Oracle® Sales for Communications

Implementation Guide

Release 11*i*

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Oracle Sales for Communications Implementation Guide, Release 11*i*.

Part No. A92136-02

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Oracle Sales for Communications Implementation Guide, Release 11*i*

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Preface

Audience for This Guide

Welcome to Release 11*i* of the Oracle Sales for Communications Implementation Guide.

This guide assumes you have a working knowledge of the following:

- The principles and customary practices of your business area.
- Oracle Sales for Communications

  If you have never used Oracle Sales for Communications, Oracle suggests you attend one or more of the Oracle Sales for Communications training classes available through Oracle University.
- The Oracle Applications graphical user interface.

  To learn more about the Oracle Applications graphical user interface, read the *Oracle Applications User's Guide*.

See Other Information Sources for more information about Oracle Applications product information.

How To Use This Guide

This document contains the information you need to understand and implement Oracle Sales for Communications.

This guide contains three chapters and two appendixes:

Chapter 1, "Oracle Sales for Communications: An Overview"

This chapter provides an overview of Oracle Sales for Communications and its features.

Chapter 2, "Overview of Implementing Oracle Sales for Communications"

This chapter presents an overview of the implementation steps that you need to perform to set up Oracle Sales for Communications.

Chapter 3, "Implementing Oracle Sales for Communications"

This chapter presents the detailed procedures for setting up Oracle Sales for Communications.

Appendix A, "Public APIs"

This appendix presents details of the public APIs belonging to Oracle Sales for Communications.

Appendix B, "Navigation Paths"

This appendix presents the navigation paths to the windows used for setting up Oracle Sales for Communications. It also indicates the appropriate responsibility you must assume for performing the setup task.

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Standards will continue to evolve over time, and Oracle Corporation is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For additional information, visit the Oracle Accessibility Program Web site at http://www.oracle.com/accessibility/.

Accessibility of Code Examples in Documentation

JAWS, a Windows screen reader, may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, JAWS may not always read a line of text that consists solely of a bracket or brace.

Other Information Sources

You can choose from many sources of information, including online documentation, training, and support services, to increase your knowledge and understanding of Oracle Sales for Communications.

If this guide refers you to other Oracle Applications documentation, use only the Release 11*i* versions of those guides.

Online Documentation

All Oracle Applications documentation is available online (HTML or PDF). Online help patches are available on MetaLink.

Related Documentation

Oracle Sales for Communications shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other product documentation when you set up and use Oracle Sales for Communications.

You can read the documents online by choosing Library from the expandable menu on your HTML help window, by reading from the Oracle Applications Document Library CD included in your media pack, or by using a Web browser with a URL that your system administrator provides.

If you require printed guides, you can purchase them from the Oracle Store at http://oraclestore.oracle.com.

Documents Related to All Products

Oracle Applications User's Guide

This guide explains how to enter data, query, run reports, and navigate using the graphical user interface (GUI) available with this release of Oracle Sales for Communications (and any other Oracle Applications products). This guide also includes information on setting user profiles, as well as running and reviewing reports and concurrent processes.

You can access this user's guide online by choosing "Getting Started with Oracle Applications" from any Oracle Applications help file.

Documents Related to This Product

Oracle Bills of Material User's Guide

This guide describes how to create various bills of materials to facilitate the ordering of products and services by customers.

Oracle TeleSales Concepts and Procedures

This guide describes how to utilize the Oracle TeleSales functionalities available as a part of Oracle Sales for Communications.

Oracle TeleSales Implementation Guide

This guide describes how to implement the Oracle TeleSales functionalities available as a part of Oracle Sales for Communications.

Oracle Configurator User's Guide

This guide describes how to use the capabilities of Oracle Configurator to reconfigure product bundles.

Oracle Order Management User's Guide

This guide describes how to create price lists and discounts for orders.

Installation and System Administration

Oracle Applications Concepts

This guide provides an introduction to the concepts, features, technology stack, architecture, and terminology for Oracle Applications Release 11*i*. It provides a useful first book to read before an installation of Oracle Applications. This guide also introduces the concepts behind Applications-wide features such as Business Intelligence (BIS), languages and character sets, and Self-Service Web Applications.

Installing Oracle Applications

This guide provides instructions for managing the installation of Oracle Applications products. In Release 11*i*, much of the installation process is handled using Oracle Rapid Install, which minimizes the time to install Oracle Applications, the Oracle8 technology stack, and the Oracle8*i* Server technology stack by automating many of the required steps. This guide contains instructions for using Oracle Rapid Install and lists the tasks you need to perform to finish your installation. You should use this guide in conjunction with individual product user's guides and implementation guides.

Oracle Applications Supplemental CRM Installation Steps

This guide contains specific steps needed to complete installation of a few of the CRM products. The steps should be done immediately following the tasks given in the Installing Oracle Applications guide.

Upgrading Oracle Applications

Refer to this guide if you are upgrading your Oracle Applications Release 10.7 or Release 11.0 products to Release 11*i*. This guide describes the upgrade process and lists database and product-specific upgrade tasks. You must be either at Release 10.7 (NCA, SmartClient, or character mode) or Release 11.0, to upgrade to Release 11*i*. You cannot upgrade to Release 11*i* directly from releases prior to 10.7.

Maintaining Oracle Applications

Use this guide to help you run the various AD utilities, such as AutoUpgrade, AutoPatch, AD Administration, AD Controller, AD Relink, License Manager, and others. It contains how-to steps, screenshots, and other information that you need to run the AD utilities. This guide also provides information on maintaining the Oracle applications file system and database.

Oracle Applications System Administrator's Guide

This guide provides planning and reference information for the Oracle Applications System Administrator. It contains information on how to define security, customize menus and online help, and manage concurrent processing.

Oracle Alert User's Guide

This guide explains how to define periodic and event alerts to monitor the status of your Oracle Applications data.

Oracle Applications Developer's Guide

This guide contains the coding standards followed by the Oracle Applications development staff. It describes the Oracle Application Object Library components needed to implement the Oracle Applications user interface described in the *Oracle Applications User Interface Standards for Forms-Based Products*. It also provides information to help you build your custom Oracle Forms Developer 6*i* forms so that they integrate with Oracle Applications.

Oracle Applications User Interface Standards for Forms-Based Products

This guide contains the user interface (UI) standards followed by the Oracle Applications development staff. It describes the UI for the Oracle Applications

products and how to apply this UI to the design of an application built by using Oracle Forms.

Other Implementation Documentation

Multiple Reporting Currencies in Oracle Applications

If you use the Multiple Reporting Currencies feature to record transactions in more than one currency, use this manual before implementing Oracle Sales for Communications. This manual details additional steps and setup considerations for implementing Oracle Sales for Communications with this feature.

Multiple Organizations in Oracle Applications

This guide describes how to set up and use Oracle Sales for Communications with Oracle Applications' Multiple Organization support feature, so you can define and support different organization structures when running a single installation of Oracle Sales for Communications.

Oracle Workflow Guide

This guide explains how to define new workflow business processes as well as customize existing Oracle Applications-embedded workflow processes.You also use this guide to complete the setup steps necessary for any Oracle Applications product that includes workflow-enabled processes.

Oracle Applications Flexfields Guide

This guide provides flexfields planning, setup and reference information for the Oracle Sales for Communications implementation team, as well as for users responsible for the ongoing maintenance of Oracle Applications product data. This manual also provides information on creating custom reports on flexfields data.

Oracle eTechnical Reference Manuals

Each eTechnical Reference Manual (eTRM) contains database diagrams and a detailed description of database tables, forms, reports, and programs for a specific Oracle Applications product. This information helps you convert data from your existing applications, integrate Oracle Applications data with non-Oracle applications, and write custom reports for Oracle Applications products. Oracle eTRM is available on Metalink

Oracle Manufacturing APIs and Open Interfaces Manual

This manual contains up-to-date information about integrating with other Oracle Manufacturing applications and with your other systems. This documentation includes APIs and open interfaces found in Oracle Manufacturing.

Oracle Order Management Suite APIs and Open Interfaces Manual

This manual contains up-to-date information about integrating with other Oracle Manufacturing applications and with your other systems. This documentation includes APIs and open interfaces found in Oracle Order Management Suite.

Oracle Applications Message Reference Manual

This manual describes Oracle Applications messages. This manual is available in HTML format on the documentation CD-ROM for Release 11i.

Oracle CRM Application Foundation Implementation Guide

Many CRM products use components from CRM Application Foundation. Use this guide to correctly implement CRM Application Foundation.

Training and Support

Training

Oracle offers training courses to help you and your staff master Oracle Sales for Communications and reach full productivity quickly. You have a choice of educational environments. You can attend courses offered by Oracle University at any one of our many Education Centers, you can arrange for our trainers to teach at your facility, or you can use Oracle Learning Network (OLN), Oracle University's online education utility. In addition, Oracle training professionals can tailor standard courses or develop custom courses to meet your needs. For example, you may want to use your organization's structure, terminology, and data as examples in a customized training session delivered at your own facility.

Support

From on-site support to central support, our team of experienced professionals provides the help and information you need to keep Oracle Sales for Communications working for you. This team includes your Technical Representative, Account Manager, and Oracle's large staff of consultants and support specialists with expertise in your business area, managing an Oracle8*i* server, and your hardware and software environment.

Oracle*MetaLink*

Oracle*MetaLink* is your self-service support connection with web, telephone menu, and e-mail alternatives. Oracle supplies these technologies for your convenience, available 24 hours a day, 7 days a week. With Oracle*MetaLin*k, you can obtain information and advice from technical libraries and forums, download patches, download the latest documentation, look at bug details, and create or update TARs. To use MetaLink, register at (http:/ / metalink.oracle.com).

Alerts: You should check Oracle*MetaLink* alerts before you begin to install or upgrade any of your Oracle Applications. Navigate to the Alerts page as follows: Technical Libraries / ERP Applications / Applications Installation and Upgrade / Alerts.

Self-Service Toolkit: You may also find information by navigating to the Self-Service Toolkit page as follows: Technical Libraries / ERP Applications / Applications Installation and Upgrade.

Do Not Use Database Tools to Modify Oracle Applications Data

Oracle STRONGLY RECOMMENDS that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle Applications data unless otherwise instructed.

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL*Plus to modify Oracle Applications data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle Applications tables are interrelated, any change you make using Oracle Applications can update many tables at once. But when you modify Oracle Applications data using anything other than Oracle Applications, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous information and you risk unpredictable results throughout Oracle Applications.

When you use Oracle Applications to modify your data, Oracle Applications automatically checks that your changes are valid. Oracle Applications also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.

About Oracle

Oracle Corporation develops and markets an integrated line of software products for database management, applications development, decision support, and office automation, as well as Oracle Applications, an integrated suite of more than 160 software modules for financial management, supply chain management, manufacturing, project systems, human resources and customer relationship management.

Oracle products are available for mainframes, minicomputers, personal computers, network computers and personal digital assistants, allowing organizations to integrate different computers, different operating systems, different networks, and even different database management systems, into a single, unified computing and information resource.

Oracle is the world's leading supplier of software for information management, and the world's second largest software company. Oracle offers its database, tools, and applications products, along with related consulting, education, and support services, in over 145 countries around the world.

1

Oracle Sales for Communications: An Overview

This chapter provides an overview of Oracle Sales for Communications and its features. This chapter covers the following topics:

- Overview of Oracle Sales for Communications
- Key Features
- Business Process Overview
- Oracle Sales for Communications and Oracle TeleSales
- *i*Store for ommunications

1.1 Overview of Oracle Sales for Communications

Oracle Sales for Communications is an integrated solution that allows communications product/service providers to streamline the sales process from lead creation to order generation. It provides a comprehensive solution for sharing information across sales channels to effectively manage and track the customer sales cycle and capitalize on up-selling and cross-selling opportunities.

Oracle Sales for Communications provides:

- Flexible telecom-specific product and service catalog.
- Comprehensive Order Management functionality, including provisioning and fulfillment.
- Seamless integration with Oracle's CRM and ERP applications through a single schema.

1.2 Key Features

This section discusses the key features of Oracle Sales for Communications.

Centralized Customer and Account Management

Customer contacts take place over the telephone, email, and the world wide web. Oracle Sales for Communications helps you manage your enterprise eBusiness Center. The eBusiness Center helps you to centralize information from all contact points and interactions by handling all inbound and outbound customer contacts.

Note: Oracle Sales for Communication is built on the Oracle TeleSales application. In addition to the features discussed in this section, Oracle Sales for Communication supports all the features supported by Oracle TeleSales.

Product and Services Catalog

Products and services are defined as items in the catalog. A distinction must be drawn between hard goods (physical items) and services that need to be activated or provisioned. For example, a communications provider may sell wireless phones as well as wireless phone service. The wireless phone (the handset) is a hard good while the wireless service is not. Service providers in the communications industry sells both these product types; Oracle Sales for Communications allows you to seamlessly handle them both.

Flexible Item Pricing

A product or service is initially defined as an Inventory item. You can then assign an item to price list. This allows the item to be priced in different ways. For example, the same item may be sold to business customers and residential customers at different prices. Each price list is in a single currency.

Charge Types Specific to the Communications Industry

The products / services offered by the Communications industry can be charged on a recurring (subscription) or non-recurring (one time) basis. A recurring charge is billed periodically (for example, a wireless phone service billed on a monthly basis). Non-recurring charges are billed only once (for example, installation charges for a DSL connection).

Intuitive Interface to Handle Quotes and Orders

The Order Workbench component of Oracle Sales for Communications provides an intuitive interface to work with quotes and book them as orders. The Order Workbench may be integrated with APIs, messages and workflows to provide network reservations and resource assignments during the quote creation process.

1.3 Business Process Overview

The main business processes supported by Oracle Sales for Communications can effectively be categorized as being related to the following:

- Product Catalog.
- Customer Contact Management.
- Quote Creation.
- Order Creation.
- Order Management.

Oracle Sales for Communications is setup and maintained by users with Administrative privileges (super users). CSRs (Customer Support Representatives) use the functionalities of Oracle Sales for Communications to support the business processes.

In a communication industry environment, the super users may be product managers, or marketing experts. They are not to be confused with the system administrator, or the database administrator.

Typically, during an interaction with a customer, the CSR has access to existing customer data. This data helps the CSR understand the products currently available at the customer's site (as well as the service contracts currently in effect). The CSR also has the option of capturing customer data with a view to creating a new customer or updating existing customer information (such as new addresses, account details, etc.).

The CSR understands and captures customer product requirements. At this time, the CSR has the opportunity to up-sell/cross-sell products, and explain about the additional mandatory items that will have to be included on the quote.

The CSR prepares a quote for the product(s) and requests the customer's approval. On receiving the approval, the quote is booked to generate an order. At this time the Order Management system takes over the process and runs a workflow that is specific to Oracle Sales for Communications.

1.3.1 Product Catalog

The Product Catalog contains all the products and services offered to customers. Products and services are first defined as Inventory items.

An important distinction in the telecommunications marketplace is the distinction between hard goods (physical items) and services that need to be activated or provisioned. Consider a communications provider who sells wireless phones as well as wireless phone service. The wireless phone itself, the physical handset, is a hard good. Physical goods are referred to in Oracle Sales for Communications as shippable items. The wireless phone service is not something which is shipped; rather, it is provisioned by interaction with additional systems, such as phone number inventory systems and switching systems. Services which require provisioning are referred to as provisionable or as requiring activation in Oracle Sales for Communications. The communications provider sells both physical goods and services. Oracle Sales for Communications allows the provider to catalog both these item types.

1.3.2 Customer Contact Management

The Interaction Center allows your company to manage all inbound and outbound customer contacts, whether via telephone, email, web, or other medium, and centralize information from all contact points and interactions. Oracle Sales for Communications helps manage the Interaction Center. It provides the history of all customer interactions. It also provides customer and account management, lead and opportunity management, event management, and One-to-One Fulfillment.

Using Oracle Sales for Communications, CSRs can:

- Create or update customer and account information.
- Add new products or services (Quotes and Orders) to a customer's account.
- Change or remove existing products and services from the customer's Installed Base.
- Create or update a sales lead.
- Qualify a sales lead into an opportunity.

1.3.3 Quote Creation

Oracle Sales for Communications provides the CSR the ability to create quotes using the information on the product catalog. It indicates item relationships, and enforces the rules for creating an orderable quote.

1.3.4 Order Creation

Oracle Sales for Communications converts an orderable quote to an order. It uses specialized Order Management workflows for fulfilling an order. Oracle Sales for Communications uses Oracle Service Fulfillment Manager to provide the capability of fulfilling orders for provisionable goods. You can also integrate external provisioning systems to handle the provisioning of services. Oracle Order Management handles the shipping of physical goods.

1.3.5 Order Management

Oracle Sales for Communications enables standard order management business processes such as the following:

- Status tracking.
- Cancelling orders.
- Cancelling order lines.
- Suspend and resume orders.

1.4 Oracle Sales for Communications and Oracle TeleSales

Oracle Sales for Communications is built on the Oracle TeleSales application. Hence, all the functions and features of Oracle TeleSales are also available through Oracle Sales for Communications. For detailed information on using these functions, please refer to *Oracle TeleSales Concepts and Procedures.*

The Implementation procedures for Oracle Sales for Communications closely mirror those for Oracle TeleSales. For more information on implementing Oracle TeleSales, please refer to *Oracle TeleSales Implementation Guide*.

Oracle TeleSales by default implements quote and order creation process using Order Capture. Oracle Sales for Communications supplants Order Capture for providing these functionalities in communications industry implementations. The main differences between Oracle Sales for Communications and Oracle Order Capture are as follows:

Table 1–1 Oracle Sales for Communications and Oracle Order Capture

Oracle Sales for Communications	Oracle Order Capture
Sells services as well as discreet products and contracts.	Sells discreet products and contracts only.
Oracle Sales for Communications handles both Recurring and Nonrecurring charges.	Handles only Nonrecurring charges.
Allows to add, modify, delete, and reconfigure products.	Allows only to add products and return shipped goods.
Allows fulfillment of subscription items.	Does not allow fulfillment of subscription items.

1.5 *i*Store for Communications

Oracle Sales for Communications is also available as a web self-service component built on top of Oracle *i*Store. *i*Store for Communications presents an interface where customers can order products and services in a self-service environment.

