values	Meaning
ORDERRELENUM	Release number	Release number of the line. A line can have several releases.

<SHIPTOADDRESS />
 <TRACKINGNUM />
 <BILLOFLADINGNUM />
 <CARRIER />
 <VEHICLENUM />
 <CONTAINERTYPE

Segment	Values	Meaning
SHIPTOADDRESS	Ship to address location	The location name of SHIP-TO address. This field can be left blank in case Ship To address is not available.
TRACKINGNUM	Tracking number	Tracking number as provided by the carrier company
CARRIER	Name of the carrier	Carrier name (as set up in Data Mapping)
VEHICLENUM	Vehicle number	Vehicle number of the carrier
CONTAINERTYPE	Container type	Container type in which material is packed. You can leave this field blank.

These fields are used for SDS or sending ASN.

<QUANTITY qualifier="PACKING">
 <VALUE />
 <NUMOFDEC>**0**</NUMOFDEC>
 <SIGN>+</SIGN>
 <UOM>**EACH**</UOM>
 </QUANTITY>

**Packing section (QUANTITY with qualifier PACKING) is not used;
 this is for mentioning packing details. <UOM> has to be EACH for
 conformance with the DTD.**

```

<VALUE />
<NUMOFDEC>0</NUMOFDEC>
<SIGN>+</SIGN>
<UOM>EACH</UOM>
</QUANTITY
    
```

```

<ENDDOCRELEASENUM>1</ENDDOCRELEASENUM>
<ENDDOCLINENUM>1</ENDDOCLINENUM>
<ENDORDERPUBID>SLAZ</ENDORDERPUBID>
<ENDORDERTYPE>Purchase Order</ENDORDERTYPE>
    
```

Segment	Values	Meaning
ENDORDERRELEASENUM	End order release number	Release Number of an Order line in the parent document of the current document. If this is a sales order and it is generated from a customers purchase order, then release number of the line of the PO is the End Order Release Number. It is used in SDS only.
ENDORDERLINENUM	End Order Line Number	Tracking number as provided by the carrier company
ENDORDERPUBID	End Order Publisher	End order publisher name (after Trading Partner data mapping). If end order publisher is the publisher itself, then there is no need of defining Trading Partner Data mapping.

Segment	Values	Meaning
ENDORDERTYPE	End Order Type	Document type of the parent document, in this case it is purchase order

Mostly these field are used in SDS data loads.

```
<USERAREA>
  <FCTCOMMENTS comment="Certest Line1" />
</USERAREA>
```

User area is used for communicating fields like Comments, etc. Some industry specific segments also can be communicated in this area.

```
<PARTNER>
  <NAME index="1">Symonds Assembly1</NAME>
  <ONETIME>0</ONETIME>
  <PARTNRID>12851</PARTNRID>
  <PARTNRRTYPE>PUBLISHER</PARTNRRTYPE>

  <USERAREA>
    <FCTADDRESS />
  </USERAREA>
</PARTNER>
```

Segment	Values	Meaning
NAME index=..	Name of publisher	Name of the publisher or owner of the document
PARTNERID	Company ID	Hub ID to the publisher company as listed in the Trading Partner Directory
FCTADDRESS	Address of the publisher	Not required, can be Null.

This partner area is used to communicate details of the publisher which is identified by specifying PUBLISHER in PARTNERTYPE tag.

```

<PARTNER>
  <NAME index="2">Slazenger Manufacturing1</NAME>
  <ONETIME>0</ONETIME>
  <PARTNRID>SLAZ</PARTNRID>
  <PARTNRTYPE>SUBSCRIBER</PARTNRTYPE>
  = <USERAREA>
    <FCTADDRESS />
  </USERAREA>
</PARTNER>
    
```

Segment	Values	Meaning
PARTNERTYPE	SUBSCRIBER	
PARTNERID	PARTNER ID	Name of the partner as defined in Trading Partner Data Mapping. For example, if your subscriber is Slazenger Manufacturing, but your company calls them as SLAZ which you have defined in Trading Partner Data Mapping Cross Reference, then you use SLAZ.

This partner area is used to communicate details of Subscriber, which is identified by specifying SUBSCRIBER in PARTNERTYPE tag.

```

<PARTNER>
  <NAME index="3">Slazenger Manufacturing1</NAME>
  <ONETIME>0</ONETIME>
  <PARTNRID>SLAZ</PARTNRID>
  <PARTNRTYPE>SHIPFROM</PARTNRTYPE>
    
```

```

<USERAREA>
  <FCTADDRESS />
</USERAREA>
</PARTNER>
    
```

Segment	Values	Meaning
PARTNERTYPE	SHIPFROM	Ship From Trading Partner
PARTNERID	PARTNER ID	Name of the partner as defined in Trading Partner Data Mapping. Like subscriber, PARTNERID is the name given in TP Cross Reference Data mapping. In SDS scenario, if this field is left blank, system will put the default value of publisher of the document.

This partner area is used to communicate details of Ship From Organization, which is identified by specifying SHIPFROM in PARTNERTYPE tag.

```

<PARTNER>
  <NAME index="4">Slazenger Manufacturing1</NAME>
  <ONETIME>0</ONETIME>
  <PARTNRID>SLAZ</PARTNRID>
  <PARTNRRTYPE>SHIPTO</PARTNRRTYPE>
  ± <USERAREA>
    <FCTADDRESS>HQ</FCTADDRESS>
  </USERAREA>
</PARTNER>
    
```

Segment	Values	Meaning
PARTNERTYPE	SHIP TO	Ship To Trading Partner

Segment	Values	Meaning
PARTNERID	PARTNER ID	Name of the Partner as defined in Trading Partner Data Mapping. Like Subscriber, PARTNERID is the name given in TP Cross Reference Data mapping. In SDS scenario, if this field is left blank, system assumes the value of subscriber of the document.

This Partner area is used to communicate details of Ship To Organization, which is identified by specifying SHIPTO in PARTNERTYPE tag.