2

Overview of Implementing Oracle Sales for Communications

This chapter presents an overview of the implementation steps that you need to perform to set up Oracle Sales for Communications. This chapter covers the following topics:

- Integration Overview
- Considerations for Planning an Implementation Project
- Overview of Implementation Steps

2.1 Integration Overview

Oracle Sales for Communications supports the business processes involved in the sales cycle of a communications service provider. It is seamlessly integrated with a number of Oracle's ERP and CRM applications. Oracle Sales for Communications also supports integration with external systems. This integration provides extensive functionality to manage the business activities involved in the sales process.

Oracle Sales for Communications helps manage an enterprise eBusiness Center. The eBusiness Center allows a company to manage all inbound and outbound customer contacts. It also provides Oracle Sales for Communications the ability to create and maintain customer and account profiles.

Oracle Sales for Communications includes an intuitive Product Catalog component for setup and maintenance of products and services as well as for selecting them for creating a quote. The Product Catalog also supports the business rules associated with selling, pricing, and provisioning the product offerings.

Oracle Sales for Communications provides comprehensive order capture capabilities for creating quotes and orders. The quotes and order creation process is

based on products and rules configured in the Product Catalog. These rules take into consideration the Installed Base items as well as items on pending orders. Oracle Sales for Communications provides Order Management functionality for managing the business processes and rules associated with each order / order line as it moves through its life cycle, managing interactions and dependencies between multiple delivery mechanisms and external systems.

Oracle Sales for Communications is integrated with Oracle Service Fulfillment Manager (SFM) for provisioning customer-ordered products and services. Oracle Sales for Communications workflow allows you to integrate with external billing systems.

Oracle Sales for Communications wraps the functionality of Oracle Order Capture and Oracle Order Management. The web store (the self-service component of Oracle Sales for Communications) calls Order Capture APIs directly for pricing, tax details and currency information. These APIs call Oracle Order Management, which in turn, calls Oracle Account Receivables.

Order Sales for Communications validates and verifies all quotes to ensure that for any action (add, change, remove and reconfigure) taken the customer's network configuratuion will be valid. Checks are performed against other items on the quote, items on pending orders as well as against the Installed Base. For valid quotes, Oracle Sales for Communications will call the Oracle Order Capture API to convert the quote to an order in Oracle Order Management. Oracle Sales for Communications initiates the workflow process; when the appropriate concurrent program is run the workflow will start. This workflow sends information to and receives information from provisioning, billing, and down-stream systems. Oracle Sales for Communications monitors the return statuses from all these systems.

2.1.1 Oracle Inventory

Oracle Sales for Communications sells products and services that have been created as inventory items. Oracle Sales for Communications uses Oracle Inventory screens to create and update products, including item relationships such as up-sell, cross-sell and prerequisite. Oracle Sales for Communications also provides a Define Product window for creating items in Oracle Inventory.

2.1.2 Oracle Bills of Material

Oracle Sales for Communications uses Oracle Bill of Materials screens to create and update the structure of valid product bundles. A package can have a fixed structure wherein all items are defined as standard items. A package may also include optional features by using option class item type.

Integration with Oracle Configurator guides Oracle Sales for Communications users through the selection of package options the customer wishes to order.

2.1.3 Oracle Order Capture

Oracle Sales for Communications relies on Oracle Order Capture for quotes, shopping carts and for invoking Oracle Order Management. Oracle Order Capture also supplies prices, offers, and discounts to Oracle Sales for Communications through its integration with Advanced Pricing. These details are used while creating and updating quotes.

2.1.4 Oracle Order Management

Integration with Oracle Order Management provides Oracle Sales for Communications the capability to place and manage orders.

When a package (either kitted or configured) is booked in Oracle Sales for Communications, the line items for the package are sent through the Oracle Sales for Communications workflow.

2.1.5 Oracle TeleSales

Oracle Sales for Communications is built on top of Oracle Telesales application. As such Oracle TeleSales share all its functionalities with Oracle Sales for Communications. In addition to these, Oracle Sales for Communications has incorporated its own specific set of functions to cater to the Communications Industry.

2.1.6 Oracle Receivables

Oracle Receivables is used to set up the information needed to calculate tax on shippable goods. Note that the calculations for this are controlled by Order Capture APIs. In addition to the Billing node of the Oracle Sales for Communications workflow, you can use Oracle Receivables to invoice for orders.

2.1.7 Oracle Advanced Pricing

Integration with Oracle Advanced Pricing allows Oracle Sales for Communications to access pricing information (modifiers, qualifiers, etc.). Oracle Sales for Communications uses Oracle Advanced Pricing setup screens to create price lists and to assign products to price lists. It is also used to create discounts, surcharges, qualifiers, and modifiers. Oracle Sales for Communications uses Advanced Pricing to differentiate pricing for Add, Change, Remove, and Reconfigure actions.

2.1.8 Oracle Service Fulfillment Manager

Oracle Sales for Communications uses Oracle Service Fulfillment Manager (SFM) workflows to activate and de-activate services.

2.1.9 Oracle Service

Oracle Sales for Communications uses Oracle Service APIs to create and update the Installed Base and to create and update parameters.

2.2 Considerations for Planning an Implementation Project

Proper planning is essential for the success of any implementation project. Planning, coupled with the use of a structured methodology, such as Oracle Application Implementation Methodology (AIM) would ensure the smooth progress of your implementation project. The following section presents some of the key implementation considerations.

2.2.1 Key Implementation Decisions

2.2.1.1 Inventory Creation

All the products and services offered by your organization must be created as inventory items. If items are not established in Inventory, quotes and orders cannot be created.

You must identify all the products and services that must be added to the Master Item Inventory.

2.2.1.2 Product Relationships

Product relationships establish the relationship (for example, prerequisite, conflict, up-sell and cross-sell) between items. Relationship may also be defined in terms of a charge. For example, for items that require both one-time and recurring charges (a recurring charge item with a one-time activation charge) the mandatory and optional charge relationship type can be used.

Pre-requisite and conflict relationships between items must be properly defined for compatibility checks to be effective.

2.2.1.3 Fulfillment Actions

Actions (add, change, remove, reconfigure) identify what needs to happen to an item at a particular point in the ordering life-cycle. You must identify the actions that need to happen to each sellable item. The parameters (name / value pairs) for each item, if applicable, must be identified and defined for each allowed action.

2.2.1.4 Data Item Mapping to Fulfillment System

Fulfillment actions and workflows must be mapped to Oracle Service Fulfillment Manager to provision items.

2.3 Overview of Implementation Steps

This section indicates the steps you have to complete to set up Oracle Sales for Communications and integrate it with other applications.

Table 2–1 Overview of Implementation Steps

Step No.	Description
1	Define an Oracle Sales for Communications user.
2	Set up system profile options from the applications that integrate with Oracle Sales for Communications.
3	Define menus.
4.	Define Order Management line transaction types.
5	Assign line flows to standard order transaction-type.
6	Define item types.
7	Define items.
8	Assign items.

Table 2–1 Overview of Implementation Steps

Step No.	Description
9	Define item relationships.
10	Define bills of material.
11	Define price lists.
12	Define categories.
13	Assign price lists to categories.
14	Assign items to price lists.
15	Define item action parameters.
16	Set up Oracle Sales for Communications system profile options.
17	Define renewal rules defaults.
18	Define groups.
19	Define resources.

3

Implementing Oracle Sales for Communications

This chapter presents the detailed procedures for setting up Oracle Sales for Communications. Specifically, this chapter covers the following topics:

- Setup Steps
- Workflows
- Verifying Sales for Communications Setup

3.1 Setup Steps

This section presents a sequence of steps that you should complete to implement Oracle Sales for Communications and integrate it with other Oracle Applications.

It is recommended that you complete the implementation steps in the sequence they are presented here. This flow takes into consideration the data/values that may be required for completing a subsequent step.

3.2 Defining Implementation Users

You will need to create an Oracle Applications user with the appropriate responsibilities for performing implementation procedures. The user name you assign to the user can be used to log on to Oracle Sales for Communications.

You must use the System Administrator responsibility to create the user. The user you create must be specified as a Person by selecting his/her name in the Person field in the User window (name of the person will be available in the LOV only if he/she has already been defined in your HR system as an employee). This would

define the employee as a resource for Oracle Sales for Communications while importing resources into the Resource Manager.

Note that only resources can open the eBusiness Center.

Assign all of the following responsibilities to the user you are creating:

- Oracle Sales for Communications.
- TeleSales Manager.
- Order Management Super User.
- System Administrator.
- OPM System Administrator.
- Receivables, Vision Operations (USA).
- CRM Resource Manager.
- Service Contracts Manager.

Use the Users window to define the Oracle Sales for Communications user. This user will need to be uniquely identified by an application user name. For detailed information on creating application users, please refer to the *Oracle Applications System Administrator's Guide.*

3.3 Setting Up System Profile Options in Other Applications

A number of system profile options belonging to other Oracle applications need to be properly set up before you can access their data in Oracle Sales for Communications setup screens. Quite often, these profile options need only be verified since they may already have been set up correctly.

You must use the System Administrator responsibility to set up profile values. For a detailed explanation of system profile options and the procedures for setting them up, please refer to *Oracle Applications System Administrator's Guide*.

The following system profile options must be set up in this step:

- ASO: Default E-Business Order.
- ASO: Default E-Business Quote.
- ASO: Default E-Business Order Screen
- ASO: Default E-Business Quote Screen
- ASO: Product Organization.

- ASO: OM defaulting.
- HR:Security Profile.
- MO: Operating Unit.
- OM: Autoschedule.
- OS: Customer Access Privilege
- OTS:Default Order Form. (Required up to 11.5.5 only)
- OTS:Default Order Form. (Required up to 11.5.5 only)
- QP: Item Validation Organization.
- Service: Default Status of Instantiated Products.
- Service: Auto-Split Products during Instantiation.
- Sequential Numbering.

3.3.0.1 ASO: Default E-Business Order Screen

Launches the Sales for Communications Order Details Screen from the E-Business Center Screen for an Order.

Application: Oracle Telesales

Profile Level: Site

Required Profile Value: Order Details XNCLINES

3.3.0.2 ASO: Default E-Business Quote Screen

Launches the Sales for Communications Order Workbench from the E-Business Center Screen for a Quote.

Application: Oracle Telesales

Profile Level: Site

Required Profile Value: Order Workbench XNCORDWK2

3.3.0.3 OS: Customer Access Privilege

Application: Oracle Telesales

Profile Level: Site

Required Profile Value: Full

3.3.0.4 MO: Operating Unit

This profile option (related to Multiple Organizations) sets the operating unit that the users using a specific responsibility will log on to. For more information on this profile option, please refer to *Oracle Applications User's Guide.*

Application: Application Object Library.

Profile Level: Responsibility (All Responsibilities).

Required Profile Value: The name of your operating unit.

3.3.0.5 HR: Security Profile

This profile option sets the default security group that would be assigned to users.

Application: Oracle Human Resources.

Profile Level: Responsibility (All Responsibilities).

Required Profile Value: The name of the default security group.

3.3.0.6 OTS:Default Order Form

This profile option determines the user interface in which order details are displayed when a user selects the details button on the Quotes / orders tab. if this profile is not set to XNCLINES, the Order Management Order window, which is used by Oracle TeleSales will be used. For a more detailed description of this profile option, please refer to *Oracle TeleSales Implementation Guide.*

Application: Oracle TeleSales.

Profile Level: Site.

Required Profile Value: XNCLINES.

3.3.0.7 ASO: Product Organization

This profile option determines the organization that Oracle Order Capture uses to verify inventory items.

Application: Oracle Order Capture.

Profile Level: Site.

Required Profile Value: The name of the organization that Order Capture should use to validate product inventory items.

3.3.0.8 ASO: OM Defaulting

When creating an order from a quote, the value of this profile option is checked to determine whether Order Management defaulting logic will be applied for the attributes Order - salesrep_id, order_type_id, payment_term_id, fob_code, freight_terms_code, and shipment_priority_code.

If the value of this profile is set to Yes, Oracle Order Management defaults values in some of the fields based on the order source.

Application: Oracle Order Capture.

Profile Level: Site.

Required Profile Value: Yes.

3.3.0.9 OM: Autoschedule

This profile option determines the default setting for the autoscheduling of order lines. If this profile is set to Ye s, order lines are scheduled automatically at the time of entry.

Application: Oracle Order Management.

Profile Level: Site.

Required Profile Value: Yes

3.3.0.10 QP: Item Validation Organization

This value determines the Oracle Manufacturing organization that items are validated and viewed against when entering items in the price list or price list modifier user interfaces. Set this value to an organization at the level in your organization hierarchy at which you set prices for items.

Application: Advanced Pricing.

Profile Level: Site.

Required Profile Value: The name of the organization for validating items.

3.3.0.11 Service: Default Status of Instantiated Products

This value determines the default status with which a product will be created in the Install Base.

Application: Install Base (Oracle Service).

Profile Level: Site.

Required Profile Value: Latest.

3.3.0.12 Service: Auto-Split Products During Instantiation

Determines whether to split products when instantiating them in the Install Base. If set to Yes, the system automatically splits multiple shippable items on an order line into its component products when instantiating them in the Install Base. For example, when this profile is set to yes, the Install Base will be updated with five instances of the cell phone if the order contained an order line for five cell phones.

Application: Install Base (Oracle Service)

Profile Level: Site.

Required Profile Value: Yes.

3.3.0.13 Sequential Numbering

This profile option assigns numbers to documents created by forms in Oracle Applications. For example, when you are in a form that creates orders, each order document can be numbered sequentially.

Sequential numbering provides a method of checking whether documents have been posted or lost. Not all forms within an application may be selected to support sequential numbering. For more information on this profile option, please refer to *Oracle Applications User's Guide.*

Application: Application Object Library.

Profile Level: Responsibility.

Required Profile Value: Always Used.

Setting the profile value to Always Used would prevent users from entering a document if no sequence exists for it.

3.3.0.14 ASO: Default E-Business Order

should be set to XNCLINES(Order Details screen)

Application:

Profile Level: Site

Required Profile Value: XNCLINES

3.3.0.15 ASO: Default E-Business Quote

should be set to XNCORDWK(Order Workbench screen)

Application: Oracle TeleSales.

Profile Level: Site.

Required Profile Value: XNCORDWK

3.3.0.16 Verifying the Item Validation Organization

Oracle Sales for Communications uses an organization to validate items. This is defined as a system parameter in Oracle Order Management. You must verify that the item validation organization is correctly setup. Please note that the item validation organization can be different than the organization under which the item is defined.

To set up item validation organization:

1. Assuming the Order Management Super User responsibility for your operating unit, open the Parameters window.
2. The current item validation organization is indicated in the Item Validation Organization field on this window. Verify this value; select another organization, if needed.
3. Save your work.

3.4 Setting Up Oracle Sales for Communications Profile Options

System profile settings helps you control how Oracle Sales for Communications looks, feels and behaves. Profiles can be set at user, responsibility, application and site levels.

Site level profile settings apply to all users at an installation site. Application level profile settings apply to all the users of the specified application. Profile settings at application level override those set at site level. Responsibility level profile settings apply to all users who use the responsibility to sign on to the application. Responsibility level profile options override those set at site and application level. User level profile options apply to individual users identified by their application user names. User level profile options override all other profile options.

The following Oracle Sales for Communications system profile options must be set up. You must use the System Administrator responsibility to set up profile values. For a detailed explanation of system profile options and the procedures for setting them up, please refer to *Oracle Applications System Administrator's Guide*.

- XNC:Add Service
- XNC:Change service
- XNC: Remove Service
- XNC:Reconfigure Service
- XNC:Default Item Type
- XNC:Non Recurring Item Type
- XNC:Recurring Item Type
- XNC:SDP Integration

XNC:Add Service

This profile option maps to a transaction line type that has already been defined in Oracle Order Management (oe_transaction_types_tl is the data source for this profile). The list of values for this profile option would display all transaction line types defined in Order Management irrespective of Multi-Org. You must assign a value (for example, ADD) to this profile. For this to happen, the value should first be created in the organization to which the current responsibility (Oracle Sales for Communications, TeleSales Manager, or any other relevant responsibility) points. For example, Oracle Sales for Communications forms will error out if a transaction line type is created in an organization (say, Vision) while the current responsibility

(say, Oracle Sales for Communications) points to a different organization (Comms Vision).

It is recommended that the value of this profile option be set to ADD. For this to happen, you must first create a transaction line type ADD in Oracle Order Management. The line type id corresponding to the transaction line type indicated by this profile is copied to the order line in Oracle Order Management when a user adds a service. Oracle Sales for Communications' logic adds a service based on this value. This profile can be set at Site, Responsibility and User levels.

Name: XNC_ADD_ORDER_LINE_TYPE.

User Profile Name: XNC:Add Service.

Valid Values: Transaction Line Types defined in Oracle Order Management.

Recommended Profile Value: ADD.

Recommended Profile Setting Level: Site, User.

XNC:Change Service

This profile option maps to a transaction line type that has already been defined in Oracle Order Management (oe_transaction_types_tl is the data source for this profile). The list of values for this profile option would display all transaction line types defined in Order Management irrespective of Multi-Org. You must assign a value (for example, CHANGE) to this profile. For this to happen, the value should first be created in the organization to which the current responsibility (Oracle Sales for Communications, TeleSales Manager, or any other relevant responsibility) points. For example, Oracle Sales for Communications forms will error out if a transaction line type is created in an organization (say, Vision) while the current responsibility (say, Oracle Sales for Communications) points to a different organization (Comms Vision).

It is recommended that the value of this profile option be set to CHANGE. For this to happen, you must first create a transaction line type CHANGE in Oracle Order Management. The line type id corresponding to the transaction line type indicated by this profile is copied to the order line in Oracle Order Management when a user changes a service. Oracle Sales for Communications' logic changes the service based on this value. This profile can be set at Site, Responsibility and User levels.

Name: XNC_CHANGE_ORDER_LINE_TYPE.

User Profile Name: XNC:Change service.

Valid Values: Transaction Line Types defined in Oracle Order Management.

Recommended Profile Value: CHANGE.

Recommended Profile Level: Site, User.