DTD for a Demand transaction File

(000_sync_forecast_001.dtd

```

<!--
$Header: 000_sync_forecast_001.dtd 115.1 2000/12/18 23:39:58 pdandapa noship $
  $ Revision: 0.0.1 $
  $ Date: 20 March 2000 $
  $ Oracle Forecast DTD$
  $ Copyright 2000, All Rights Reserved$

  $Name: $

  Pacifia 0.0.0 22/02/2000 Initial Release - from revision 001
  Preetam 0.0.1 23/02/2000 Modified 000_add_forecast_001.dtd

  Structure Overview
    SYNC_FORECAST (FCTHEADER, FCTLINE+)

```

FCTHEADER (PARTNER+)
 FCTLINE (PARTNER+)

Notes:

-->

```
<!-- ===== -->
<!ENTITY % RESOURCES SYSTEM "oagis_resources.dtd"> %RESOURCES;
<!ENTITY % MSCFIELDS SYSTEM "msc_fields.dtd"> %MSCFIELDS;
```

```
<!-- ===== -->
```

```
<!ELEMENT SYNC_FORECAST_001 (CNTROLAREA, DATAAREA+)>
```

```
  <!ATTLIST VERB value CDATA #FIXED "SYNC">
  <!ATTLIST NOUN value CDATA #FIXED "FORECAST">
  <!ATTLIST REVISION value CDATA #FIXED "001">
```

```
  <!ELEMENT DATAAREA (SYNC_FORECAST)>
```

```
  <!ELEMENT SYNC_FORECAST (FCTHEADER, FCTLINE*)>
```

```
  <!ELEMENT FCTHEADER (
    (%DATETIME.DOCUMENT;),
    (%OPERAMT.EXTENDED.T;)?,
    FCTHDRID,
    SYNCIND,
    FCTCODE?,
    DESCRIPTN?,
    NOTES?,
    FCTSTATUS?,
    (%DATETIME.FORECASTS;),
    (%DATETIME.FORECASTF;),
    USERAREA?,
    PARTNER+
  )>
```

```
  <!ELEMENT FCTREVNUM %STRDOM;>
```

```
  <!ELEMENT FCTREVDATE %STRDOM;>
```

Sample Demand Transaction File

```
<!ELEMENT FCTLINE (
    (%QUANTITY.ORDERED;)?,
    (%OPERAMT.EXTENDED.T;)?,
    (%DATETIME.FORECASTS;)?,
    (%DATETIME.FORECASTF;)?,
    (%DATETIME.INVOICE;)?,
    (%DATETIME.SHIP;)?,
    (%DATETIME.DELIVACT;)?,
    (%OPERAMT.UNIT.T;)?,
    FCTLINENUM?,
    FCTTYPECODE?,
    FCTADJCODE?,
    FCTPRIORITY?,
    ITEMRV?,
    ITEMRVX?,
    FCTLNSTATUS?,
    ((DESCRIPTN,ITEM?,ITEMX?,UPC?)(ITEM,ITEMX?,UPC?)(ITEMX,UPC?)(UPC)),
    FCTCORSUP?,
    FCTLINIDEN?,
    FCTORDERTYPE?,
    ORDERRELNUM?,
    ORDERLINENUM?,
    SHIPTOADDRESS?,
    TRACKINGNUM?,
    BILLOFLADINGNUM?,
    CARRIER?,
    VEHICLENUM?,
    CONTAINERTYPE?,
    (%QUANTITY.PACKING;)?,
    ENDDOCRELEASENUM?,
    ENDDOCLINENUM?,
    ENDORDERPUBID?,
    ENDORDERTYPE?,
    USERAREA?,
    ((PARTNER?) | (PARTNER+))
)>

<!ELEMENT FCTBKTYPE %STRDOM;>
<!ELEMENT FCTCOMMENTS %STRDOM;>
<!ATTLIST FCTCOMMENTS comment CDATA #REQUIRED>
```

<!ELEMENT FCTADDRESS %STRDOM;>

Sample Demand Transaction File

B

Sample XML File and DTD for a Supply Transaction

Topic covered in this appendix includes:

- [Sample Supply Transaction File](#) on page B-2

Sample Supply Transaction File

Control Area

```

<CONTROLAREA>
  = <BSR>
    <VERB>SYNC</VERB>
    <NOUN>SUPPLY</NOUN>
    <REVISION>001</REVISION>
  </BSR>
  = <SENDER>
    <LOGICALID>XGRB1109</LOGICALID>
    <COMPONENT>PRODUCTION</COMPONENT>
    <TASK>DP</TASK>
    <REFERENCEID>9534223449</REFERENCEID>
    <CONFIRMATION>1</CONFIRMATION>
    <LANGUAGE>EN</LANGUAGE>
    <CODEPAGE>CP001001</CODEPAGE>
    <AUTHID>12851</AUTHID>
  </SENDER>
  = <DATETIME qualifier="CREATION">
    <YEAR>1998</YEAR>
    <MONTH>11</MONTH>
    <DAY>21</DAY>
    <HOUR>00</HOUR>
    <MINUTE>25</MINUTE>
    <SECOND>45</SECOND>
    <SUBSECOND>0000</SUBSECOND>
    <TIMEZONE>-0600</TIMEZONE>
  </DATETIME>
</CONTROLAREA>

```

Segment	Values	Meaning
VERB	SYNC	Synchronize
NOUN	SUPPLY	"Supply" signifies it is a supply transaction. This is used by the XML Gateway to identify transaction type for processing.