XNC: Reconfigure Service

This profile option maps to a transaction line type that has already been defined in Oracle Order Management (oe_transaction_types_tl is the data source for this profile). The list of values for this profile option would display all transaction line types defined in Oracle Order Management irrespective of Multi-Org. You must assign a value (for example, RECONFIGURE) to this profile. For this to happen, the value should first be created in the organization to which the current responsibility (Oracle Sales for Communications, TeleSales Manager, or any other relevant responsibility) points. For example, Oracle Sales for Communications forms will error out if a transaction line type is created in an organization (say, Vision) while the current responsibility (say, Oracle Sales for Communications) points to a different organization (Comms Vision).

Name: XNC_RECONFIGURE_ORDER_LINE_TYPE.

User Profile Name: XNC:Reconfigure Service.

Valid Values: Transaction Line Types defined in Oracle Order Management.

Recommended Profile Value: RECONFIGURE.

Recommended Profile Level: Site, User.

XNC: Remove Service

This profile option maps to a transaction line type that has already been defined in Oracle Order Management (oe_transaction_types_tl is the data source for this profile). The list of values for this profile option would display all transaction line types defined in Oracle Order Management irrespective of Multi-Org. You must assign a value (for example, REMOVE) to this profile. For this to happen, the value should first be created in the organization to which the current responsibility (Oracle Sales for Communications, TeleSales Manager, or any other relevant responsibility) points. For example, Oracle Sales for Communications forms will error out if a transaction line type is created in an organization (say, Vision) while the current responsibility (say, Oracle Sales for Communications) points to a different organization (Comms Vision).

It is recommended that the value of this profile option be set to REMOVE. For this to happen, you must first create a transaction line type REMOVE in Oracle Order Management. The line type id corresponding to the transaction line type indicated by this profile is copied to the order line in Oracle Order Management when a user removing a service. Oracle Sales for Communications' logic removes a service based on this value. This profile can be set at Site, Responsibility and User levels.

Name: XNC_REMOVE_ORDER_LINE_TYPE.

User Profile Name: XNC:Remove Service.

Valid Values: Transaction Line types defined in Oracle Order Management.

Recommended Profile Value: REMOVE.

Recommended Profile Setting Level: Site and User.

XNC:Default Item Type

This profile option determines the default item type that Oracle Sales for Communications will display when the item type selected is neither recurring nor non-recurring.

Item types for Oracle Sales for Communications are defined as either recurring or non-recurring. All other item types will be treated as the item type specified by this profile value. This profile can be set at Site, Responsibility and User levels.

Note that this profile option is used to ensure backward compatibility with previous releases.

Name: XNC_DEFAULT_ITEM_TYPE.

User Profile Name: XNC:Default Item Type.

Valid Values: RECURRING, NON_RECURRING.

Recommended Profile Value: NON-RECURRING.

Recommended Profile Setting Level: Site, User.

XNC:Non Recurring Item Type

This profile option sets the item type that Oracle Sales for Communications will identify as non-recurring.

This profile option is used to ensure backward compatibility with previous releases.

The data source for this profile option is fnd_common_lookups where the lookup type is item type (lookup_type=ITEM_TYPE). It is recommended that the value of this profile option be set to NON-RECURRING. For this to happen, you must first define RECURRING (RI) as an item type.

Name: XNC_NONRECURRING_ITEM_TYPE.

User Profile Name: XNC:Non Recurring Item Type.

Valid Values: All valid item types.

Recommended Profile Value: NON-RECURRING.

Recommended Profile Setting Level: Site and User.

XNC:Recurring Item Type

This profile option sets the item type that Oracle Sales for Communications will identify as recurring.

Note that this profile option is used to ensure backward compatibility with previous releases.

The data source for this profile option is fnd_common_lookups where the lookup type is item type (lookup_type=ITEM_TYPE). It is recommended that the value of this profile option be set to RECURRING. For this to happen, you must first define RECURRING (RI) as an item type.

Name: XNC_RECURRING_ITEM_TYPE.

User Profile Name: XNC:Recurring Item Type.

Valid Values: All valid item types.

Recommended Profile Value: RECURRING.

Recommended Profile Setting Level: Site and User.

XNC:SDP Integration

This profile option determines if the integration Oracle Sales for Communications and Oracle Service Fulfillment Manager integration is to be enabled.

When the value of this profile option is set to Yes, anOracle Sales for Communications order can be sent to Oracle Service Fulfillment Manager for provisioning purposes. This profile can be set at Site, Application, Responsibility and User levels.

Name: XNC_SDP_INTEGRATION.

User Profile Name: XNC:SDP Integration.

Valid Values: Yes, No.

Recommended Profile Value: Yes.

Recommended Profile Setting Level: Site.

3.5 Defining Menus

A menu is a hierarchical arrangement of functions and menus of functions. Each responsibility has a menu assigned to it.

A 'full access' responsibility with a menu that includes all the functions in an application is predefined for each Oracle Applications product. As a System Administrator, you can restrict the functionality a responsibility provides by defining rules to exclude specific functions or menus of functions. For detailed information on creating menus, please refer to the *Oracle Applications System Administrator's Guide*.

You must enhance the AST_TELEMANAGER menu by adding the following functions. AST_TELEMANAGER is the menu assigned to the TeleSales Manager responsibility, which was assigned to your implementation user. The inclusion of these functions would allow the implementation user to access all the appropriate functions and menus.

- Order Capture Navigator (XNCIBTRE).
- Order Workbench (XNCORDWK).
- Order Details (XNCLINES).
- TeleSales Manager (XNC_FUNC_MENU).
- Subscription Window (XNCWBSUB)

Make sure that the Grant check box is selected for each of these functions. If this check box is not selected, the users will not have access to these functions even though they are on the menu.

Enter an appropriate sequence number for each of these functions. You may leave the remaining fields (Navigator Prompt, Submenu, and Description) blank.

3.6 Defining Order Management Line Transaction Types

Line transaction types help control order line information. There are specific controls that need to be definable at the line type level. Some controls can be such that they default from the order level, but can be overridden at the line level. For example, you can have both order and return lines on a single order. However, order and return lines go through different types of processing. The kind of processing that an individual line undergoes is controllable at a line type level.

Note: A workflow assignment is required for a given line type to support creation of lines using that line type.

3.6.1 Setting up Line Transaction Types

Transaction types are not seeded in Order Management and, hence, must be added to Order Management before an Oracle Sales for Communications quote or order can be taken. This is a necessary setup step. Without successful completion of this step, quotes and orders cannot be taken in Oracle Sales for Communications.

1. Use the Transaction Types window in Order Management to create line transaction types. For detailed information on defining transaction types on Order Management, please refer to the *Oracle Order Management User's Guide*.
2. You must use the Order Management Super User responsibility to define line transaction types.
3. Oracle Sales for Communications uses the following transaction types:
   - ADD
   - CHANGE
   - REMOVE
   - RECONFIGURE
4. Define the transaction types with the following values:

Table 3–1 Transaction Type Definition

Transaction Type	ADD	CHANGE	REMOVE	RECONFIGURE
Effective Dates From	Current Date	Current Date	Current Date	Current Date

Table 3–1 Transaction Type Definition

Transaction Type	ADD	CHANGE	REMOVE	RECONFIGURE
Transaction Type Code	Line	Line	Line	Line
Order Category	Order	Order	Order	Order

5. You may leave all the other fields on the Transaction Types window blank.

> **Note:** Do not attach a warehouse (inventory organization) or price list to these transaction types.

3.7 Assigning Line Flows to Standard Order Transaction Type

A line flow is a workflow that is assigned to an Oracle Order Management line transaction type. This workflow determines the processing path that the line transaction takes.

A line flow can be assigned to an order type, line type and item type combination. Order Management allows you to define only one effective assignment for a given combination. If the item type is left blank, then that assignment will apply to all item types that do not have a specific assignment.

The Line Workflow Assignments window is used for assigning line flows. Use this window to assign line flows to the various line types that can be used with an order type. You must use the Order Management Super User responsibility to Define the line flow with the following values:

Table 3–2 Line Flow Values

Order Type	Standard	Standard	Standard	Standard
Line Type	ADD	CHANGE	REMOVE	RECONFIGURE
Process Name	Line Flow - Sales for Comms	Line Flow -Sales for Comms	Line Flow -Sales for Comms	Line Flow -Sales for Comms
Start Date	Current Date	Current Date	Current Date	Current Date

You must assign the ADD, CHANGE, REMOVE and RECONFIGURE line transaction types defined in the previous step to Standard Order Type workflow.

Leave the Item Type field blank. Enter an end date only if you want to obsolete the line flow after the specified date. For detailed information on line flows and how to assign them, please refer to the *Oracle Order Management User's Guide*.

3.8 Defining Items

The creation of an inventory item is the first step in creating products and services in Oracle Sales for Communications. Inventory items correspond to the products and services sold by your organization.

Oracle Sales for Communications supports a single catalog. Each catalog must contain at least one category.

A catalog can have multiple categories; each category can have sub categories. Note that these categories are specific to Oracle Sales for Communications and are not identical to Oracle Inventory categories. Categories help group a large number of items. The items can be added to one or more price lists. Further you can attach multiple price lists to each category.

Items for use with Oracle Sales for Communications can be defined at the master level (master item) or the organization level. The default organization for Oracle Sales for Communications must reflect the level at which items are set up. If the item is set up at the master level, the default organization should point to the operating unit; if the items are defined at the organization level, the default organization should point to the organization under which the items are set up.

You will need to create the following type of items that can be used in creating different types of Bills of Materials. For detailed information on item types and how to create items, please refer to the *Oracle Inventory User's Guide*.

- Standard
- Model Item
- Option Class

You can use the Master Item window of Oracle Inventory or the Define Product window of Oracle Sales for Communications to create and maintain items. For your convenience, this section provides procedures for using both these windows.

Using the Define Product Window

The Define Product window provides a quick mechanism to setup items (products) specific to Oracle Sales for Communications. It provides a subset of the fields available on the Item Master window, which Oracle Inventory uses for creating

items. Special menu functions (Organization Assignment, Copy From. etc.) available from the Item Master window are not available through the Define Product window.

On opening the Define Product window, Oracle Sales for Communications prompts you to choose an organization. If you choose an organization, the item is created in the Master Organization of the organization you have selected. If you do not choose an organization (Select the Cancel button in the Organization window), the Inventory Organization is defaulted from the Order Management parameters based on the operating unit to which the responsibility points.

The scope of this window is to quickly setup products; only the fields required to create different types of products pertaining to Oracle Sales for Communications are available on the window.

The Define Product window also acts as a portal for accessing other forms to correctly setup the item you have created. You can use the search facility available from the Define Product window to search for products you have already defined.

You can launch the following setup windows from the Define Product window:

- Bills of Material (To define the bills of materials for the item).
- Item Relationships (to define relationship between items).
- Price Lists (to define price lists and qualifiers for items).
- Price List Summary window listing all the active price lists to which this product belongs.
- Action Parameters (to set up item action parameters for the item).
- Organization Items (to view details of the item and all its attributes).
- Define Services (to facilitate the integration of Oracle Service Fulfillment Manager with Oracle Sales for Communications).
- Product Hierarchy Definition (to set up navigation categories for Oracle Sales for Communications).

Note: You should create package BOMs using PTO, not ATO, for provisional goods.

To launch any of these windows, select the appropriate option from the Setup Screen drop-down list and then select the Launch button.

To create items using the Define Product window:

1. Using the Oracle Sales for Communications responsibility, open the Define Product window.
2. Enter an item name and item description. The item name can contain a maximum of 30 characters.
3. Accept Active in the Status field. Item status sets the value for attributes under status control.
4. In the Primary Unit of Measure field on the Main tab, select the unit of measure for the item you are defining. Note that each item must have a primary unit of measure. The primary unit of measure is the stocking and selling unit of measure. All conversions are based on this value.
5. If you plan to use this item as a BOM item, in the BOM Item Type field, select the appropriate BOM type. You will need to create BOM items of type Model, Item Class and Standard to enable the creation of BOMs. This field denotes the type of BOM represented by the item being defined.
6. In the Item Type field, select the an item type (a QuickCode that can be used to define an item. You can use the types provided by Oracle Inventory or create your own.). Selecting a user item type is an optional step. However, setting this value is very important in certain contexts.
7. Select the appropriate check boxes to set item attributes. The check boxes available on the Define Product window and their significance are explained in the following table.

Note: The following attributes are mutually exclusive:

- Support Service and Serviceable Product.
- Assemble to Order and Pick Components

Table 3–3 Check Boxes on the Define Product Window

Check Box	Meaning
Activation Required	Select this check box if this item is provisionable.

Table 3–3 Check Boxes on the Define Product Window

Check Box	Meaning
Shippable	Indicates whether to ship an item to a customer. Shippable items are released by Oracle Shipping Execution's Pick Release program, creating confirmable shipping lines, and are printed on the pick slip. A warning is issued if you change the value of this attribute when open sales order lines exist. This attribute must be turned off if the BOM Item Type field is set to Planning.
Customer Ordered	Indicates whether to allow an item to be ordered by external customers. This attribute must be turned off if the BOM Item Type attribute is set to Planning. If you turn this attribute on, you can temporarily exclude an item from being ordered by not selecting the Customer Orders Enabled check box. This is an item defining attribute. If you turn this attribute on, the item is automatically assigned to the default category set for the Oracle Order Management functional area.
Customer Orders Enabled	Indicates whether an item is currently customer orderable. If this check box is selected, the item can be ordered by customers. This can be selected only if the Customer Ordered check box is selected.
Inventory	Indicates whether to stock and transact this item in Oracle Inventory. You must select this check box if you want to enable BOM Allowed attribute. This is an item defining attribute. If you select this check box, the item is automatically assigned to the default category set for the Inventory functional area.
BOM Enabled	Allows you to define a bill of material for an item, or to assign the item as a component on a bill. This attribute is optionally set by the Item Status code.
Assemble to Order	Select this check box if the item is generally built for sales order demand. A final assembly work order is created based on sales order details. An item cannot have Assemble to Order and Pick Components check boxes selected at the same time.
Pick Components	Indicates whether an item has a bill of material with options, classes, or included items picked from finished goods inventory. Pick–to–order items must have this check box selected. Do not select this check box for items without a bill of material.

Table 3–3 Check Boxes on the Define Product Window

Check Box	Meaning
Web Orderable	Select this check box if this item can be ordered over the web (self-service). The Web Status for an item that can be ordered over the web should be set to Published.
Network Logistics	Select this check box if this item is to be tracked and recorded in the Install Base.
Serviceable Product	Select this check box if this item is serviceable. Note that if this check box is selected, the Support Services check box should not be selected.
Support Service	Select this check box if the item represents a service.

8. Use the Service Duration Value and Period fields to set the time period for the current service. These values provide defaults when the current service is ordered using the Order Workbench. You can set any period defined as a time unit of measure.
9. Save your item definition.

Note: When you use the Define Product window to create an item, some values are assigned internally. You will need to use the Item Master window to view and modify these values.

For service items (Support Service check box selected) these values are set to No (check box not selected: Cycle Count Enabled, Purchased Item, Returnable, ATP, Inventory Item).

For web orderable items, the web status is set to Published. If item is not web orderable, web status is set to UnPublished.

For items that are neither of type service or inventory item, BOM Allowed check box is not selected (attribute set to No).

To create items using the Master Item window:

1. Using the Oracle Sales for Communications responsibility, open the Master Item window.

   Prior to opening the Master Item window, Oracle Sales for Communications prompts you to choose an organization. If you choose an organization, the item

is created in the Master Organization of the organization you have selected. If you do not choose an organization (Select the Cancel button in the Organization window), the Inventory Organization is defaulted from the Order Management parameters based on the operating unit to which the responsibility points.

2. Enter an item name and item description. The item name can contain a maximum of 30 characters.

3. In the Primary Unit of Measure field on the Main tab, select the unit of measure for the item you are defining. Note that each item must have a primary unit of measure.

   The primary unit of measure is the stocking and selling unit of measure. All conversions are based on this value. The default primary unit of measure for new items is defined using the INV: Default Primary Unit of Measure profile option. Please refer to the *Oracle Inventory User's Guide* for more information.

4. In the User Item Type field, select the user item type (a QuickCode that can be used to define an item. You can use the types provided by Oracle Inventory or create your own.). Selecting a user item type is an optional step. However, setting this value is very important in certain contexts. For example, for contract service item, this value must be set to Service Pgm / Warranty.

Notes:

- You can create an item without specifying it as Shippable, Stockable, or Recurring. Such items, though they do not appear on the Product Catalog Setup Navigator, can still be used as related items for the items that appear on the tree. For example, a non-shippable, non-stockable, non-recurring installation charge can be a mandatory related item for an item which appears on the Product Catalog Setup Navigator tree.
- The combination of the value in the User Item Type field and the information in the Order Management tab of the Master Item window is very important. If user item type is not set for an item that must be activated (Activation Required check box in the Order Management tab is selected), the item will not appear in the run-time Product Catalog Setup Navigator.

5. Accept Active in the Status Code field. Item status code sets the value for attributes under status control. The default item status for new items is defined using the INV: Default Item Status profile option.

6. Accept Both as the value for unit of measure conversion. This would enable Sales for Communications to accept both item–specific and standard unit of measure conversions. If you defined an item–specific and a standard conversion for the same unit of measure, the item–specific conversion is used.

7. Open the Inventory tab. On the Inventory tab, select the Inventory Item check box. Note that all items in the catalog must be created as inventory items. This is an item defining attribute. If you turn this attribute on, the item is automatically assigned to the default category set for the Inventory functional area.

   Also select the NL Trackable check box. This would ensure that the item can be tracked through the down stream provisioning systems.

   Note: When Inventory Item check box is selected, Stockable and Transactable check boxes will automatically be selected (indicating that this item is to be stocked and transacted in Oracle Inventory). You can keep this default selection for shippable goods. For provisionable goods, remove the selection from the Stockable check box, if you are using Oracle Inventory.

   This flag must be set to enable item attributes such as Stockable, BOM Allowed, Transactable, and Build in WIP.

8. If you want the ability to create a BOM for this item use the following procedure. Note that you can create a BOM only for inventory items and support service items under vendor warranty.

   a. Open the Bills of Material tab.

   b. Select the BOM Allowed check box.

   c. In the BOM Item Type field, select the type of BOM item you want to define. You must define standard, model and/or option class BOM items for creating BOMs using Oracle Sales for Communications.