Segment	Values	Meaning
AUTHID	Hub ID of the sender trading partner, as listed under Welcome/Trading Partner	Hub ID is the ID used by the Hub to identify the trading partner posting the XML file.
DATETIME	Date and timestamp of the document	Timestamp of the document creation

Data Area

Data area consists of two broad sections – Header and Line. One header can contain many lines. Header area contains Document specific details about Publisher, Subscriber, Document Creation date etc., and line area contains details about each data line.

```
<DATETIME qualifier="DOCUMENT">
  <YEAR>2000</YEAR>
  <MONTH>12</MONTH>
  <DAY>01</DAY>
  <HOUR>00</HOUR>
  <MINUTE>25</MINUTE>
  <SECOND>45</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0600</TIMEZONE>
</DATETIME>
```

This DATETIME section contains document creation date time that is usually system generated.

Segment	Values	Meaning
SYNCIND	A	Action to be taken during synchronize
	C	„ A: Add - Add a supply to the existing supply data. If the supply data is already present in the Hub for the publisher, subscriber, item, and date, then the system overwrites it with new data loaded through the file.
	D	„ C: Change the existing data with new data
	R	„ D: Delete the existing supply data
	P	„ R: Replace the existing data with a new set of data supplied in the file
		„ P: Purge existing data in the date-range provided. This option has to be used very carefully, as it deletes all data of a publisher/item combination with the date specified.

More about the use of SYNCID is described in the flat file upload section.

Header Area

```
<DATETIME qualifier="FORECASTS">
  <YEAR>1900</YEAR>
  <MONTH>11</MONTH>
  <DAY>21</DAY>
  <HOUR>00</HOUR>
  <MINUTE>25</MINUTE>
  <SECOND>45</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0600</TIMEZONE>
</DATETIME>
```

This DATETIME section with qualifier "FORECASTS" is used for "HORIZON START DATE" field of the supply data.

```
DATETIME qualifier="FORECASTF">
  <YEAR>2099</YEAR>
  <MONTH>11</MONTH>
  <DAY>21</DAY>
  <HOUR>00</HOUR>
  <MINUTE>25</MINUTE>
  <SECOND>45</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0600</TIMEZONE>
</DATETIME>
```

This DATETIME section with qualifier "FORECASTF" is used for "HORIZON END DATE" field of the supply data.

```
<PARTNER>
  <NAME index="1">Symonds Assembly1</NAME>
  <ONETIME>0</ONETIME>
  <PARTNRID>12851</PARTNRID>
  <PARTNRTYPE>PUBLISHER</PARTNRTYPE>
</PARTNER>
```

This section refers to the "PUBLISHER" field of the supply data. PartnerID should be equal to the Hub ID of the trading partner for which data is posted. PARTNERTYPE has to be "PUBLISHER."

Line area

Line area is bound by tags <SUPLINE> and </SUPLINE>. Different segments in every data Line are as follows:

```
<QUANTITY qualifier="ORDERED">
  <VALUE>0104</VALUE>
  <NUMOFDEC>0</NUMOFDEC>
  <SIGN>+</SIGN>
  <UOM>EACH</UOM>
</QUANTITY
```

Line item quantity is the quantity of the line XXXX.

```
<DATETIME qualifier="FORECASTS">
  <YEAR>2001</YEAR>
  <MONTH>01</MONTH>
  <DAY>31</DAY>
  <HOUR>00</HOUR>
  <MINUTE>25</MINUTE>
  <SECOND>45</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0600</TIMEZONE>
</DATETIME
```

Value in this DATETIME section refers to the "START DATE" of the supply data and is valid for the line.

```
DATETIME qualifier="FORECASTF">
  <YEAR>2001</YEAR>
  <MONTH>01</MONTH>
  <DAY>31</DAY>
  <HOUR>00</HOUR>
```

```
<MINUTE>25</MINUTE>
<SECOND>45</SECOND>
<SUBSECOND>0000</SUBSECOND>
<TIMEZONE>-0600</TIMEZONE>
</DATETIME
```

Value in the DATETIME section refers to "END DATE" of the supply data and is valid for the line.

```
ATETIME qualifier="INVOICE">
  <YEAR>2000</YEAR>
  <MONTH>01</MONTH>
  <DAY>15</DAY>
  <HOUR>00</HOUR>
  <MINUTE>25</MINUTE>
  <SECOND>45</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0600</TIMEZONE>
</DATETIME
```

Depending on Order Type, Order Date is passed through this field. For example, if the document is a sales order, then "Order Date" will be passed through "INVOICE DATE" element.

```
DATETIME qualifier="SHIP">
  <YEAR>2000</YEAR>
  <MONTH>01</MONTH>
  <DAY>15</DAY>
  <HOUR>00</HOUR>
  <MINUTE>25</MINUTE>
  <SECOND>45</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0600</TIMEZONE>
</DATETIME
```

Value in this DATETIME section refers to the SHIP DATE field of the supply data and is valid for the line.

DATETIME qualifier="DELIVACT">
 <YEAR>2001</YEAR>
 <MONTH>01</MONTH>
 <DAY>31</DAY>
 <HOUR>00</HOUR>
 <MINUTE>25</MINUTE>
 <SECOND>45</SECOND>
 <SUBSECOND>0000</SUBSECOND>
 <TIMEZONE>-0600</TIMEZONE>
 </DATETIME

Value in this DATETIME section refers to ACTUAL DELIVERY DATE field of supply data.

<ITEM>SYMONDS102</ITEM>

Value in this section (<ITEM>) refers to ITEM field of supply data. This is also valid for the line only. Item name should exactly match with the Item Name defined in "Data Mapping" section for the Trading Partner.

<SUPCORSUP>Certest_1</SUPCORSUP>
 <SUPLINIDEN>Certest_OMB_99</SUPLINIDEN>

Segment	Values	Meaning
SUPCORSUP	End order number	End order number is the order number from which the current document is generated. For example, if this is a sales order and it is generated from a customer's purchase order, then the purchase order (parent document) number is end order number of the sales order.
SUPLINIDEN	Line number	Line number of the line in the current document.

<SUPORDERTYPE>Sales Order</SUPORDERTYPE>

Segment	Values	Meaning
SUPORDERTYPE (for buyers)	n Committed demand	Order type of the current supply document. These order types are permissible for the collaborative role of buyer in collaborative supply planning.
	n Forecast	
	n Onhand	
	n Purchase order	
SUPORDERTYPE (for sellers)	n Intransit	These order types are permissible for the collaborative rold of seller in collaborative supply planning.
	n Supplier capacity	
	n Actual production	
	n Actual production for forecast	
	n Actual production for committed demand	
	n Planned production	
	n Planned production for forecast	
	n Planned production for committed demand	
	n Sales order	
n Shipment notice		

```

<ORDERRELNUM>1</ORDERRELNUM>
<ORDERLINENUM>1</ORDERLINENUM>
<SHIPTOADDRESS />
<TRACKINGNUM />
<BILLOFLADINGNUM />
<CARRIER />
<VEHICLENUM />

```

Segment	Values	Meaning
ORDERRELNUM	Release number	Release number of the line
ORDERLINENUM	Line number	Line number of the data line in the current document

Sample Supply Transaction File

Segment	Values	Meaning
SHIPTOADDRESS	Ship to address	Ship to address location. Address location name should be used to communicate the address
TRACKINGNUM	Tracking number	Tracking number, typically used for a shipment
BILLOFLADINGNUM	Bill of lading number	Bill of lading number
CARRIER	Carrier	Name of the carrier trading partner
VEHICLENUM	Vehicle number	Vehicle number

```

<CONTAINERTYPE />
= <QUANTITY qualifier="PACKING">
  <VALUE />
  <NUMOFDEC>0</NUMOFDEC>
  <SIGN>+</SIGN>
  <UOM>EACH</UOM>
</QUANTITY

```

Segment	Values	Meaning
CONTAINERTYPE	Container type	This section is used to provide packing information. Provide the container type information like pallet, box, etc. in this tag.
QUANTITY	Quantity in the container	Quantity in each container. There can be several lines, each describing one container.

```

<ENDDOCRELEASENUM>1</ENDDOCRELEASENUM>
<ENDDOCLINENUM>1</ENDDOCLINENUM>
<ENDORDERPUBID>SLAZ</ENDORDERPUBID>
<ENDORDERTYPE>Purchase Order</ENDORDERTYPE>

```

Segment	Values	Meaning
ENDDOCRELEASENU M	End order release number	Release number of the line in the parent document.

Segment	Values	Meaning
ENDDOCLINENUM	End order line number	Line number of the line in the parent document.
ENDORDERPUBID	End order publisher	Publisher name (as defined in the Data Mapping or Code Conversion mapping), of the parent document.
ENDORDERTYPE	End order type	Order type of the parent document. If the current document is a sales order and it is derived from a purchase order, then end order type is "purchase order." This field has to be Null for the first document, which is not derived from any other document.

```
<USERAREA>
  <SUPCOMMENTS comment="Certest Line1" />
</USERAREA
```

Segment	Values	Meaning
SUPCOMMENTS	Comments	Line level comments

```
<PARTNER>
  <NAME index="1">Symonds Assembly1</NAME>
  <ONETIME>0</ONETIME>
  <PARTNRID>12851</PARTNRID>
  <PARTNRTYPE>PUBLISHER</PARTNRTYPE
```

This PARTNER area is used to communicate line level "PUBLISHER." Line level publisher is the actual publisher of the data. If this field is left blank, "PUBLISHER" field from the header level is assumed to be the publisher of the line. If this field is populated and is different from the header level "PUBLISHER," then the header level "PUBLISHER" is assumed to be PROXY, posting data for the line level publisher.

```
<PARTNER>
  <NAME index="2">Slazenger Manufacturing1</NAME>
  <ONETIME>0</ONETIME>
  <PARTNRID>SLAZ</PARTNRID>
  <PARTNRTYPE>SUBSCRIBER</PARTNRTYPE>
  <USERAREA>
    <SUPADDRESS />
  </USERAREA>
</PARTNER>
```

This PARTNER are is used to communicate Subscriber Trading Partner information in the document. Subscriber name has to match with the trading partner defined as in Trading Partner Data Mapping.

```
<PARTNER>
  <NAME index="3">Slazenger Manufacturing1</NAME>
  <ONETIME>0</ONETIME>
  <PARTNRID>SLAZ</PARTNRID>
  <PARTNRTYPE>SHIPFROM</PARTNRTYPE>
  = <USERAREA>
    <SUPADDRESS />
  </USERAREA>
</PARTNER>
= <PARTNE
```

This PARTNER area is used to communicate Ship-From trading partner information.

```

<PARTNER>
  <NAME index="4">Slazenger Manufacturing1</NAME>
  <ONETIME>0</ONETIME>
  <PARTNRID>SLAZ</PARTNRID>
  <PARTNRTYPE>SHIPTO</PARTNRTYPE>
  = <USERAREA>
    <SUPADDRESS>HQ</SUPADDRESS>
  </USERAREA>

```

This PARTNER area is used to communicate Ship-To trading partner information. Notice the SUPADDRESS tag which contains the address location. This is used to derive the Ship-To address.