      For detailed information on creating BOM items, please refer to the *Oracle Bills of Material Users Guide*.

Note: Information on Costing, Purchasing, Receiving, Physical Attributes, General Planning, and Invoicing tabs is required only if you are defining physical goods that will be managed using Oracle Inventory. For more information on defining attributes on these tabs, please refer to the *Oracle Inventory User's Guide*.

9. Open the Order Management tab. In the default display on the Master Item window, this tab is hidden. To open this tab, click on the More Tabs (arrow) button to the right of the tab labels and select Order Management.
10. On the Order Management tab:
    a. Select the Customer Ordered check box if the item you are defining can be ordered by customers. If this check box is not selected (checked), the item will not appear on the price lists. The Customer Orders Enabled check box is automatically selected when you select the Customer Ordered check box. If you remove the selection from the Customer Orders Enabled check box, the item will show up on the price list, but will not be displayed on the navigation tree.
    b. Select the Activation Required check box if you are defining a provisionable or recurring item. The UOM class determines if the item is recurring. If UOM class is recurring, or time, the base charge for the item is recurring (any other charges for the item will still be non-recurring). Otherwise, all charges are non-recurring.
    c. If you are defining a shippable item, select the Shippable check box.
11. Open the Service tab:
    a. To define the item as serviceable, select the Serviceable Product check box and enter a positive number in the Service Starting Delay field indicating how many days after shipment of the current service should start.

    Note: An item cannot be defined as both Serviceable Product and Support Service at the same time.

    b. To define the item as a contract item, from the Contract Item Type drop-down list, select an option. Oracle Sales for Communications supports warranties and extended warranties. For warranty items, select warranty from the drop-down list; for extended warranty items, select Service.

c. In the Coverage Template field, select the template based on which warranty support should be made available.

d. Enter the warranty service duration in the Duration Period field. This value can be expressed as hours, minutes, days, month, week or year for which warranty service will be provided.

e. In the Duration field, enter the value if the service duration.

12. Save your item definition.

Note: For a more detailed discussion on creating items and setting item parameters, please refer to the *Oracle Inventory User's Guide.*

3.9 Setting up Recurring and Non-Recurring Items

Two types of Master Items need to be created: Recurring and Non-Recurring. Recurring and Non-Recurring Items in 11.5.6 are identified by Unit of Measure. If an item's primary unit of measure belongs to the Time: Unit of Measure Class, then it is treated as a Recurring Item. Otherwise, it is a Non-Recurring Item.

To Set up Recurring and Non-Recurring Items:

1. Choose the Sales for Comms Administrator Responsibility. Navigate to Product Catalog Setup > Setup > Inventory > Item Setup > Master Items.
2. From the Main tab, set the primary unit of measure.
3. Set user Item Type: Recurring.
4. From the Inventory tab, check Inventory Item. Verify that Transactable is checked. Stockable must be *unchecked* for Provisionable goods
5. From the Order Management tab, check the following checkboxes:
   - Customer Ordered Enabled
   - Activation Required (For provisioning only. If this is for a non-recurring or a shippable item, check Shippable.)
6. Verify that Shippable is unchecked for those items that require creating a CHANGE- or REMOVE-Order Line
7. From the Service tab, check Serviceable Product so that the item appears in Install Base.

8. To enable the Master Items in the right Organizations, go to the Tools menu and pick Organization Assignment, and assign the Organizations that this Master Item is to be enabled in.

3.10 Assigning Items

You must assign the items you have created to one or more organizations. This is especially important if you plan to run Oracle Sales for Communications in a multi-org environment. Remember to keep a note of the organization(s) to which you assign each item.

Use the Organization Assignment window to assign items. You must use the Oracle Sales for Communications responsibility to assign items.

To assign an item to an organization:

1. In the Item Master window, create the item you want to assign to an organization. Alternatively, execute a query to display the item you want to assign to an organization.
2. Open the Organization Assignment window. This window lists all the organizations to which the current item can be assigned. The current organization assignment for the item, if any, is indicated by the check mark in the Assigned check box.
3. To assign the item to an organization, select the Assigned check box.
4. Save your work.

For a more detailed discussion on assigning items, please refer to the *Oracle Inventory User's Guide.*

3.11 Defining Item Relationships

You can define relationships between items to allow you to set network configuration rules, marketing rules, substitute items, and pricing relationships. Oracle Sales for Communications supports a number of relationship types (mandatory charge, optional charge, service, prerequisite, conflict, etc.); you can define multiple relationships between items.

Use the Oracle Sales for Communications responsibility to create item relationships from the Item Relationships window. You can open this window from the Define Product window by selecting Item Relationships from the Setup Screen drop-down list in the Define Product window and then selecting the Launch button.

Please note that the item you create are automatically assigned to the current organization.

To define item relationships:

1. Navigate to the Item Relationships window.
2. In the From Item field, select the item for which you wish to create a relationship. Item description is automatically displayed.
3. In the To Item field, select the item being related to the item in the From field. Item description is automatically displayed.

   The system establishes the specified relationship between the items selected in the From Item and To Item fields. You can define multiple relationships for an item. The fact that a number of items are related to the current item (in the From Item field) does not necessarily establish relationships among the items specified in the To Items field.
4. In the Type field, select the Relationship Type. Select Prerequisite to define that To Item is a prerequisite for using the From Item. Similarly, select conflict if the From Item and To Item cannot be used together since that may cause a conflict.

   You may also select from relationships such as: Related, Substitute, Cross-Sell, Up-Sell, Service, Collateral, Superseded, Complimentary, Impact, Mandatory Charge, Optional Charge, and Promotional Upgrade.
5. Save your work.

For more information on defining item relationships, please refer to the *Oracle Inventory User's Guide.*

3.12 Defining Bills of Materials

Oracle Sales for Communications uses the Bills of Materials (BOM) concept to create bundles or packages comprised of one or more Items. Bills of material store lists of items that are associated with a parent item and information on how each item is related to its parent.

A product can be a part of one or more BOM. BOMs in Oracle Sales for Communications may consist of provisionable goods, shippable goods, warranties, or all these.

Oracle Sales for Communications requires the use of Oracle Configurator to configure other BOM types which include optional features. See the *Oracle Configurator User's Guide* for more details.

3.12.1 Types of Bills of Material

This section provides a brief discussion of the types of bills of material supported in Oracle Sales for Communications. For a detailed discussion on the types of bills of material, please read the *Oracle Bills of Material User's Guide*.

Standard Bill of Material The most common type of bill of material is a standard bill of material which lists a fixed set of components associated with a package. It lists the mandatory components and the required quantity of each component among other information.

A configuration bill (a type of standard bill) provides a set of choices made from a model bill that comprise a buildable, sellable product or service. Configuration items and bills are automatically created from the model bills after a customer chooses appropriate options on a sales order. Alternatively, configuration bills can be manually created by choosing options directly from a model bill.

Model Bill of Material A model bill of material defines the list of options and option classes you can choose in Oracle Order Management to order a configuration. A model bill also specifies mandatory components or included items that are required for each configuration of that model. You do not order or build the model itself: you order and build configurations of the model. A model bill can be either assemble–to–order or pick–to–order.

Option Class Bill of Material An option class is an item that groups optional components on a bill. An option class is an item that becomes a level in your model bill of material. Option classes can also have mandatory components that apply for all of its options. For example, when you order a computer, the monitor is an option class, and the specific type of monitor you order is an option within that option class. An option class bill can be either assemble–to–order or pick–to–order.

Planning Bill of Material A planning bill of material is a bill of material structure that includes a percentage distribution for its components. The percentages associated with the components on a planning bill of material do not need to add to 100%. You can define alternate and common planning bills, where the bill you reference as a common must be another planning bill. Planning items can be nested within one another any number of times.

Product Family Bill of Material A product family bill of material is a grouping of products whose similarity in resource usage, design, and manufacturing process facilitates planning at an aggregate level. A product family bill of material cannot be a part of a Standard, Model, Option Class, or Planning bill of material. Consequently, it is a single level bill. Members of a product family can belong to one and only one product family.

Notes: The bills of material type is specified while defining the item from the Master Item window (Bills of Material tab).

For information on the bills of material related attributes that can be set up for items, please refer to the discussion on Bills of Material Attribute Group in *Oracle Inventory User's Guide*. Please note that these attributes are not the same as the item action parameters of Oracle Sales for Communications.

3.12.2 Creating BOMs (Kit and Configurable)

A bill of material contains information on the parent item, components, attachments, and descriptive elements. Each standard component on a bill can have multiple reference designators and substitute components.

Items for which a BOM is being defined as well as the items being included on the BOM must have the BOM Allowed flag set to Yes. This is done by selecting the BOM Allowed check box on the Bills of Material tab of the Master Item window.

You will need to define both kit and configurable packages for use in Oracle Sales for Communications. A configurable BOM package, unlike the kit, can be configured by a customer during the purchasing process. The parent item for a configurable BOM must be a model item. The next level of item must be of option class and the lowest level of purchase items.

Before creating a bills of material, you must define the parent item and all components as inventory items.

To create a BOM:

1. Navigate to the Bills of Material window. You can open this window from the Define Product window by selecting Bills of Material from the Setup Screen drop-down list in the Define Product and then selecting the Launch button.
2. In the Item field, select the parent item for which you are creating a bill, and if you are creating an alternate bill, enter the alternate.

   Note: Bills and routings can share alternate labels. If you create an alternate bill with the same label as an alternate routing, components are assigned to operations on the alternate routing. If there is no routing with the same alternate label, components are assigned to operations on the primary routing.

3. Click in the Item Seq field to generate the Item Sequence and Operation Sequence numbers.

   The item sequence indicates the sequence of the item on the bill.This defaults to the value of the highest existing component item sequence plus the value of the BOM: Component Item Sequence Increment profile option. If this profile option is not set, the default is 10. You can override or change this number.

   The operation sequence on a bill indicates the order in which you perform operations on a routing. Valid values range from 1 to 9999.
4. In the Component field, select the item you want to add to the bills of material.
5. In the Quantity field, enter the quantity required to make one unit of this bill. The value can include negative or decimal values, based on certain conditions.
6. Repeat steps 4 through 6 to add more items to the BOM, if required.

Note: A BOM may consist of provisionable goods, shippable goods, or both. Items of other types should be associated with the bills of material using the Related Items feature.

7. Cycle through the other tabs and modify the default values, if needed.
8. On the Order Entry tab, select the Optional check box to define a configurable package. If this check box is not selected, a kit package will be created.
9. Save your work.

For detailed information on defining bills of materials, see Creating a Bill of Material section in *Oracle Bills of Material User's Guide*.

To run the concurrent program Populate Configuration Models for a BOM Package:

1. Choose Configurator Developer Responsibility.
2. Choose Populate / Refresh Configuration Models.
3. Populate Configuration Models:
   a. Enter Concurrent Program name Populate Configuration Models.
   b. Enter Organization Code same as the Master Organization Code of the item.
   c. Enter the Model item From as the Model item that you want to populate.
   d. You may leave Model Inventory Item To blank if there is only one model item to populate.
   e. Submit the request and make sure it completes successfully.

Note: To publish the configured BOM package , refer to the Oracle Configurator Implementation Guide, Release 11*i* for the required steps.

3.13 Defining Price Lists

Oracle Sales for Communications uses the concept of price lists to price products. An item must be added to a price list before it can be assigned a price.

Item pricing identifies the value of an item. An item may have different values depending on the package it is bundled in. Setting up Item Price consists of:

- Setting up item price list and list lines (Mandatory)
- Setting up secondary price lists (optional)
- Setting up price qualifier groups (optional)
- Setting up discounts and surcharges (optional)

Notes: For a model BOM package, it is recommended that the pricing be set up such that the model level item and all option classes are priced at $0. Advanced Pricing Qualifiers / Modifiers should be used based on the models or option classes chosen. This provides greater flexibility in pricing items.

To price items whose action type is set to CHANGE, RECONFIGURE, or REMOVE, it is recommended that Advanced Pricing New Price modifier be used, with the qualifier set equal to the Action Type.

3.13.1 Some Important Considerations

- An item must be added to a price list. Items not added to the price list cannot be sold using Oracle Sales for Communications.
- An item can have only one price in a price list. (Items can have different units of measure. Each item and UOM combination can have a different price on the price list. In such cases, an item may have multiple prices on the same price list.)
- An item may be added to multiple price lists.

Note that defining item price is a mandatory step for setting up items. For detailed information on defining item price, please refer to *Oracle Pricing User's Guide*.

3.13.2 Creating Price Lists and List Lines

Price lists are essential to ordering products. Each item entered on a quote or order must have a price. Each price list contains basic list information and one or more:

- Pricing lines
- Pricing attributes
- Qualifiers
- Secondary prices lists

To create price lists and list lines:

1. Open the Price Lists window.
2. Enter a name and description for the price list.
3. Select the price list currency in the Currency field.
4. Enter the rounding factor to be applied to the price list in Round To field. A positive rounding factor indicates the number of places to the left of the decimal point; a negative rounding factor indicates the number of places to the right of the decimal point.
5. Using the Effective Dates fields, select the period when this price list will be effective.
6. In the Payment Terms field, select the appropriate payment terms code. Payment terms determine the payment schedule and discount information for customer invoices, debit memos, and commitments.
7. Select the Freight Term to be associated with the price list. Freight terms determine whether the customer is responsible for the freight charges for an order.
8. In the Freight Carriers field, select the carrier which will be used to ship the item.
9. In the Comments field, enter remarks, if any, about the price list.
10. To define the list lines, do the following in the List Lines tab:
    a. In Product Context field, select Item. This will automatically populate the Line Type and Application Method fields.

b. In the Product Attribute field, select the product type Item Number.

c. In the Product Value field, select the unique inventory item number of the item you want to associate with the price list.

The UOM field is automatically populated when you select a value in the Product Value field.

d. Optionally select the Primary UOM check box if the value in the UOM field is to be used as the primary unit of measure for the item.

e. In Value field, enter the base charge or price for the item.

f. In the Dynamic Formula and Static Formula fields, select the appropriate dynamic or static formula to recalculate the item price. Formulas are mathematical expressions that the pricing engine uses to determine the list prices of items and the discounts that apply to those items. Formulas allow you to create a price from a computation as an alternative to entering prices in a price list.

Notes: When you attach a formula to a price list line, you typically do not enter a price for that line because the pricing engine uses the formula to calculate the final list price. An exception to this is when you attach a formula that has a component of list price. For such a formula, you must enter the list price (base price) for the formula to use in its calculations.

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g. Use the Start Date and End Date fields to set the period when this price list line will be effective.

h. In the Precedence field, enter a value representing the product precedence. The pricing engine uses this value to resolve conflicts in price selection when it selects more than one price list line from a price list.

Note: Repeat step 10 for every price list line you want to create for this price list.

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11. Save your work.

Note: Items created with a Mandatory Charge between them have to be added to the same Price List.

3.13.3 Using Secondary Price Lists

The pricing engine uses secondary price lists when it cannot determine the price for an item using the price list assigned to an order. Primary and secondary price lists have the same currency.

If an item appears on both the primary and a secondary price list with the same effective dates, the pricing engine uses the primary price list to price the item. If an item appears on the primary price list but is not active (the effective end date has passed), the pricing engine uses the price on the secondary price list.

To define a secondary price list for a price list:

1. Create price list and price list lines. See the preceding section for detailed procedures.
2. Open the Secondary Price List tab.
3. In the Secondary Price List field, select the price list you want to use as the secondary price list.
4. In the Precedence field, enter a value representing the price list precedence. If the item being ordered is not on the primary price list, the pricing engine uses the secondary price list with the lowest value in the precedence field to price the item.
5. Save your work.

3.13.4 Enabling Pricing Based on Action Type

Pricing of items in Oracle Sales for Communications would be based on the action being performed in the Order Workbench. You must set up modifiers for action types Remove, Reconfigure, and Change so as to enable Oracle Sales for Communications to modify the price.

Pricing qualifiers are specific attributes that assist Oracle Sales for Communications in determining the price applicable to customized orders in which the customer has changed or removed items from the original configuration.

In order to help you take advantage of the functionality offered by qualifiers, Oracle has pre-seeded basic qualifier contexts and associated qualifier attributes that use Oracle Application database tables as the data source wherever applicable.

The following are components of pricing qualifiers:

3.13.4.0.1 Qualifier Context Qualifier context is a structure defining a hierarchy of certain qualifier attributes like class code or site id for a customer.

3.13.4.0.2 Qualifier Attributes Qualifier attributes are user-definable values, used to determine whether an order is eligible for a particular benefit. These are values in a qualifier context.

3.13.4.0.3 Qualifier Group Qualifier group is a grouping of multiple conditions to be assigned to a single benefit.

3.13.4.0.4 Qualifier Qualifiers are specific attributes that assist in limiting the customers eligible for a price or benefit.

To define qualifiers to enable pricing based on action types:

1. Open the Qualifier Group window.
2. Enter a name and optional description for the qualifier group.
3. On the Qualifiers tab, enter the grouping number (for example, 1) in the Grouping No field.

Note: You must enter the EXACT values for Start Date and End date for EACH qualifier in a qualifier group when simulating an AND condition. If different dates are entered in either field, then the entire qualifier group will be ignored by the pricing engine.

4. In the Context field, select Order as the qualifier context.
5. In the Attribute field, select Line Type as the qualifier attribute of the context chosen in the preceding step.
6. In the Operator field, select equal to (=) as the logical operator for creating the condition.
7. If you are defining qualifier for action type Change, in the Value From field, select CHANGE as value for the qualifying attribute. If you are defining qualifier for action type Remove, in the Value From field, select Remove. If you are defining qualifier for action type Reconfigure, in the Value From field, select Reconfigure.
8. Save your work.

For a more detailed discussion on pricing qualifiers and how they assist Oracle Pricing in defining the customers who will qualify for a benefit or price eligibility, please refer to the *Oracle Pricing User's Guide*.

3.13.5 Setting up Modifiers for Action Types Remove/Change/Reconfigure

You must set up the modifiers of type Discount List to permit Oracle Sales for Communications to recalculate the price on orders where the customer has changed, reconfigured, or removed items.

To setup modifiers:

1. Navigate tot he Define Modifier window.
2. In the type field, select Discount List as the modifier list type.
3. Enter a number, name and version number for the current modifier list type.
4. In the currency field, select the appropriate currency for the modifier. The pricing engine applies modifiers to sales orders of the same currency.

5. Select the Active check box to indicate that this modifier list is active. The pricing engine looks at this flag before it checks effectivity dates and ignores inactive modifiers. Inactivating expired modifiers helps the pricing engine to perform more effectively.
6. Select the Automatic check box if all the modifier list lines are to be selected by default.
7. Optionally enter a description for the modifier.

   Modifier line number is automatically generated and shown in the Modifier No field.
8. In the Level field, select Line+.
9. In the Modifier Type field, select Discount.
10. Do not specify values in the Start Date and End Date fields since this value modifier list should not be deactivated.
11. Verify that the Automatic check box is selected. This flag makes the modifier line automatic.
12. In the Pricing Phase field, select All Lines Adjustment.
13. Retain default values, if any for Incompatibility Group, Bucket, Proration Type, and GL Value fields.
14. In the Product Attribute field, select Item Number.
15. In the Product Attribute Value field, select the item for which modifier is being set.
16. Retain the default values for the remaining fields on the Modifier Summary tab.
17. Open the Discounts / Charges Tab.
18. In the Application Method field, select an application method (for example, New Price).
19. In the value field, specify the appropriate value for the discount.
20. Repeat steps 8-19 for each item that can be added or removed from an order.
21. Select the List Qualifiers button. The qualifiers you have defined appear in the qualifier list.
22. Check the appropriate qualifier to associate it with the modifier list.
23. Click OK to save your work.

For a more detailed discussion on pricing qualifiers and how they assist Oracle Pricing in defining the customers who will qualify for a benefit or price eligibility, please refer to the *Oracle Pricing User's Guide*.

3.13.6 Creating Discounts and Surcharges

A discount is a modifier type that creates pricing adjustments which allows the pricing engine to extend a reduced price for an order, specific line item, or group of lines to a customer. Discounts create a negative price adjustment against the order while surcharges create a positive price adjustment.

Discounts and surcharges are set up as a part of the process of defining modifiers. A detailed discussion on modifiers and the procedure for defining them is available in the chapter on Modifiers in *Oracle Pricing User's Guide*.

3.14 Defining Navigation Categories

A navigation category is a logical classification of items that have similar characteristics.You must define categories to group items that share similar characteristics. Examples of categories could include Business and Residential Services, Wireline, Wireless, and Cable services. There are no restrictions on the categories that can be created.

Note: Navigation categories created in Oracle Sales for Communications are not identical to Oracle Inventory categories. Inventory categories are defined in MTL_Category tables and are used by a wide variety of Oracle Applications. Navigation categories are used only by the Product Catalog.

Oracle Sales for Communications require at least one navigation category in your catalog.

You can define an unlimited number of navigation categories and assign them price lists. When the CSR accesses the Product Catalog Navigator, he/she will then be able to select a navigation category, select a Price List which is associated with that category, and then select any product which is assigned to the Price List.

The Product Catalog Setup Navigator of Oracle Sales for Communications offers you a unique way to identify products and work with navigation categories. It presents products and navigation categories in a hierarchical tree structure and allows you to create categories that are meaningful to your business.

3.14.1 Setting Up a New Category

You can define an unlimited number of navigation categories.

To create a navigation category:

1. Navigate to the Define Product window.
2. From the Setup Screen drop-down list, select Category Pricelist Association Setup and click the Launch button.

   The Product Hierarchy Definition window opens. This window graphically presents the hierarchies, if any defined for items in Oracle Sales for Communications.
3. Select the Add Node button to open the New Node window.
4. Verify that the Category radio button is selected in the Node Type region.
5. Select the Maintain Categories / PriceLists button.
6. In the Category Name field, enter a unique name for the new category.
7. Optionally, use the Effective From and Effective To date fields to define the period when the category would be active. Note that your effective from date can be back dated.

   The effectivity of the category is inclusive of the Effective From and Effective To dates. For example, if the Effective To date is today's date, the category is considered ineffective.
8. In the Description field, enter a brief description for the category.
9. Save your work.

3.14.2 Adding Navigation Category to Product Catalog Setup Navigator Tree

You must add the categories you have created as nodes to the Product Catalog Setup Navigator tree before you can access them from the Product Catalog Setup Navigator of Oracle Sales for Communications.

To add a navigation category to the Product Catalog Setup Navigator:

1. Navigate to the Define Product window.
2. From the Setup Screen drop-down list, select Category Pricelist Association Setup and click the Launch button.

   The Product Hierarchy Definition window opens. This window graphically presents the hierarchies, if any defined for items in Oracle Sales for Communications.
3. Select the Add Node button to open the New Node window.
4. Verify that the Category radio button is selected in the Node Type region.
5. In the Name field, select the category you want to add to the tree from the list of values. This will add the category to the tree.
6. Click the OK button.

> **Note:** The tree may not automatically refresh. Collapse and expand the Product Hierarchy Definition tree to verify that the category has been added to the tree. Alternatively, use the refresh option on the canvas (right-click) menu.

You cannot delete a category from the Product Hierarchy Definition tree. However, you can make the category ineffective by setting the Effective To date. A red colored X would replace the folder symbol in the tree if the category is obsolete.

3.14.3 Creating Product Catalogs

In Sales for Comms, an Item does not inherently contain a price. Rather, prices are associated with an Item. The benefit of this is that an Item need only be created once, yet it can be priced in different ways for different types of customers. This is valuable for communications companies who often price their products differently for different types of customers, such as Business and Residential.

This is managed through Product Catalogs that can be reached through Order Capture for Comms – Product Navigator Tree, and is an easy way of navigating through the different groupings of prices for different types of customers.

Product Catalog consists of two elements; Categories and Price Lists. Numerous Categories can be created, and for each Category a number of Price List can be added containing the relevant products.

To setup a new Category:

1. Login with the Sales for Communications Administration Responsibility. Navigate to Product Catalog Setup > Product Catalog Setup Navigator. The Product Catalog Navigator form appears.
2. Click the Product Catalog node to make the two buttons‘Add Note and Properties appear.
3. Press Add Node to create a new Catalog.
4. Press Maintain Categories / Pricelists to create a new Category.
5. Add the new Category to the list of Categories.
6. Add a PriceList to the Category you just created by positioning the cursor on the Category that you want to add a pricelist to, and press Add Node.
7. Choose Price List as the Node Type and Pick your Price List from the list of values.
8. Click OK.
9. Repeat steps to create additional Pricelists to the Catalog.
10. Save, and close the form.

3.15 Assigning Price Lists to Categories

One or more items can be assigned to the price list to create a hierarchy with the category at the top level and item(s) at the lowest level.

To assign a price list to a navigation category:

1. Navigate to the Define Product window.
2. From the Setup Screen drop-down list, select Category Pricelist Association Setup and click the Launch button.

   The Product Hierarchy Definition window opens. This window graphically presents the hierarchies, if any defined for items in Oracle Sales for Communications.
3. Expand the Catalog Setup node and select the category to which you want to attach the price list.
4. Select the Add Node button to open the New Node window.
5. Verify that the Price List radio button is selected in the Node Type region.

6. In the Name field, select the price list you want to add to the category.
7. Optionally, use the Effective From and Effective To date fields to define the period when the association between the price list and category would be active.

   The effectivity of the association is inclusive of the Effective From and Effective To dates. For example, if the Effective To date is today's date, the association is considered ineffective. A red X indicates an obsolete price list association.
8. Click the OK button.

   You may need to refresh the display to see the pice list as a node of the selected category. Using the Refresh option on the canvas menu is a quick way to refresh the display.

Note: You will only see the price list, not any of the price list Lines.

3.15.1 Setting the Effectivity Period for a Category/Price List Association

You can define the period when a category or the association between the price list and category would be effective. This is done by entering values in the Effective From and Effective To fields for the category / price list. You can set the effectivity dates even after adding the category to the tree or associating the price list to the category.

Note that your category or price list association can be made effective for a period in the future. For example, your Effective From date can be a week after today's date. In such cases, the category / price list association will be considered ineffective till the beginning of the effectivity period.

The effectivity dates are inclusive of the beginning and end dates. For example, if the Effective To date is today's date, the category is price list is considered ineffective. A red X indicates an ineffective category / price list.

To set the effectivity period:

1. Navigate to the Define Product window.
2. From the Setup Screen drop-down list, select Category Pricelist Association Setup and click the Launch button.

   The Product Hierarchy Definition window opens. This window graphically presents the hierarchies, if any defined for items in Oracle Sales for Communications.
3. Select the Catalog or price list whose effectivity date is to be set.
4. Select the Properties button to open the Node window.
5. Use the Effective From and Effective To date fields to define the period when the association between the price list and category would be active.
6. Click the OK button.

3.16 Defining Enumerated Lookup Codes

Oracle Sales for Communications provides the preseeded lookup code type XNC_PARS_SRC_ENUMERATED to enable the enumerated list lookup codes that may be used while defining item action parameters for products. You must create a sufficient number of lookup codes (for example, ENLIST1, ENLIST2, etc.) under XNC_PARS_SRC_ENUMERATED lookup codes type.

For each of these lookup codes, you must define values. These values will be available from the appropriate field during the order creation process if the item action parameter Source Type is set to Enumerated List and the Source Name is set to a lookup code (for example ENLIST1) defined under the XNC_PARS_SRC_ENUMERATED lookup codes type. In this scenario, the values defined for ENLIST1 will be available from the appropriate LOV on the Order Workbench during order creation process.

To define XNC_PARS_SRC_ENUMERATED lookup codes:

1. Navigate to the Oracle Sales for Communications Lookups window.
2. Query up XNC_PARS_SRC_ENUMERATED lookup code type.
3. Click the New toolbar button to open a new row.

4. In the new row you have opened:
   a. In the Code field, enter the lookup code you want to create. The code is internal to the system.
   b. In the Meaning field, explain the meaning of the lookup code. This is the user facing value of the code, and is displayed in all LOVs from which this code can be selected.
   c. Optionally enter a description and the effective dates in the appropriate field.
5. Repeat steps 3 and 4 to create additional lookup codes.
6. Save your work.

   Now that the lookup codes have been created, you are ready to define values for each lookup code. The values you define would depend on your specific requirements. Remember that these values are to be used as parameters while creating an order for the item.
7. Click in one of the fields in the control region. Now select the New toolbar button. The Oracle Sales for Communications Lookups window refreshes. You are now ready to define the lookup codes and its values.
8. In the Type field, enter a code (for example, ENLIST1). Note that the type you enter must be an exact match to a lookup code you have previously defined for XNC_PARS_SRC_ENUMERATED lookup codes type.
9. In the User Name field, enter a user friendly name for the code.
10. In the Application field, select Oracle Sales for Communications. Note that the codes are created relative to an application. Codes defined for an application may not be accessed and used in other applications.
11. In the Description field, optionally enter a description for the lookup code.
12. Click in the spread table below the control region. The first row of the spread table opens.

13. In the open row:
    a. In the Code field, enter a code describing the value that need to be displayed in the appropriate LOV. Note that this code is internal to the system.
    b. In the Meaning field, explain the meaning of the code. This is the user facing value of the code, and is displayed in all LOVs from which this code can be selected.
    c. Optionally enter a description and the effective dates in the appropriate field.
14. Repeat step 13 to define all the values you want to use as parameter during the ordering process.
15. Save your work.
16. Repeat steps 7 - 15 to define values set for all the codes you have defined for XNC_PARS_SRC_ENUMERATED lookup code type.

3.17 Defining Item Action Parameters

Item actions help capture the relationship between an item in the catalog and the actions that can be performed on it. The item-action combination is linked to the set of attributes that are unique to ordering that item and action. If attributes are not specified, the item is still sellable even though it has no associated attributes.

Item Action Parameters are a way to specify the method for accepting attribute values for item related fields. The source of each parameter value in the current release could be the customer, a predefined enumerated list, or External.

Note that the setting up of item action parameters is an optional step.

The following actions can be performed on an item.

- ADD
- CHANGE
- REMOVE
- RECONFIGURE

A sub-action type may also be specified to designate the systems that have an interest in the attributes specified. Some data is of interest to provisioning systems, some to billing systems, some to various other down-stream systems involved in fulfilling a telecommunications service order. The sub-action type allows the application to segregate the data and channel it to the appropriate external system. The following sub-actions can be set up:

- Subscription.
- Provisioning.
- Billing.
- Post Billing.
- Post Provisioning.
- Pre Order.
- Reserve.
- Resource Date.
- Test.

You will need to set the following values for the item for which action parameters are to be set up:

- Item.
- Action Type.
- Action Name.

To create item action parameters:

1. Open the Action Parameters window. You can open this window from the Navigator or from the Define Product window (by selecting Item Action Parameters option from the Setup Screen drop-down list and then clicking the Launch button).
2. Find the item for which you want to create or modify item action parameters.
3. Select the action type. Action type indicates the action that a customer can perform while ordering the item. You can permit customers to add, remove, change or reconfigure the current item. Action type should be set to Add for items that require subscription.

4. Select a sub action type to indicate the system to which Oracle Sales for Communications should channel data.

   Sub action type for items requiring subscription should be set to Subscription.

5. Optionally enter a descriptive action name, description and a result procedure.

Note: In previous version of Oracle Sales for Communications, parameter names were defined using lookup type XNC_PARAMETER. In the current version, they are defined using CSI_EXTEND_ATTRIB_POOL lookup type.

You can define parameter names from the Installed Base Lookups window. Use the following navigation path to open this window:

Setup > Define Installed Base Lookups (Oracle Sales for Communications responsibility)

---

6. Select the Synchronous Action check box if some feedback or result is required from an auxiliary system or workflow before proceeding. If this check box is not selected, the system will proceed without waiting for feedback from auxiliary systems and workflows. This selection will apply to all the parameters that you define on the Main tab of the Action Parameters window.

7. On the Main tab, enter a sequence number and select the parameter name.

Note: To set up an item as subscription defining, in the Item Action Parameters window, select subaction type Subscription. Now for subscription subaction type, add a parameter that will represent the subscription defining attribute. Make sure that this parameter has the check boxes for display and mandatory selected.

To set up an item as subscription requiring, select subaction type Subscription. However, do not add any parameters for this subaction. Ensure that this item has a pre-requisite item defined for it in the item relationships window so that Sales for Communications can determine what the appropriate subscription defining item is.

The item that defines a subscription should be modeled as an item that is a prerequisite for the item that requires a subscription for subscription Linking management.(Use Inventory Item Relationships screen to define Pre-Requisites)

Notes:

- The Parameter Name list of values is drawn from Oracle Foundation's lookup table. These values must be set up ahead of time. See Oracle Foundation documentation for more details.
- Do not enter parameter details for items that require subscription (for example, call waiting requires a phone line). You must, however, enter parameters for items that define the subscription (for example, the phone line).
- Only one of the parameters should define the subscription. You must select Subscription check box on the Others tab for the parameter that defines the subscription.

The description associated with the parameter name is displayed in the Description field.

8. Optionally, enter the default value for the parameter in the Default Value field.
9. In the Source Type field, select the source from which the parameter value for this item is to be derived during the ordering process. The source can be: , Customer Entered, Enumerated List, or External. Note that only Customer

Entered (where the customer enters a value manually) and Enumerated List are provided out of the box in this release of Oracle Sales for Communications. For any other source types, you will need to integrate with specific APIs, messages, etc. Oracle Sales for Communications provides hooks to enable this integration.

Selecting Customer Entered as the source type means that the value for that parameter will be entered by the user. No validations are performed against that entered value, and it can be letters, numbers, or any combination of symbols. An example of a Customer source for a parameter is an email password that the customer chooses. The value entered is stored exactly as it was entered.

10. If you have selected Enumerated List as the source type, in the Source name field, select a lookup code you have defined for XNC_PARS_SRC_ENUMERATED lookup type. The values associated with the code you select in this field will be available in the LOV for selecting a value for the parameter during the ordering process for this item.

If the Source Type is set up as External, a message needs to be defined in the Service Fulfillment Manager screens. Messages have to be defined via the SFM System Administrator Responsibility:

a. Define the Item Action Parameters to be associated with the Item. Navigate to Oracle Sales for Communications > Product Catalog > Product Catalog Setup > Setup : Item Action Parameters.

b. Identify the Parameter name. REQUIREMENT - The parameter name should not contain any blank spaces. Otherwise the XNC-SFM interface cannot decode the parameter name properly.

c. Messages have to be defined via the SFM System Administrator Responsibility. Navigate to > SFM System Administrator > Setup > Message Definition > iMessage Studio. REQUIREMENT : All new messages to be used for the external call-outs should have the prefix 'XNC_' otherwise the XNC-SFM interface cannot decode the message name properly. There has to be a one-to-one relationship between the Parameter Name and the Message Name.

d. Create a new message with the Message Name having the prefix 'XNC_' and followed by the parameter name.

e. The data source has to be defined as the PL/SQL package that needs to be invoked.

11. Select the Mandatory and Subscription check boxes as needed.

    Selecting the Mandatory check box forces the user to enter or select a value for this parameter before submitting an order. If the parameter is not mandatory, (check box is not selected), the user need not enter this value while capturing the order.

    Selecting the Subscription check box causes this item to be defined as a parameter that defines the subscription.

12. On the Effectivity tab, set the period during which each of the action parameters would be effective.

13. Open the Others tab.

14. In the Display Type field, select how this parameter is to be used. Available options are: Both, Call Center, None and Self-Service.

    - Select Both if the parameter is to be used in Self Service and Call Center interfaces.
    - Select Self Service if the parameter is to be used only for the Self Service interface.
    - Select Call Center, if the parameter is to be used only for the Call Center (Forms based) interface.

15. Use the Map Work Items button to launch Oracle Service Fulfillment Manager to allow the linking of item actions to work items. This button is only enabled for Test Actions when this screen is launched from Oracle Service for Communications responsibility.

16. Save your work.

3.18 Defining Default Renewal Rules

The Install Base interface checks the association of items in contracts. This is done by executing the appropriate APIs. You must define default renewal rules to allow the APIs to work properly.