DTD for a Supply transaction File

(000_sync_supply_001.dtd

```

<!--
$header: 000_sync_supply_001.dtd 115.1 2000/12/18 23:40:45 pdandapa noship $
  $Revision: 115.1 $
  $Date: 2000/12/18 23:40:45 $
  $Oracle Supply DTD Copyright 2000, All Rights Reserved$

  $Name: $

  Preetam      0.0.1  20/03/2000  Initial version

  Structure Overview
  SYNC_SUPPLY (SUPHEADER, SUPLINE+)
  FCTHEADER (PARTNER+)
    FCTLINE ( PARTNER+)

  Notes: Refer to 000_sync_forecast_001.dtd

-->

<!-- ===== -->
<!ENTITY % RESOURCES SYSTEM "oagis_resources.dtd"> %RESOURCES;
<!ENTITY % MSCFIELDS SYSTEM "msc_fields.dtd"> %MSCFIELDS;

```

Sample Supply Transaction File

<!-- ===== -->

```
<!ELEMENT SYNC_SUPPLY_001 (CNTROLAREA, DATAAREA+)>

  <!ATTLIST VERB value CDATA #FIXED "SYNC">
  <!ATTLIST NOUN value CDATA #FIXED "SUPPLY">
  <!ATTLIST REVISION value CDATA #FIXED "001">

  <!ELEMENT DATAAREA (SYNC_SUPPLY)>
    <!ELEMENT SYNC_SUPPLY (SUPHEADER, SUPLINE*)>
      <!ELEMENT SUPHEADER (
        (%DATETIME.DOCUMENT;),
        (%OPERAMT.EXTENDED.T;)?,
        SUPHDRID,
        SYNCIND,
        SUPPLYCODE?,
        DESCRIPTN?,
        NOTES?,
        SUPSTATUS?,
        (%DATETIME.FORECASTS;),
        (%DATETIME.FORECASTF;),
        USERAREA?,
        PARTNER+
      )>

      <!ELEMENT SUPREVNUM %STRDOM;>
      <!ELEMENT SUPREVDATE %STRDOM;>

      <!ELEMENT SUPLINE (
        (%QUANTITY.ORDERED;)?,
        (%OPERAMT.EXTENDED.T;)?,
        (%DATETIME.FORECASTS;)?,
        (%DATETIME.FORECASTF;)?,
        (%DATETIME.INVOICE;)?,
        (%DATETIME.SHIP;)?,
        (%DATETIME.DELIVACT;)?,
        (%OPERAMT.UNIT.T;)?,
        SUPLINENUM?,
        SUPTYPECODE?,
        SUPADJCODE?,
```

```

SUPPRIORITY?,
        ITEMRV?,
        ITEMRVX?,
        SUPLNSTATUS?,
        (( (DESCRIPTN, ITEM?, ITEMX?, UPC?) | (ITEM, ITEMX?, UPC?) |
        (ITEMX, UPC?) | (UPC) ),
        SUPCORFCT?,
        SUPLINIDEN?,
        SUPORDERTYPE?,
        ORDERRELNUM?,
        ORDERLINENUM?,
        SHIPTOADDRESS?,
        TRACKINGNUM?,
        BILLOFLADINGNUM?,
        CARRIER?,
        VEHICLENUM?,
        CONTAINERTYPE?,
        (%QUANTITY.PACKING;)?,
        ENDDOCRELEASENUM?,
        ENDDOCLINENUM?,
        ENDORDERPUBID?,
        ENDORDERTYPE?,
        USERAREA?,
        (( (PARTNER?) | (PARTNER+))
        )>

<!ELEMENT SUPBKTYPE %STRDOM;>
<!ELEMENT SUPCOMMENTS %STRDOM;>
<!ATTLIST SUPCOMMENTS comment CDATA #REQUIRED>
<!ELEMENT SUPADDRESS %STRDOM;>

```

Sample Supply Transaction File

C

Sample XML File and DTD for a Sequence Schedule Transaction

Topic covered in this appendix includes:

- [Sample Supply Transaction File](#) on page C-2

Sample Supply Transaction File

Control Area

```
<CNTROLAREA>
  = <BSR>
    <VERB>SYNC</VERB>
    <NOUN>PSQI</NOUN>
    <REVISION>001</REVISION>
  </BSR>
  = <SENDER>
    <LOGICALID>XX141HG09</LOGICALID>
    <COMPONENT>MFG</COMPONENT>
    <TASK>SEQSCHD</TASK>
    <REFERENCEID>731</REFERENCEID>
    <CONFIRMATION>1</CONFIRMATION>
    <LANGUAGE>EN</LANGUAGE>
    <CODEPAGE>TEST</CODEPAGE>
    <AUTHID>12851</AUTHID>
  </SENDER>
  = <DATETIME qualifier="CREATION">
    <YEAR>2000</YEAR>
    <MONTH>09</MONTH>
    <DAY>19</DAY>
    <HOUR>09</HOUR>
    <MINUTE>08</MINUTE>
    <SECOND>45</SECOND>
    <SUBSECOND>0000</SUBSECOND>
    <TIMEZONE>-0600</TIMEZONE>
  </DATETIME>
</CNTROLAREA>
```

Segment	Values	Meaning
NOUN	SUPPLY	Supply signifies it is a supply transaction. This is used by XML Gateway to identify transaction type for processing.
AUTHID	Hub ID of the Sender Trading Partner, as listed under Welcome/Trading Partner)	Hub ID is the ID used by the Hub to identify the Trading Partner posting XML file.
DATETIME section	Date and timestamp of the document creation.	Timestamp of the document creation.

Data Area

Data area has two segments SEQSCHDHD, representing Sequence Header and SEQSCHEDDT, representing Sequence Details or line.

<SCHEDID>ILVS10/30</SCHEDID>

Segment	Values	Meaning
SCHEDID	Schedule ID	Name of the plan. The plan has to be derived as ILVS plan.

```

=> <DATETIME qualifier="SCHSTART">
  <YEAR>2000</YEAR>
  <MONTH>01</MONTH>
  <DAY>01</DAY>
  <HOUR>12</HOUR>
  <MINUTE>30</MINUTE>
  <SECOND>45</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0600</TIMEZONE>
</DATETIME>
=> <DATETIME qualifier="SCHEND">
  <YEAR>2001</YEAR>
  <MONTH>01</MONTH>
  <DAY>30</DAY>
  
```

Sample Supply Transaction File

```

    <HOUR>09</HOUR>
    <MINUTE>50</MINUTE>
    <SECOND>55</SECOND>
    <SUBSECOND>0000</SUBSECOND>
    <TIMEZONE>-0600</TIMEZONE>
</DATETIME>