Use the Renewal Rule Defaults window to set up renewal defaults at the system, party and organization levels. The defaults at the system level are mandatory and are set up in the Global region of the window. The defaults at the organization and party levels are optional and are set up in the Parties and Organization tabs respectively. The Administration tab is the same for both.

Define default renewal rules with the following values in the Global region. Leave all the other field blank:

Table 3–4 Values for Default Renewal Rules

Renewal Type	Notify Salesrep
Role	Customer
QA Checklist	Default QA Checklist
Approval Workflow	OKCAUKAP
Contract Group: New Order	Contracts
Contract Group: Renewal	Contracts
PO Required	No (not selected)
Pricing Method	Manual

For detailed information on the steps you need to perform to set up default renewal rules, please refer to the *Oracle Service for Contracts Concepts and Procedures Guide*.

3.19 Setting up Users

This section discusses how to set up Oracle Sales for Communications users so as to grant them access to the eBusiness Center.

Note: Please do not try to access the eBusiness Center before completing these procedures.

You will need to perform the following steps to make sure that your users can access the eBusiness Center.

- Create Users
- Create and Modify Resources.
- Define Groups and Assign Resources.
- Import Resources.
- Assign Resources to Groups.

- Link User to an Employee in HR and Create/Import Resource
- Setup Oracle TeleSales Users.
- Setup Role Types and Roles

3.19.1 Create Users

1. Navigate to SYSADMIN Responsibility > Security > User > Define.
2. From the Responsibilities tab, add the following Responsibilities, as needed:
   - Application Developer
   - System Administrator
   - Sales for Comms Telemarketing Agent
   - Sales for Comms Administration
   - Sales for Comms Interaction Center Sales Agent
   - Sales for Comms Interaction Center Sales Manager
   - Sales for Comms Super User
   - Order Management Super User, Vision Operations (USA)
   - US Super HRMS Manager
3. Save, and close the form.

3.19.2 Creating Resources

All Oracle Sales for Communications users must be created as resources to grant them access to the eBusiness Center. For this to happen, all the users who need to access the eBusiness Center must first be defined as employees in Oracle HRMS. For detailed information on creating employees, please refer to *Managing People Using Oracle HRMS Release 11i*.

3.19.3 Defining Groups and Assigning Resources

A resource group is a collection of resources. Resources fall into three categories: people, places, and things. Breaking these categories into groups helps you to distinguish the characteristics of its members. After creating a new group, you can define its members, roles, usages, and relations.

Sometimes a resource is not just a person. It can be a group of people and piece of equipment, for example. Grouping these single resources into groups can strengthen their skills and save you time when allocating resources to a job.

Use the Define Groups window to create a group using the following values:

Name	Telesales Group
Roles Type (Roles tab)	Telesales
Role (Roles tab)	Telesales Manager
Usage (Usages tab)	Sales and Telesales

For more information on resource groups, please refer to the *Oracle CRM Foundation Concepts and Procedures Guide*.

To define groups:

1. Navigate to the Define Groups window.

   You can view details of an existing group by performing a search from this window.

2. To create a new group, in the Groups header region:

   a. Enter a group name in the Name field.

   b. Enter a brief description of the group in the Description field.

   c. If you want this group to be active only for a specific period, use the Start and End date fields in the Active Dates region to set the period.

3. To assign members to the group:

   a. On the Members tab, select Employee in the Category field. You can assign resources from categories such as employees, partners, parties and Others to a resource group.

   b. In the Number field, select the employee number of the employee you want to assign to the group.

      Values for the Name and Operating Unit fields, if appropriate, are automatically displayed when you select a value in the Number field.

   c. If you want to view details of the current group member, select the Member Details button.

d. If you want to define roles for the current group member, use the Member Roles button. This opens the Member Roles window from where you can define roles for the current member (resource).

e. If you want to move a member resource from this group to another, use the Move Member button. This opens the Move Member window, where you can specify the group t which the member is to be moved.

4. To define roles for the group:

a. Navigate to the Roles tab.

b. Select Telesales in the Type field. Note that role types are application specific.

c. In the Role field, select Telesales Manager.

5. Set group usage parameter:

a. Open the Usages tab.

b. In the Usage field, select Sales and Telesales.

6. Open the Relations tab and define parent groups, if necessary.

7. Save your Work.

3.19.4 Importing Resources

You can import a resource into Oracle Sales for Communications from an Oracle Human Resources database running under the same application instance. Please note that you will see the actual name of the employee (and not the user name specified for logging on to Oracle Application) in the LOV when you try to import an employee as a resource.

Importing resources involves:

- Finding the resource from the appropriate category.
- Entering default values for the resource from the Default Values window.
- Reviewing details of the selected resource from the Resource window. While reviewing the resource details, you will need to ensure that the resource is assigned to a resource group you have already created. Also remember to verify that an appropriate Group Member Role Name and position(s) is assigned to the resource.
- Saving the resource definition.

Note: You can use the Synchronize Employees concurrent program to import a large number of resources from your HR system.

To import a resource for Oracle Sales for Communications:

1. Navigate to the Selection Criterion window.
2. Search for and display details of a resource from Oracle Human Resources, which you want to define as a resource. You will need to:
   a. Select employee as the resource category In the Resource Category drop-down list.
   b. Specify one or more parameters that would uniquely identify only the employees you want to import as resources.

      Note that the search criteria available for selection are determined by your selection in the Resource Category drop-down list.

c. Select the Search button to list the resources matching the search criteria in the Search Results region.

   Note that you can import multiple employees at a time. For example, you can search using Job Title as the criteria to list all employees with the specified job title.

3. In the Search result region, make sure that only the employees you want to import as resource is selected. By default, all the employees retrieved by the search are selected. You will have to deselect the employees you do not wish to import as resource.

4. Select the Create Resource button. The Default Values window opens. In this window, select the job role (Telesales Manager or Telesales Agent) for the resources. Note that the selected job role will be inherited by all the resources being imported. Role type is automatically assigned based on the job role you select.

5. Select the Ok button to open the Selected Resources window. This window presents information on the selected resources such as category, name, role type, role, and organization. Examine the Comments column to see if the resource category has already been saved as a resource.

   To view or modify details about a resource listed in this window:

   a. Make sure that only the resource whose details you want to view is selected. By default, all listed resources are selected as indicated by the check mark in the Select check box.

   b. Select the Details button. The Resources window opens. This window presents all the information available for the selected resource. You can update information, if needed.

   c. Save the changes you may have made.

   d. Close the Resources window to return to the Selected Resource window.

6. Select the Save Resource button to save all the selected employees from Oracle Human Resources as resources in Oracle Sales for Communications.

   On selecting the Save Resource button, only the selected employees will be created as Oracle Sales for Communications resources. By default, all listed resources are selected when you open the Selected Resources window as indicated by the check mark in the Select check box. If you do not want to save one or more resources, be sure to remove the selection from the appropriate Select check box(es).

3.19.5 Assigning Resources to Groups

Resources can be assigned to a resource group from the Groups tab on the Resource window. This can also be done on the Members tab of the Define Groups window while creating resource groups (see Defining Groups and Assigning Resources for details).

To assign resources to groups from the Resources window:

1. Navigate to the Find Resource window and search for the resource you want to assign to a group.
2. Select the Find button to display the search results in the Resource Search Results window.
3. Select the resource you want to assign tot he group. Now select the Resource Details button.

   The Resource window opens. This window displays details of the selected resource.
4. Navigate to the Groups tab.
5. In the Name field in the Groups region, select the group to which you want to assign the resource.

   Note that the resource can belong to multiple groups. Repeat step 5 to assign the resource to all applicable resource groups.
6. Modify other resource details, if needed.
7. Save your work.

For a more detailed discussion on assigning resources to groups, please refer to *Oracle CRM Foundation Concepts and Procedures Guide.*

3.19.6 Link User to an Employee in HR and Create/Import Resource

For instructions on liking users to an employee in HR and Creating / Importing Resources, please refer to the *Oracle CRM Foundation Concepts and Procedures Guide, Release 11i.*

3.19.7 Setting up Oracle Sales for Communications Users

All the users of Oracle Sales for Communications must be defined as Oracle Applications users to allow them to log into the system. Each Oracle Applications user will need to be uniquely identified by a user name, which will be used to log

on to Oracle Applications. The responsibilities tied to the application user determines the user's access privileges in Oracle Applications.

You can define multiple application users, with appropriate privileges, to control access to the system. You must use the System Administrator responsibility to create the user. The user you create may be specified as a Person by selecting his/her name in the Person field (name of the person will be available in the LOV only if he/she has already been defined in your HR system as an employee).

To define an Oracle Sales for Communications user:

1. Navigate to the Users window.
2. Enter a unique application user name and description.
3. Enter a password and confirm it.
4. In the Person field, select the employee who will use this user name to log into Oracle Sales for Communications.
5. On the responsibilities tab, select and assign the following responsibilities to the user.
   - TeleSales Manager.
   - TeleSales Marketing Agent.
   - TeleSales Agent.
   - TeleSales Administrator.
6. Save your work.

   For a more detailed discussion on creating application users, please refer to the *Oracle Applications System Administrator's Guide.*

Note: All Oracle Sales for Communications users must be imported as resources. If the employee you have selected in step 4 has not been imported as a resource, you must do so now. Please refer to the Importing Resources section in this guide for details.

3.20 Setting Up Service Fulfillment Manager

One of the primary functions of the Oracle Service Fulfillment Manager is to supply telecommunication providers, ISPs (Internet Service Providers) and similar vendor companies with the ability to manage the critical business functions of order activation.

Oracle Sales for Communications integrates in such a way as to allow sequencing all the order lines contained in an order depending on the pre-requisite relationship along with the subscription defined for various items. It also helps Oracle Sales for Communications users to initiate a provisioning request and manage the response for the request from the provisioning system.

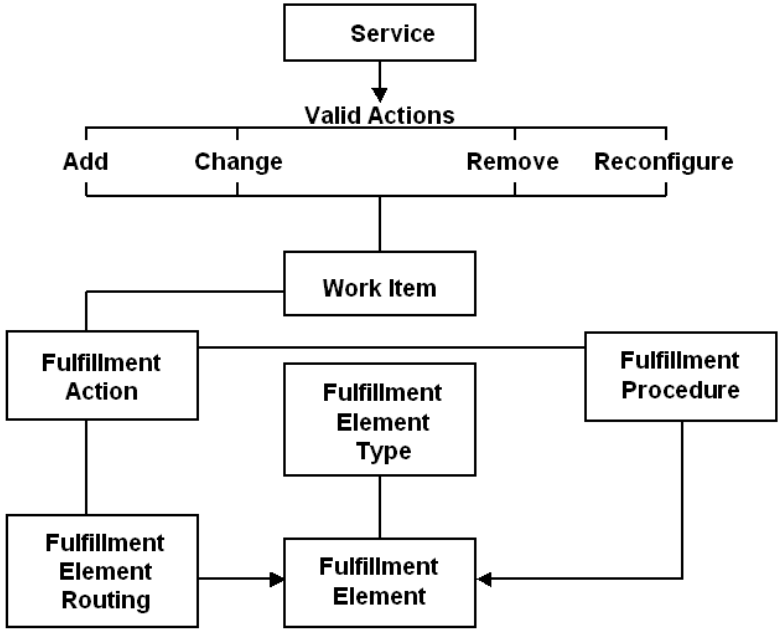
Oracle Sales for Communications passes service order requests to Oracle Service Fulfillment Manager, which analyzes and fulfills the order. For more information, please refer to *Oracle Service Fulfillment Manager Implementation Guide*.

You will need to define services for:

- A single service
- A package of services (for kit as well as configurable packages)

3.20.1 Setup Process

The following graphic illustrates the steps involved in integrating Oracle Sales for Communications with Oracle Service Fulfillment Manager. This illustration is explained in the following paragraphs.



To integrate Oracle Sales for Communications with Oracle Service Fulfillment Manager, you will need to define and link the following. Some of these may already have been defined while implementing Oracle Service Fulfillment Manager:

- Fulfillment Element Types.
- Fulfillment Elements.
- Fulfillment Actions.
- Work Items.
- Service.

3.20.1.1 Setting up Fulfillment Element Types

Any service order request provisioned through Oracle Provisioning requires that the type for that specific fulfillment element be defined in the system before the fulfillment element itself is defined.

To configure a fulfillment element type, you must define the following items:

- The fulfillment element type name and details.
- The software generic properties for the fulfillment element type.
- The attributes of the fulfillment element type.

For detailed information, please refer to the *Oracle Service Fulfillment Manager Implementation Guide*.

3.20.1.2 Defining Fulfillment Elements

In Oracle Service Fulfillment Manager, a fulfillment element is a unique physical entity. It is a member of a unique fulfillment element type and has a unique name on a carrier's network.

You must give each fulfillment element a unique name. This name is registered in the system during the configuration of the fulfillment element. For example, if a telecommunications service provider has a router of a certain fulfillment element type (such as Cisco), then a logical name (Cisco_LA, or Cisco_NY, etc.) must be created for it during configuration. This helps to identify which particular Cisco router needs to be activated during provisioning.

For detailed information on defining fulfillment elements, please refer to the *Oracle Service Fulfillment Manager Implementation Guide*.

3.20.1.3 Setting up Fulfillment Actions

Fulfillment actions are responsible for the actual provisioning of services at the fulfillment element level.

To define a new fulfillment action, you will need to perform the following steps. For detailed information, please refer to the *Oracle Service Fulfillment Manager Implementation Guide*.

- Configure parameters.
- Configure fulfillment element types.
- Configure fulfillment elements.
- Build the fulfillment procedures.

Please note that you must have a one-to-one mapping of fulfillment actions between Oracle Sales for Communications and Oracle Service Fulfillment Manager. This is established through defining identical action items in both the applications.

3.20.1.4 Defining Work Items

Services provided by the carrier are fulfilled by a set of work items performed in a specific sequence within Oracle Service Fulfillment Manager. A work item, then, is a unit of work which is necessary to fulfil a service. A work item helps Oracle Service Fulfillment Manager connect with the item action parameters defined in Oracle Sales for Communications.

- You assign to a work item the appropriate parameters, fulfillment actions and fulfillment procedures necessary for the provisioning process.
- Fulfillment actions are responsible for the actual provisioning of services at the fulfillment element level.
- As an alternative to work items, users can execute the fulfillment actions conditionally in a user-defined workflow. The workflow is defined according to pre-set conditions in a service order request.

You must have a one-to-one mapping between the work items in Oracle Sales for Communications and Oracle Service Fulfillment Manager.

At the least, you must define the following fulfillment actions to integrate Oracle Sales for Communications with Oracle Service Fulfillment Manager:

- ADD
- CHANGE
- REMOVE
- CONFIGURE

For a detailed discussion of work items and the procedures involved in creating and maintaining them, please refer to *Oracle Service Fulfillment Manager Implementation Guide*.

3.20.1.5 Defining Service

In Oracle Provisioning, a service is a telecommunication-related product, offered to the customer as an individual item or in bundles.

Examples of services include:

- Telephone services: Voice, data, video-conferencing, FAX, etc.
- Internet Protocol (IP) services: Web hosting, ecommerce, email, etc.

It is possible to define more than one version of a service in Oracle Provisioning. You set the begin dates and end dates for each service / product version individually. However, only one version of the service is available to a given customer at one time.

For a more detailed discussion of service, and the procedures involved in creating and maintaining them, please refer to *Oracle Service Fulfillment Manager Implementation Guide*.

3.20.2 Setup Steps

This discussion assumes that Oracle Service Fulfillment Manager is fully setup and is functional. In the process of setting up Oracle Service Fulfillment Manager, you may already have completed some of the set up procedures listed here. This section provides the general flow of the setup steps you need to complete rather than specific procedures. For detailed information on Oracle Service Fulfillment Manager and the setup steps listed here in, please refer to the *Oracle Service Fulfillment Manager Implementation Guide*.

To integrate Oracle Service Fulfillment Manager with Oracle Sales for Communications:

1. Assuming the OP System Administrator responsibility navigate to the Define Services window.
2. In the Display field, enter a name for the service.
3. In the Internal Name field enter an appropriate value.
4. Save the service. The service you have created appears on the Services list.
5. Make sure that the Service you have created is selected in the Services list.
6. Open the Action tab.

   The actions you can add to this service are listed in the Available Actions list. If the action you want to add to the service is not listed, create it from the Define Actions window. This window can be opened by selecting the Define Actions button.

   For detailed information on creating actions, please refer to the *Oracle Service Fulfillment Manager Implementation Guide*.
7. From the Available Actions list, select the Actions you want to associate with the service and move them to the Selected Actions list.
8. Save your work.
9. Open the Work Items for Action tab.

   From this tab you can add work items for the actions you have assigned to the service. The work items you can add to the actions are listed in the Available Work Items list. If the work item you want to assign to the action is not listed, create it from the Define Work Items window. This window can be opened by selecting the Define Work Items button.

   For detailed information on creating work items, please refer to the *Oracle Service Fulfillment Manager Implementation Guide*.
10. In the Action field, select the action to which you want to assign work items.
11. From the Available Work Items list, select the work items you want to associate with the action and move them to the Selected Work Items list.
12. Save your work.

3.21 Workflows

You must setup specific concurrent programs to execute Oracle Sales for Communications workflows. These concurrent programs manage the workflows associated with Oracle Sales for Communications, the Service Fulfillment Manager, Install Base interface, etc.

This discussion provides an overview of how Oracle Sales for Communications uses workflows in the ordering process. For detailed information on working with workflows, please refer to *Oracle Workflow Guide*.

Oracle Sales for Communications utilizes the OM Line Flow—Sales for Communications workflow for the ordering process. This workflow uses the specialized Sales for Communications workflow as part of the process.

To enable the Sales for Communications workflow, you must run the workflow background engines (concurrent programs) for all the default nodes (Fulfill: Deferred, Defer Thread, and the node that launches the Sales for Communications workflow):

- OM Order Line
- Sales for Communications

In addition to these concurrent programs, for shippable items you must run:

- Inventory Interface
- OM Interface

We recommend that all the concurrent programs be set up to run automatically so that these background processes are running continuously.

Note: There is no need to run Inventory Interface and OM Interface in 11.5.6. These are required only up to 11.5.5.

The Sales for Communications workflow, called by the OM Line Flow workflow is explained in the steps listed below.