```

Segment	Values	Meaning
DATETIME with qualifier SCHSTART	Start date of the schedule	Start date
DATETIME with qualifier SCHEND	End date of the schedule	End date

```

<SYNCIND>ADD</SYNCIND>
<ACKREQUEST>Y</ACKREQUEST>

```

Segment	Values	Meaning
SYNCIND	ADD	Add the schedule.
ACKREQUEST	Y	Use if acknowledgment request is required from the supplier. Currently has to be populated for DTD conformance.

```

    <DATETIME qualifier="DOCUMENT">
    <YEAR>2000</YEAR>
    <MONTH>09</MONTH>
    <DAY>19</DAY>
    <HOUR>10</HOUR>
    <MINUTE>25</MINUTE>
    <SECOND>00</SECOND>
    <SUBSECOND>0000</SUBSECOND>
    <TIMEZONE>-0600</TIMEZONE>
</DATETIME>

```

Segment	Values	Meaning
DATETIME with qualifier DOCUMENT	Document time	Document time

```

<PARTNER>
  <NAME index="1">Symonds Assembly1</NAME>
  <ONETIME>0</ONETIME>
  <PARTNRID>12851</PARTNRID>
  <PARTNRRTYPE>SOLDTO</PARTNRRTYPE>
</PARTNER>
  
```

Segment	Values	Meaning
PARTNER with PARTNERTYPE = SOLDTO	Trading partner name	Buyer/Sender Trading Partner of the schedule. If it is posting for itself, then no need to define code conversion in Trading Partner Data Mapping

```

<PARTNER>
  <NAME index="2">SLAZ</NAME>
  <ONETIME>0</ONETIME>
  <PARTNRID>12849</PARTNRID>
  <PARTNRRTYPE>SUPPLIER</PARTNRRTYPE>
</PARTNER>
  
```

Segment	Values	Meaning
PARTNER with qualifier PARTNERTYPE = SUPPLIER	Trading partner name	Supplier Trading Partner. This is the name as chosen while defining code conversion in Trading Partner Data Mapping

```

DATETIME qualifier="REQUIRED">
  <YEAR>2000</YEAR>
  <MONTH>09</MONTH>
  <DAY>21</DAY>
  <HOUR>15</HOUR>
  <MINUTE>25</MINUTE>
  
```

Sample Supply Transaction File

<SECOND>15</SECOND>
 <SUBSECOND>0000</SUBSECOND>
 <TIMEZONE>-0600</TIMEZONE>
 </DATETIME>

Segment	Values	Meaning
DATETIME with qualifier REQUIRED	Required time	Required time of the schedule serial number.

<PRODSEQBEG>270A001</PRODSEQBEG>
 <PRODSEQEND>270A010</PRODSEQEND>

Segment	Values	Meaning
PRODSEQBEG	Beginning production sequence number	Beginning Production sequence Number for the sequence transaction
PRODSEQEND	End production sequence number	Ending Production Sequence # for this Sequence Transaction Document. Later there will be one individual line for each production number.

<ITEM>SYMONDS103</ITEM>

Segment	Value	Meaning
ITEM	Item name	Item name as defined in Item Data Mapping

<SEQSCHDLN>

Under one header, there are several sequence lines, each representing one production sequence number. Each line is confined by tags <SEQSCHDLN> and </SEQSCHDLN> Below is the details of each segment of a line.

```
<QUANTITY qualifier="ORDERED">
  <VALUE>4</VALUE>
  <NUMOFDEC>0</NUMOFDEC>
  <SIGN>+</SIGN>
  <UOM>EACH</UOM>
</QUANTITY>
```

Segment	Values	Meaning
QUANTITY with qualifier ORDERED	Quantity	Quantity required for this particular item in this particular sequence

```
<PRODSEQNUM>270A001</PRODSEQNUM>
<ENDITEMID>CISCO-ASSLY</ENDITEMID>
<LINEFEED>CISCO_LNFD</LINEFEED>

</SEQSCHDLN>
```

Segment	Values	Meaning
PRODSEQNUM	Actual production sequence number	Production sequence number for this line
ENDITEMID	End item ID	End item is the parent item of the sequenced item, if it is derived from the bill of materials. Otherwise it is the customer item.
LINEFEED	Assembly line name	Usually given by customer for delivery purposes.

This portion repeats for every line of the sequence transaction, and each line typically represents one production sequence number.

DTD for a Sequence Schedule Transaction File

(000_sync_seqsched_001.dtd)

```
<!--
$header: 000_sync_seqsched_001.dtd 115.1 2000/08/30 17:25:24 appldev noship $
  $ Revision: 0.0.1 $
  $ Date: 20 March 2000 $
  $ Oracle Forecast DTD$
  $ Copyright 2000, All Rights Reserved$

  $Name: $

  Prashant 0.0.0 05/26/2000 Initial Release - from revision 001

  Structure Overview
    SYNC_SEQSCHD (SEQSCHDHD, SEQSCHDDT+)
    SEQSCHDHD (PARTNER+)
    SEQSCHDDT (SEQSCHDLN+)

  Notes:

-->
<!-- ===== -->
<!ENTITY % RESOURCES SYSTEM "oagis_resources.dtd"> %RESOURCES;

<!ENTITY % RLXFIELDS SYSTEM "rlx_fields.dtd"> %RLXFIELDS;

<!-- ===== -->

<!ELEMENT SYNC_SEQSCHD_001 (CNTROLAREA, DATAAREA+)>

  <!ATTLIST VERB value CDATA #FIXED "SYNC">
  <!ATTLIST NOUN value CDATA #FIXED "SEQSCHD">
```

```
<!ATTLIST REVISION value CDATA #FIXED "001">

<!ELEMENT DATAAREA (SYNC_SEQSCHD)>

<!ELEMENT SYNC_SEQSCHD (SEQSCHDHD, SEQSCHDDT+)>

<!ELEMENT SEQSCHDHD (
    SCHEDID,
    (%DATETIME.SCHSTART;)?,
    (%DATETIME.SCHEND;)?,
    SYNCIND,
    ACKREQUEST,
    (%DATETIME.DOCUMENT;)?,
    PARTNER+
)>

<!ELEMENT SEQSCHDDT (
    (%DATETIME.REQUIRED;),
    PRODSEQBEG?,
    PRODSEQEND?,
    SEQSCHDLN+
)>

<!ELEMENT SEQSCHDLN (
    ITEM,
    (%QUANTITY.ORDERED;),
    PRODSEQNUM,
    ENDITEMID?,
    LINEFEED
)>

<!-- Following elements are not present in oagis_fields.dtd -->
```

Sample Supply Transaction File

D

Using XML Documents to Inquire or Respond

Topic covered in this appendix includes:

- [Sample file for Availability Inquiry XML Document from Hub to Supplier](#) on page D-2

Sample file for Availability Inquiry XML Document from Hub to Supplier

Control Section:

Sender: Buyer information is available in this section. This information should be used for buyer specific pricing.

Logical Id: the number assigned by Hub to buyer's company (look this up on Hub by searching for buyer company's name after navigating to Welcome/Trading Partner Directory)

Auth Id: the exact name under which buyer company is registered on Hub.

Data Section:

User Area:

Name1: Hub Id.

Name2: Hub Name.

```
<?xml version = '1.0' standalone = 'no'?>
```

```
<GET_PRODAVAIL_002>
```

```
<CNTROLAREA>
```

```
<BSR>
```

```
<VERB>
```

```
<![CDATA[GET]]>
```

```
</VERB>
```

```
<NOUN>
```

```
<![CDATA[PRODAVAIL]]>
```

```
</NOUN>
```

```
<REVISION>
```

```
<![CDATA[002]]>
```

```
</REVISION>
```

```
</BSR>
```

```
<SENDER>
<LOGICALID>
<![CDATA[8821]]>
</LOGICALID>
<COMPONENT>
<![CDATA[SALES]]>
</COMPONENT>
<TASK>
<![CDATA[ATP]]>
</TASK>
<REFERENCEID>
<![CDATA[786957]]>
</REFERENCEID>
<CONFIRMATION>
<![CDATA[1]]>
</CONFIRMATION>
<LANGUAGE>
<![CDATA[EN]]>
</LANGUAGE>
<CODEPAGE>
<![CDATA[CPXML]]>
</CODEPAGE>
<AUTHID>
<![CDATA[CHRIS]]>
</AUTHID>
</SENDER>

<DATETIME qualifier='CREATION'>
```

```
<YEAR>
<![CDATA[1999]]>
</YEAR>
<MONTH>
<![CDATA[01]]>
</MONTH>
<DAY>
<![CDATA[01]]>
</DAY>
<HOUR>
<![CDATA[00]]>

</HOUR>
<MINUTE>
<![CDATA[00]]>
</MINUTE>
<SECOND>
<![CDATA[00]]>
</SECOND>
<SUBSECOND>
<![CDATA[0000]]>
</SUBSECOND>
<TIMEZONE>
<![CDATA[-0600]]>
</TIMEZONE>
</DATETIME>
</CONTROLAREA>
<DATAAREA>
```

```
<GET_PRODAVAIL>
<PRODAVAIL returndata='1'>
```

Segment	Values	Meaning
DATETIME with qualifier REQUIRED	Date and time	Need by date in the ATP inquiry

```
<DATETIME qualifer='REQUIRED'>
<YEAR>
<![CDATA[2000]]>
</YEAR>
<MONTH>
<![CDATA[6]]>
</MONTH>
<DAY>
<![CDATA[6]]>
</DAY>
<HOUR>
<![CDATA[15]]>
</HOUR>
<MINUTE>
<![CDATA[32]]>
</MINUTE>
<SECOND>
<![CDATA[21]]>
</SECOND>
<SUBSECOND>
<![CDATA[0000]]>
```

```

</SUBSECOND>
<TIMEZONE>
<![CDATA[-8]]>
</TIMEZONE>
</DATETIME>

```

Segment	Values	Meaning
QUANTITY	Quantity	Required quantity

```

<QUANTITY qualifier='ORDERED'>
<VALUE>
<![CDATA[1]]>
</VALUE>
<NUMOFDEC>
<![CDATA[0]]>
</NUMOFDEC>
<SIGN>
<![CDATA[+]]>
</SIGN>
<UOM>
<![CDATA[Each]]>
</UOM>
</QUANTITY>
<ITEM>

```

Segment	Values	Meaning
ITEM	Item number	Exact item number

```

<![CDATA[652EGBA002]]>
</ITEM>
<SITELEVEL index='1'>
<![CDATA[200]]>
</SITELEVEL>
<USERAREA>
<NAME index='1'>

```

Segment	Values
NAME index '1'	Hub ID
NAME index '2'	Hub name

```

<![CDATA[2]]>
</NAME>
<NAME index='2'>
<![CDATA[auto-xchange]]>
</NAME>
</USERAREA>
</PRODAVAIL>
</GET_PRODAVAIL>
</DATAAREA>
</GET_PRODAVAIL_002>

```

Availability Response XML Document from Supplier Back to Hub

\$Revision: 6.1.0 \$

\$Date: 27 December 1998 \$

Open Applications Group Sample XML Data

Copyright 1998, All Rights Reserved

\$Name: 063_show_prodavail_002.xml \$

cmk 6.1.0 12/27/98 Initial Release

<!DOCTYPE SHOW_PRODAVAIL_002 SYSTEM "064_show_prodavail_002.dtd">

<SHOW_PRODAVAIL_002>

<CNTROLAREA>

<BSR>

<VERB>SHOW</VERB>

<NOUN>PRODAVAIL</NOUN>

<REVISION>002</REVISION>

</BSR>

<SENDER>

<LOGICALID>SS123123</LOGICALID>

Segment	Values	Meaning
LOGICALID	Number	Number assigned by the Hub to the company (as shown in Welcome/Trading Partner Directory)