The following brief explanation takes you through the process established by the workflow:

1. An order is booked from the Order Workbench.

Provisionable Item: OM Line Flow workflow waits at the Sales for Communications host shipping block node in “Notified” stage.

Shippable Item: OM Line Flow workflow releases the sales order and ship confirm. After successful shipping, the OM Line Flow workflow waits at the Sales for Communications host shipping block node in “Notified” stage.

2. The Sales for Communications workflow is launched when the Sales for Communications workflow background process is run.

   Provisionable Item: Passes through Activation, Subscribe to Business Events and Get Order Fulfillment Status nodes. After successful provisioning, the Sales for Communications workflow waits at Sales for Communications block node in “Notified” stage. A notification is sent to Order Management to complete the OM Line Flow workflow waiting at Sales for Communications host shipping block node in “Notified” stage.

   The Sales for Communications workflow waits at Sales for Communications block node in “Notified” stage. A notification is sent to Order Management to complete the OM Line Flow workflow waiting at the Shippable Item block node in “Notified” stage.

3. Provisionable Item or Shippable Item: OM Line Flow workflow is deferred at Fulfillment node. Run the OM Order Line workflow background process to fulfill Order Line.

4. Provisionable Item: OM Line Flow workflow waits at the Sales for Communications host shipping block node in “Notified” stage. A notification is sent to complete the Sales for Communications workflow waiting at the Sales for Communications block node in “Notified” stage.

   Shippable Item: OM Line Flow workflow waits at the Sales for Communications host shipping block node in “Notified” stage. A notification is sent to Order Management to complete the Sales for Communications workflow waiting at the Sales for Communications block node in “Notified” stage.

5. Provisionable Item: Sales for Communications workflow is deferred at the Defer Thread node. Run the Sales for Communications workflow background process to continue.

   Shippable Item: Sales for Communications workflow is deferred at the Defer Thread node. Run the Sales for Communications workflow background process to continue.

6. Provisionable Item: The Install Base and Billing interfaces are executed and then the Sales for Communications workflow is completed. A notification is sent to

Order Management to complete the OM Line Flow workflow waiting at the Sales for Communications host fulfillment block node in “Notified” stage.

Shippable Item: The Install Base and Billing interfaces are executed and then the Sales for Communications workflow is completed. A notification is sent to Order Management host fulfillment node to complete the OM Line Flow workflow waiting at the second block node in “Notified” stage.

7. OM Line Flow workflow is completed and the line is closed.

For the Installed Base interface to update the installed base successfully, the following points are very important:

- The item being interfaced into the installed base should have the Network Logistics trackable flag checked (set to Y). This attribute can be found under the Inventory tab in the Master Items Setup screen.
- A new lookup code should be defined under Installed base lookup type CSI_ SYSTEM_TYPE:
  - Lookup Code: CSI_SYSTEM
  - Meaning: CSI_SYSTEM

  The Installed Base lookups screen maybe accessed from Oracle Sales for Communications responsibility under Setup > Installed Base lookups.
- The concurrent managers should be started by enabling the GSM flag, and the SFM Event Manager should be started after the Internal Concurrent managers have been started with the GSM option enabled.
- **Note:** For the Installed Base interface to update the installed base successfully, the following steps are necessary:

1. Gather information to be used in the installation:

   a. The DB Name as found in the V$PARAMETER view:

Example: In this example the DB Name is atg115.

```
SQL> select value from v$parameter where name = 'db_name';

VALUE

atg115
```

   b. The list of nodes that will be used to run managers and services.

Example: This is dependent on how you have set up your installation. For purposes of our example, we will be using two nodes: ap332sun, and ap896sun.

c. The locations of the ORACLE_HOME and FND_TOP for your environment.

Example: Our example will use /fnddev/fnd/11.5 as our FND_TOP and /local/db/8.0.5 as our ORACLE_HOME.

d. The location of your APPSORA.env, tnsnames.ora, and listener.ora files on each of the nodes in b. The tnsnames.ora and listener.ora files are often usually found in ORACLE_HOME/network/admin directory. The APPSORA.env file will be in the appropriate APPLTOP directory, but might be named something else. It will be an environment file that sources two other environment files: The applsys.env file for the environment as well as an environment file dealing with the database being used.

Example: Our example will assume a shared APPLTOP with APPSORA.env located in /myappltop/APPSORA.env. Our tnsnames.ora will be in /local/db/8.0.5/network/admin/tnsnames.ora. Our listener.ora is in /local/db/8.0.5/network/admin/listener.ora.

2. Log on to each node that you made in 1b. Add the following entries to your tnsnames.ora file (one for each node).

FNDSM_<node_name>_<dbname> = (DESCRIPTION=
(ADDRESS=(PROTOCOL=tcp)(HOST=<node_name>)(PORT=<port_number>)

(CONNECT_DATA=(SID=FNDSM_<dbname>))

where:

<node_name> is the name of the node (each entry should be a different one);

<dbname> is the DB Name that was found in step 1a;

<port_number> is the listener port number (usually 1521)

Example: In our example we would place 2 entries in each nodes TNSNAMES.ora file:

FNDSM_ap332sun_ATG115 = (DESCRIPTION=
(ADDRESS=(PROTOCOL=tcp)(HOST=ap332sun)(PORT=1521))
(CONNECT_DATA=(SID=FNDSM_atg115)))

and

FNDSM_ap896sun_ATG115 = (DESCRIPTION=

(ADDRESS=(PROTOCOL=tcp)(HOST=ap896sun)(PORT=1521))

(CONNECT_DATA=(SID=FNDSM_atg115)))

3. For each node, edit the listener.ora file (or create one if none exists).

Edit the SID_LIST_LISTENER as follows: Place a new SID_DESC entry in the SID_LIST in the following format (you only need to make a single entry per DB):

SID_DESC=(SID_NAME=FNDSM_<dbname>)(ORACLE_HOME=<ORACLE_HOME>) (program=<FND_TOP>/bin/FNDSM)

(ENVS= 'MYAPPSORA=<APPSORA_File>,PATH=<PATH>,FNDSM_SCRIPT=<FND_TOP>/bin/gsmstart.sh'))

where:

<dbname> is the DB Name that was found in step 1a;

<ORACLE_HOME> is the location of the appropriate ORACLE_HOME for this environment found in Step 1-C;

<FND_TOP> is the FND_TOP for the environment found in Step 1-C;

<APPSORA_File> is the location of APPSORA.env found in step 1-D.

<PATH> is a path that will allow the shell to find common utilities such as awk and sed.

Note: The quoted part of the ENVS entry 'MYAPPSORA . . . gsmstart.sh' MUST be placed on a single line (even if it is over 80 characters).

Example: our example listenr.ora file for the node ap896sun includes the following entry for SID_LIST_LISTENER (notice it contains SID_DESCs for other items besides our FNDSM:

SID_LIST_LISTENER = (SID_LIST =

(SID_DESC=(SID_NAME=atg115) (ORACLE_HOME=/local/db/8.0.5))
(SID_DESC=(SID_NAME=fndsm_atg115)(ORACLE_HOME=/local/db/8.0.5)
(program=/fnddev/fnd/11.5/bin/FNDSM) (ENVS=
'MYAPPSORA=/myappltop/APPSORA.sh,PATH=/bin,FNDSM_SCRIPT=/fnddev/fnd/11.5/bin/gsmstart.sh'))

(SID_DESC=(SID_NAME=FNDFS)(ORACLE_HOME=/local/db/8.0.5)

(program=/fnddev/fnd/11.5/bin/FNDFS)))

The listener.ora file for ap332sun looks very similar:

SID_LIST_LISTENER = (SID_LIST =

(SID_DESC=(SID_NAME=atg118) (ORACLE_HOME=/local/db/8.0.5))

(SID_DESC=(SID_NAME=fndsm_atg115)(ORACLE_HOME=/local/db/8.0.5)

(program=/fnddev/fnd/11.5/bin/FNDSM)

(ENVS=
'MYAPPSORA=/myappltop/APPSORA.sh,PATH=/bin,FNDSM_
SCRIPT=/fnddev/fnd/11.5/bin/gsmstart.sh'))

(SID_DESC=(SID_NAME=FNDFS)(ORACLE_HOME=/local/db/8.0.5)

(program=/fnddev/fnd/11.5/bin/FNDFS)))

4. For each node, run lsnrctl. Issue the command reload. The listener should bring up handlers for the new services.
5. Change the site level system profile 'Concurrent:GSM_Enabled' to have a value of 'Y'. IMPORTANT: If problems occur with the GSM code failing to start manager processes, the GSM functionality may be turned off by resetting this Profile to 'N' and bouncing the managers. This may happen if the various .ora files are not correctly set up.
6. Use the Register Nodes form (found under the Sysadmin Responsibility) to register all nodes that you will be using for concurrent managers and services.
7. Start up the icm.

3.21.1 Required Setup to support running XNC for Self Service part

For the following required steps, please refer to the Oracle *i*Store Implementation Guide, Release 11*i*:

- Creating Storetree Categories
- Adding a Product to Categories
- Creating Store

3.21.1.1 Mapping Required Logical Templates

Map required logical templates to XNC physical files for your store. The following pages are required for XNC mapping.

STORE_CART_VIEW_SUM : xncCScdViewSum.jsp

STORE_CART_VIEW_LINE : xncCScdShowCartLines.jsp

STORE_CART_MODIFY : xncCScdViewA.jsp

STORE_CART_MODIFY_P : xncCScpViewA.jsp

STORE_CHKOUT_REVIEW : xncCCkdOrdReview.jsp
STORE_CHKOUT_REVIEW_P : xncCCkpOrdReview.jsp
STORE_CHKOUT_SUMMARY : xncCCkdOrdSummary.jsp

STORE_CART_ADD_ITEM : xncCScpAddItem.jsp
STORE_CFG_BRANCH : xncCFgpBranch.jsp
STORE_CFG_REDIRECT : xncCFgpRedirect.jsp

STORE_PSI_ORDER_DETAIL_D : xncCOtdOrdDtl.jsp
STORE_PSI_SHIPMENT_DETAIL_D : xncCOtdShpDtl.jsp
STORE_PSI_PAYMENT_SUMMARY_P : xncCOtdPmtSumMain.jsp
STORE_PSI_INVOICE_SUMMARY_P : xncCOtdInvSumMain.jsp

XNC_CT_SUBSCRIPTION_TYPE :xncCCtpSubscriptionType.jsp
XNC_CT_SUBSCRIPTION_SELECTION: xncCCtdSubscriptionSel.jsp
XNC_CT_CONFLICTS: xncCCtdConflicts.jsp

XNC_MP_PRODUCT_MAIN : xncCMpdProdMain.jsp
XNC_MP_PRODUCT_DETAIL : xncCMpdProdDtl.jsp
XNC_MP_PRODUCT_PROCESS : xncCMppProdDtl.jsp
XNC_CK_COMMS_ATTRIB_DISPLAY : xncCCkdCommsAttrib.jsp
XNC_CK_COMMS_ATTRIB_PROCESS : xncCCkpCommsAttrib.jsp

STORE_PSI_ORDER_DETAIL_P : xncCOtdOrdDtlMain.jsp
STORE_PSI_ORDER_DETAIL_D : xncCOtdOrdDtl.jsp
STORE_PSI_SHIPMENT_DETAIL_D : xncCOtdShpDtl.jsp
STORE_PSI_SHIPMENT_DETAIL_P : xncCOtdShpDtlMain

3.22 Verifying Sales for Communications Setup

A properly implemented and integrated Oracle Sales for Communications application should flawlessly handle the process of creating a quote, booking it as an order, fulfilling and provisioning or shipping the ordered items and recording details of the product in the Install Base.

To quickly check your Oracle Sales for Communications instance:

- Log on to the eBusiness Center.
- Create a quote from the Order Workbench of Oracle Sales for Communications.
- Create and book an order based on the quote.
- Fulfill and provision the order or ship the ordered items.
- Verify that the item details have been properly recorded in the Install Base.

For details on performing these activities, please refer to the *Oracle Sales for Communications Concepts and Procedures Guide*.

A

Public APIs

This appendix presents details of the public APIs belonging to Oracle Sales for Communications.

A.1 Introduction

This section presents information applicable to all the APIs discussed in this appendix.

A.1.1 Parameter Specifications

The specifications for the public APIs provided by the Oracle CRM Application Foundation define four categories of parameters:

- Standard IN
- Standard OUT
- Procedure specific IN
- Procedure specific OUT

Standard IN and OUT parameters are specified by the Oracle Applications business object API Coding Standards, and are discussed in the following sections.

Procedure specific IN and OUT parameter are related to the API being specified, and are discussed with that individual API.

A.1.1.1 Standard IN Parameters

The following table describes standard IN parameters, which are common to all public APIs provided by Oracle CRM Application Foundation.

Table A–1 Standard IN Parameters

Parameter	Data Type	Required	Description
p_api_version	NUMBER	Yes	This must match the version number of the API. An unexpected error is returned if the calling program version number is incompatible with the current API version number (provided in the documentation).
p_init_msg_list	VARCHAR2	Yes	Default = FND_API.G_FALSE. If set to true, then the API makes a call to *fnd_msg_pub.initialize* to initialize the message stack. If set to false then the calling program must initialize the message stack. This action is required to be performed only once, even in the case where more than one API is called.
p_commit	VARCHAR2(1)	No	Default = FND_API.G_FALSE ■ If set to true, then the API commits before returning to the calling program. ■ If set to false, then it is the calling program's responsibility to commit the transaction.

A.1.1.2 Standard OUT Parameters

The following table describes standard OUT parameters, which are common to all public APIs provided by Oracle CRM Application Foundation.

Note: All standard OUT parameters are required.

Table A–2 Standard OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2(1)	Indicates the return status of the API. The values returned are one of the following: ■ FND_API.G_RET_STS_SUCCESS Success: Indicates the API call was successful ■ FND_API.G_RET_STS_ERROR Expected Error: There is a validation error, or missing data error. ■ FND_API.G_RET_STS_UNEXP_ERROR Unexpected Error: The calling program can not correct the error.
x_msg_count	NUMBER	Holds the number of messages in the message list.
x_msg_data	VARCHAR2(2000)	Holds the encoded message if *x_msg_count* is equal to one.

A.1.2 Status Messages

Note: It is not required that all status notifications provide a number identifier along with the message, although, in many cases, it is provided.

Every API must return one of the following states as parameter *x_return_status* after the API is called:

- S (Success)
- E (Error)
- U (Unexpected error)

Each state can be associated with a status message. The following table describes each state.

Table A–3 Status Message and Description

Status	Description
S	Indicates that the API performed all the operations requested by its caller. ■ A success return status may or may not be accompanied by messages in the API message list. ■ Currently, the CRM Foundation APIs do not provide a message for a return status of success.
E	Indicates that the API failed to perform one or more of the operations requested by its caller. An error return status is accompanied by one or more messages describing the error.
U	Indicates that the API encountered an error condition it did not expect, or could not handle, and that it is unable to continue with its regular processing. ■ For example, certain programming errors such as attempting to a division by zero will cause this error. ■ These types of errors usually cannot be corrected by the user and requires a system administrator or application developer to correct.

Warning and Information Messages

In addition to these three types of possible status messages, you can also code the following additional message types:

- Warnings
- Information

To create a warning message, perform the following steps:

1. Create a global variable to be used to signal a warning condition. For example, this could be similar to the following:

   ```
   G_RET_STS_WARNING := 'W'
   ```

   This global variable is not part of the FND_API package.

2. Return this value if the warning condition is encountered. For example, using the same example as in step one, set up the following code in the API to process the warning condition:

   ```
   x_return_status := G_RET_STS_WARNING
   ```

   This code replaces the more usual:

   ```
   x_return_status := fnd_api.g_ret_sts_unexp_error for "U"
   ```

If desired, perform a similar procedure to create Information messages.

A.2 Oracle Sales for Communications Public Packages

Oracle Sales for Communications provides the following public API.

- XNC_PROVINTERFACE_PUB
- XNC_QUOTE_PUB

XNC_PROVINTERFACE_PUB contains the Provisioning API while the XNC_QUOTE_PUB package contains the following APIs:

- Create_Quote
- Update_Quote
- Create_Quote_Line
- Update_Quote_Line
- Delete_Quote_Line
- Submit_Quote

A.3 Package XNC_PROVINTERFACE_PUB

This package contains the Provisioning public API. This API is used to integrate Oracle Sales for Communications with Oracle Service Fulfilment Manager (SFM).

Table A–4 API Description

Name	Description
Provisioning	This public API is used for integrating Oracle Sales for Communications with Oracle Service Fulfillment Manager (SFM). This integration allows for the fulfillment of provisionable products.

Procedure Specification

```
PROCEDURE Provisioning(
    p_line_id IN NUMBER,
    p_api_version IN NUMBER,
    p_init_msg_list IN VARCHAR2,
    p_commit IN VARCHAR2,
    p_validation_level IN NUMBER,
    x_return_status OUT VARCHAR2,
    x_msg_count OUT NUMBER,
    x_msg_data OUT VARCHAR2
);
```

Current Version

```
1.0
```

Parameter Descriptions

The following table describes the IN parameters associated with this API.

Table A–5 IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" for details.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" for details.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" for details.
p_line_id	NUMBER	Yes	Order line id.
p_validation_ level	NUMBER	Optional	Validation Level

The following table describes the OUT parameters associated with this API.

Table A–6 OUT Parameters

Parameter	Data Type	Descriptions
x_return_status	VARCHAR2	See "Standard OUT Parameters" for details.
x_msg_count	NUMBER	See "Standard OUT Parameters" for details.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" for details.

A.3.1 Data Structure Specifications

The following data structures are used:

- Service Order Header
- Service Line Item

A.3.1.1 Service Order Header

This record contains attributes related to order header information. These attributes are populated for order lines.