<COMPONENT>SALES</COMPONENT>

```
<TASK>ATP</TASK>
<REFERENCEID>786957</REFERENCEID>
<CONFIRMATION>1</CONFIRMATION>
<LANGUAGE>EN</LANGUAGE>
<CODEPAGE>CPXML</CODEPAGE>
<AUTHID>CHRIS</AUTHID>
</SENDER>
<DATETIME qualifier = "CREATION" >
<YEAR>1998</YEAR>
<MONTH>12</MONTH>
<DAY>27</DAY>
<HOUR>18</HOUR>
<MINUTE>27</MINUTE>
<SECOND>00</SECOND>
<SUBSECOND>0000</SUBSECOND>
<TIMEZONE>-0600</TIMEZONE>
</DATETIME>

</CNTROLAREA>
<DATAAREA>
<SHOW_PRODAVAIL>
<PRODAVAIL>

<DATETIME qualifier="AVAILABLE">
<YEAR>1999</YEAR>
<MONTH>01</MONTH>
<DAY>01</DAY>
```

Sample file for Availability Inquiry XML Document from Hub to Supplier

```

<HOUR>00</HOUR>
<MINUTE>00</MINUTE>
<SECOND>00</SECOND>
<SUBSECOND>0000</SUBSECOND>
<TIMEZONE>-0600</TIMEZONE>
</DATETIME>
    
```

Segment	Values	Meaning
DATETIME with qualifier AVAILABLE	Date and time	Date time when it is available

```

<QUANTITY qualifier="AVAILABLE">
<VALUE>1</VALUE>
<NUMOFDEC>0</NUMOFDEC>
<SIGN>+</SIGN>
<UOM>EACH</UOM>
</QUANTITY>
    
```

Segment	Values	Meaning
QUANTITY	Quantity	How much available (needed quantity as requested)

```

<ITEM>BBT99EB</ITEM>
    
```

Segment	Values	Meaning
ITEM	Item Number	Item number for which availability check is carried out

```

<SITELEVEL index = "1">200</SITELEVEL>
    
```

```
</PRODAVAIL>
</SHOW_PRODAVAIL>
</DATAAREA>
</SHOW_PRODAVAIL_002>
```

DTD for a Availability Check Inquiry Transaction File

```
-->
<!-- ===== -->
<!ENTITY % RESOURCES SYSTEM "oagis_resources.dtd">
%RESOURCES;
<!-- ===== -->
<!ELEMENT GET_PRODAVAIL_004 (CNTROLAREA, DATAAREA+)>
<!ATTLIST VERB
                value CDATA #FIXED "GET" >
<!ATTLIST NOUN
                value CDATA #FIXED "PRODAVAIL" >
<!ATTLIST REVISION
                value CDATA #FIXED "004">
<!ELEMENT DATAAREA (GET_PRODAVAIL)>
<!ELEMENT GET_PRODAVAIL (PRODAVAIL)>
<!ELEMENT PRODAVAIL ((%DATETIME.REQUIRED;), (%QUANTITY.ORDERED;),
(%DATETIME.EFFECTIVE;)?, ITEM, SITELEVEL+, DOCTYPE?, DOCUMENTID?, ITEMDESC?,
ITEMRV?, ITEMTYPE?, LOTLEVEL*, NAME*, NOTES*, POID?, POLINENUM?, PRDLINENUM?,
PRODCTLINE?, PRODORDID?, PROPERTY*, SALESORDID?, SERIALNUM?, SOLINENUM?, SUB-
SFLAG?, USERAREA?)>
<!ATTLIST PRODAVAIL
                returndata CDATA #REQUIRED
>
```

Sample file for Availability Inquiry XML Document from Hub to Supplier

Index

A

Assigning Users To Items, 2-12

C

Checking the Status of a Collaboration, 2-30
Collaborative Demand Planning, 3-3
Collaborative Supply Planning, 3-13
Cross referencing items, 2-15
Cross referencing trading partners, 2-17
Customer Managed Inventory, 3-32

D

Determining the Type of Collaboration, 2-20

E

Exceptions, 4-18
Exporting Data Formats From the Hub, 2-35

I

Introduction to Oracle Supply Chain Hub, 1-2

L

Loading Items, 2-7

O

Order Promising or Real-Time Check Availability, 4-29
Order Visibility, 4-3
Order Visibility Business Process, 4-4

Other Features of the Supply Chain Hub, 1-11

P

Posting Data to the Hub, 2-34
Posting demands and supplies to the Hub, 2-40
Posting Demands and Supplies to the Hub
Manually, 2-48
Posting Demands and Supplies to the Hub Using Flat File
Bulk Upload, 2-55
Posting Demands and Supplies to the Hub Using
XML, 2-50
Preparing for Collaborations, 2-19
Production Sequencing, 3-39

R

Responding to a Collaboration Invitation, 2-28

S

Sample Demand Transaction File, A-2
Sample file for Availability Inquiry XML Document from
Hub to Supplier, D-2
Sample Supply Transaction File, B-2, C-2
Setting Up Additional Features, 4-2
Setting Up Collaboration Terms and Inviting Partners to
Collaborate, 2-22
Setting Up Collaborations, 3-2
Setting Up Supply Chain Users and Items, 2-3
Setting up the Initial Supply Chain Hub, 2-2
Setup Steps Overview, 1-12
Supply Chain Hub - Collaboration E-Hub, 1-7
Supply Chain Hub - Collaborative Planning E-Hub, 1-8

Supply Chain Hub - Common Integrated
Components, 1-5
Supply Chain Hub - Communication E-Hub, 1-6
Supply Chain Hub - Complete Integration, 1-10

V

Vendor Managed Inventory, 3-24
Viewing Formats, 2-56
Viewing the Terms of a Collaboration Invitation, 2-27