Name: Service Order Header

PACKAGE Name: XNC_PROVINTERFACE_PUB

```
TYPE SERVICE_ORDER_HEADER IS RECORD
    (
    order_number              VARCHAR2(40)   DEFAULT   FND_API.G_MISS_CHAR,
    order_version             VARCHAR2(40    DEFAULT   1,
    required_fulfillment date DATE           DEFAULT   SYSDATE,
    priority                  NUMBER         DEFAULT   100,
    jeopardy_enabled_flag     VARCHAR2(1)    DEFAULT   'N',
    execution_mode            VARCHAR2(5)    DEFAULT   'ASYNC',
    account_number            VARCHAR2(30)   DEFAULT   FND_API.G_MISS_CHAR,
    cust_account_id           NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    due_date                  DATE           DEFAULT   FND_API.G_MISS_DATE,
    customer_required_date    DATE           DEFAULT   FND_API.G_MISS_DATE,
    order_type                VARCHAR2(40)   DEFAULT   FND_API.G_MISS_CHAR,
    order_source              VARCHAR2(40)   DEFAULT   FND_API.G_MISS_CHAR,
    org_id                    NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    related_order_id          NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    previous_order_id         NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    next_order_id             NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    order_ref_name            VARCHAR2(80)   DEFAULT   FND_API.G_MISS_CHAR,
    order_ref_value           VARCHAR2(300)  DEFAULT   FND_API.G_MISS_CHAR,
    order_comments            VARCHAR2(4000) DEFAULT   FND_API.G_MISS_CHAR,
    order_id                  NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    order_status              VARCHAR2(40)   DEFAULT   FND_API.G_MISS_CHAR,
    fulfillment_status        VARCHAR2(40)   DEFAULT   FND_API.G_MISS_CHAR,
    fulfillment_result        VARCHAR2(4000) DEFAULT   FND_API.G_MISS_CHAR,
    completion_date           DATE           DEFAULT   FND_API.G_MISS_DATE,
    actual_fulfillment_date   DATE           DEFAULT   FND_API.G_MISS_DATE,
    customer_id               NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    customer_name             VARCHAR2(40)   DEFAULT   FND_API.G_MISS_CHAR,
```

```
    telephone_number          VARCHAR2(40)   DEFAULT   FND_API.G_MISS_CHAR,
    attribute_category        VARCHAR2(30)   DEFAULT   FND_API.G_MISS_CHAR,
    attribute1                VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute2                VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute3                VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute4                VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute5                VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute6                VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute7                VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute8                VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute9                VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute10               VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute11               VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute12               VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute13               VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute14               VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute15               VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute16               VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute17               VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute18               VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute19               VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute20               VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR
);
```

Parameter Descriptions

The following table describes the parameters associated with this data structure.

Table A–7 Service Order Header Parameters

Parameter	Data Type	Description
order_number	VARCHAR2(40)	Product code concatenated with a unique number.
order_version	VARCHAR2(40)	Order version.
required_fulfillment date	Date	Required fulfillment date.
priority	Number	Priority.
jeopardy_enabled_flag	VARCHAR2(1)	A flag to indicate whether to send a notification if required fulfillment date is not met.
execution_mode	VARCHAR2(5)	Execution mode. Pass ‘ASYNC’.
account_number	VARCHAR2(30)	Account number.
cust_account_id	NUMBER	Cust Account id for the order line as defined in HZ_CUST_ACCOUNTS.

Table A–7 Service Order Header Parameters

Parameter	Data Type	Description
due_date	DATE	Due date.
customer_required_date	DATE	Customer required date.
order_type	VARCHAR2(40)	Order type.
order_source	VARCHAR2(40)	Order source.
org_id	NUMBER	Org id for which the order is placed.
related_order_id	NUMBER	Order id of the previously submitted order which is related to this order.
previous_order_id	NUMBER	Order id of the previously submitted order which should be prior to this order.
next_order_id	NUMBER	Order id of the previously submitted order which should be next to this order.
order_ref_name	VARCHAR2(80)	Order reference name. Pass ‘OE_ORDER_HEADERS’
order_ref_value	VARCHAR2(300)	Order reference value.Pass order number from OE_ORDER_HEADERS_ALL.
order_comments	VARCHAR2(4000)	Comments.
order_id	NUMBER	Order id.
order_status	VARCHAR2(40)	Order status.
fulfillment_status	VARCHAR2(40)	Fulfillment status.
fulfillment_result	VARCHAR2(4000)	Fulfillment result.
completion_date	DATE	Completion date.
actual_fulfillment_date	DATE	Actual fulfillment date.
customer_id	NUMBER	Customer Id.
customer_name	VARCHAR2(40)	Party name.
telephone_number	VARCHAR2(40)	Telephone number if any.
attribute_category	VARCHAR2(30)	Attribute category.
attribute1- 20	VARCHAR2(30)	Attribute value.

A.3.1.2 Service Line Item

This record contains attributes related to order line information.

Name: Service Line Item

PACKAGE Name: XNC_PROVINTERFACE_PUB

```
TYPE SERVICE_LINE_ITEM IS RECORD
(
    line_number                NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    line_source                VARCHAR2(30)   DEFAULT   FND_API.G_MISS_CHAR,
    inventory_item_id          NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    service_item_name          VARCHAR2(40)   DEFAULT   FND_API.G_MISS_CHAR,
    version                    VARCHAR2(40)   DEFAULT   FND_API.G_MISS_CHAR,
    action_code                VARCHAR2(30)   DEFAULT   FND_API.G_MISS_CHAR,
    organization_code          VARCHAR2(4)    DEFAULT   FND_API.G_MISS_CHAR,
    organization_id            NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    site_use_id                NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    ib_source                  VARCHAR2(20)   DEFAULT   'NONE',
    ib_source_id               NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    required_fulfillment_date  DATE           DEFAULT   FND_API.G_MISS_DATE,
    fulfillment_required_flag  VARCHAR2(1)    DEFAULT   'Y',
    is_package_flag            VARCHAR2(1)    DEFAULT   'N',
    fulfillment_sequence       NUMBER         DEFAULT   0,
    bundle_id                  NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    bundle_sequence            NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    priority                   NUMBER         DEFAULT   100,
    due_date                   DATE           DEFAULT   FND_API.G_MISS_DATE,
    jeopardy_enabled_flag      VARCHAR2(1)    DEFAULT   'N',
    customer_required_date     DATE           DEFAULT   FND_API.G_MISS_DATE,
    starting_number            NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    ending_number              NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    line_item_id               NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    workitem_id                NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    line_status                VARCHAR2(40)   DEFAULT   FND_API.G_MISS_CHAR,
    completion_date            DATE           DEFAULT   FND_API.G_MISS_DATE,
    actual_fulfillment_date    DATE           DEFAULT   FND_API.G_MISS_DATE,
    parent_line_number         NUMBER         DEFAULT   FND_API.G_MISS_NUM,
    is_virtual_line_flag       VARCHAR2(1)    DEFAULT   'N',
    attribute_category         VARCHAR2(30)   DEFAULT   FND_API.G_MISS_CHAR,
    attribute1                 VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute2                 VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute3                 VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute4                 VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
```

```
    attribute5              VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute6              VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute7              VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute8              VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute9              VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute10             VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute11             VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute12             VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute13             VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute14             VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute15             VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute16             VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute17             VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute18             VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute19             VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR,
    attribute20             VARCHAR2(240)  DEFAULT   FND_API.G_MISS_CHAR
);
```

Parameter Descriptions

The following table describes the parameters associated with this data structure.

Table A–8 Service Line Item Parameters

Parameter	Data Type	Description
line_number	NUMBER	Line number in 'OE_ORDER_LINES_ALL'.
line_source	VARCHAR2(30)	Line source 'OE_ORDER_LINES'.
inventory_item_id	NUMBER	Inventory item id for the order line.
service_item_name	VARCHAR2(30)	Item name for item to be provisioned.
version	VARCHAR2(30)	Version number.
action_code	VARCHAR2(30)	Action code.
organization_code	VARCHAR2(4)	Organization code.
organization_id	NUMBER	Organization for item.
site_use_id	NUMBER	Installation site id from HZ_CUST_SITE_USES.
ib_source	VARCHAR2(20)	Installed Base source if 'TXN', then transaction details are picked.
ib_source_id	NUMBER	Instance id when item is received from a service application.
required_fulfillment_date	DATE	Required fulfillment date.

Table A–8 Service Line Item Parameters

Parameter	Data Type	Description
fulfillment_required_flag	VARCHAR2(1)	Fulfillment required fag.
is_package_flag	VARCHAR2(1)	Is packed flag.
fulfillment_sequence	NUMBER	Sequence in which lines should be fulfilled within order.
bundle_sequence	NUMBER	Bundling sequence.
priority	NUMBER	Priority.
due_date	DATE	Due date.
jeopardy_enabled_flag	VARCHAR2(1)	A flag to indicate whether to send a notification if required fulfillment date is not met.
customer_required_date	DATE	Customer required date.
starting_number	NUMBER	Starting number.
ending_number	NUMBER	Ending number.
line_item_id	NUMBER	Line item id.
workitem_id	NUMBER	Work item id.
line_status	VARCHAR2(40)	Line status.
completion_date	DATE	Completion date.
actual_fulfillment_date	DATE	Actual fulfillment date.
parent_line_number	NUMBER	Parent line number.
is_virtual_line_flag	VARCHAR2(1)	Virtual line flag.
attribute_category	VARCHAR2(30)	Attribute category.
attribute_1- 20	VARCHAR2(30)	Attribute value.

A.3.2 Messages and Notifications

Please refer to "Status Messages" for details on the status messages and their descriptions.

Error Messages

The error messages used in XNC_PROVINTERFACE_PUB are explained in the following table:

Table A–9 Error Message used by XNC_PROVINTERFACE_PUB

Type	Message	Explanation
Error	XNC_PROV_INFO_NOT_FOUND	The system could not find provisioning information for this line id.

A.4 Package XNC_QUOTE_PUB

This package contains the public APIs used for creating, updating and deleting quotes.

These APIs are created for Communications specific usage. They eventually call the Oracle Order Capture Public APIs to create, update and delete quotes. Prior to calling Oracle Order Capture APIs, these APIs capture subscription information in addition to Communications Industry specific provisioning and billing parameters.

XNC_QUOTE_PUB package contains the following APIs:

- Create_Quote
- Update_Quote
- Create_Quote_Line
- Update_Quote_Line
- Delete_Quote_Line
- Submit_Quote

These APIs are explained in the following table:

Table A–10 API Description

Name	Description
Create_Quote	This API allows the creation of an entire quote, including the quote header, shipment, payment, line shipments and line payments. It also calculates the prices for items included in the quote taking into consideration the appropriate tax, shipping charges, and freight charges. Create_Quote API calls the Create_Quote_Lines API for creating quote lines, line shipments, line payments, etc. It also calls private procedures Capture_Subscription and Capture_Parameters to create temporary subscription keys which need to be resolved prior to making a quote orderable.
Update_Quote	This API updates a quote, including the quote header and quote lines. The following operations can be performed by using the Update_Quote API: ■ Create quote lines and attributes such as line shipment and line payment. ■ Update existing quote lines and line attributes. After updating quote lines, this API recalculates the prices of the items included on the quote taking into consideration the appropriate tax, shipping, and freight charges.
Create_quote_line	This API creates quote line for a given quote header id and populates the shipping and pricing information. The following procedures are called before calling the ASO API create quote line: ■ Capture provisioning and billing parameters for the inventory item to be inserted from xnc_item_actions table. ■ Capture subscription related information depending on whether the item “defines” or “requires” subscription. ■ Create quote line using the ASO QuotePub. ■ Update the quote line returned for subscription and create line relationship in quote line relationship table if required (depending on the type of subscription item).
Update_quote_line	This API updates the quote line for a given quote line id. It can also be used for recalculating price, populating tax information and changing other quote line details such as Qty, price list, etc.

Table A–10 API Description

Name	Description
	This API deletes a given quote line and also the associated parameters in ASO line attribs Ext table. The following procedures are called before actually deleting the quote line: ■ If the item to be deleted is a configured item from the Configurator (CFG item), delete the quote line that contains the parent model item to which the CFG item is linked. Deleting the line containing the model item would automatically delete all the lines linked to it. ■ If a subscription defining item is to be deleted, then remove all the associations that it has with quote lines containing subscription requiring items.
Submit_quote	This API accepts the quote header id that is to be converted into an order. It validates the quote to resolve the temporary service keys and makes sure that all mandatory parameters have values assigned to them. It also validates the conflicting and pre-requisites information captured on the quote.

A.4.1 Create_Quote

Procedure Specification

```
PROCEDURE Create_quote(
    P_Api_Version_Number      IN   NUMBER,
    P_Init_Msg_List           IN   VARCHAR2 := FND_API.G_FALSE,
    P_Commit                  IN   VARCHAR2 := FND_API.G_FALSE,
    P_Validation_Level        IN   NUMBER := FND_API.G_VALID_LEVEL_FULL,
    P_Control_Rec             IN   Aso_Quote_Pub.Control_Rec_Type
                                   := Aso_Quote_Pub.G_Miss_Control_Rec,
    P_Qte_Header_Rec          IN   Aso_Quote_Pub.Qte_Header_Rec_Type
                                   := Aso_Quote_Pub.G_MISS_Qte_Header_Rec,
    P_hd_Price_Attributes_Tbl IN   Aso_Quote_Pub.Price_Attributes_Tbl_Type
                                   := Aso_Quote_Pub.G_Miss_Price_Attributes_Tbl,
    P_hd_Payment_Tbl          IN   Aso_Quote_Pub.Payment_Tbl_Type
                                   := Aso_Quote_Pub.G_MISS_PAYMENT_TBL,
    P_hd_Shipment_Rec         IN   Aso_Quote_Pub.Shipment_Rec_Type
                                   := Aso_Quote_Pub.G_MISS_SHIPMENT_REC,
    P_hd_Freight_Charge_Tbl   IN   Aso_Quote_Pub.Freight_Charge_Tbl_Type
                                   := Aso_Quote_Pub.G_Miss_Freight_Charge_Tbl,
    P_hd_Tax_Detail_Tbl       IN   Aso_Quote_Pub.Tax_Detail_Tbl_Type
                                   := Aso_Quote_Pub.G_Miss_Tax_Detail_Tbl,
```

```
P_hd_Attr_Ext_Tbl         IN   Aso_Quote_Pub.Line_Attribs_Ext_Tbl_Type
                               := Aso_Quote_Pub.G_MISS_Line_Attribs_Ext_TBL,
P_hd_Sales_Credit_Tbl     IN   Aso_Quote_Pub.Sales_Credit_Tbl_Type
                               := Aso_Quote_Pub.G_MISS_Sales_Credit_Tbl,
P_hd_Quote_Party_Tbl      IN   Aso_Quote_Pub.Quote_Party_Tbl_Type
                               := Aso_Quote_Pub.G_MISS_Quote_Party_Tbl,
P_Qte_Line_Tbl            IN   Aso_Quote_Pub.Qte_Line_Tbl_Type
                               := Aso_Quote_Pub.G_MISS_QTE_LINE_TBL,
P_Qte_Line_Dtl_Tbl        IN   Aso_Quote_Pub.Qte_Line_Dtl_Tbl_Type
                               := Aso_Quote_Pub.G_MISS_QTE_LINE_DTL_TBL,
P_Line_Attr_Ext_Tbl       IN   Aso_Quote_Pub.Line_Attribs_Ext_Tbl_Type
                               := Aso_Quote_Pub.G_MISS_Line_Attribs_Ext_TBL,
P_line_rltship_tbl        IN   Aso_Quote_Pub.Line_Rltship_Tbl_Type
                               := Aso_Quote_Pub.G_MISS_Line_Rltship_Tbl,
P_Price_Adjustment_Tbl    IN   Aso_Quote_Pub.Price_Adj_Tbl_Type
                               := Aso_Quote_Pub.G_Miss_Price_Adj_Tbl,
P_Price_Adj_Attr_Tbl      IN   Aso_Quote_Pub.Price_Adj_Attr_Tbl_Type
                               := Aso_Quote_Pub.G_Miss_PRICE_ADJ_ATTR_Tbl,
P_Price_Adj_Rltship_Tbl   IN   Aso_Quote_Pub.Price_Adj_Rltship_Tbl_Type
                               := Aso_Quote_Pub.G_Miss_Price_Adj_Rltship_Tbl,
P_Ln_Price_Attributes_Tbl IN   Aso_Quote_Pub.Price_Attributes_Tbl_Type
                               := Aso_Quote_Pub.G_Miss_Price_Attributes_Tbl,
P_Ln_Payment_Tbl          IN   Aso_Quote_Pub.Payment_Tbl_Type
                               := Aso_Quote_Pub.G_MISS_PAYMENT_TBL,
P_Ln_Shipment_Tbl         IN   Aso_Quote_Pub.Shipment_Tbl_Type
                               := Aso_Quote_Pub.G_MISS_SHIPMENT_TBL,
P_Ln_Freight_Charge_Tbl   IN   Aso_Quote_Pub.Freight_Charge_Tbl_Type
                               := Aso_Quote_Pub.G_Miss_Freight_Charge_Tbl,
P_Ln_Tax_Detail_Tbl       IN   Aso_Quote_Pub.Tax_Detail_Tbl_Type
                               := Aso_Quote_Pub.G_Miss_Tax_Detail_Tbl,
P_ln_Sales_Credit_Tbl     IN   Aso_Quote_Pub.Sales_Credit_Tbl_Type
                               := Aso_Quote_Pub.G_MISS_Sales_Credit_Tbl,
P_ln_Quote_Party_Tbl      IN   Aso_Quote_Pub.Quote_Party_Tbl_Type
                               := Aso_Quote_Pub.G_MISS_Quote_Party_Tbl,
x_Qte_Header_Rec          OUT  Aso_Quote_Pub.Qte_Header_Rec_Type,
X_Qte_Line_Tbl            OUT  Aso_Quote_Pub.Qte_Line_Tbl_Type,
X_Qte_Line_Dtl_Tbl        OUT  Aso_Quote_Pub.Qte_Line_Dtl_Tbl_Type,
X_Hd_Price_Attributes_Tbl OUT  Aso_Quote_Pub.Price_Attributes_Tbl_Type,
X_Hd_Payment_Tbl          OUT  Aso_Quote_Pub.Payment_Tbl_Type,
X_Hd_Shipment_Rec         OUT  Aso_Quote_Pub.Shipment_Rec_Type,
X_Hd_Freight_Charge_Tbl   OUT  Aso_Quote_Pub.Freight_Charge_Tbl_Type,
X_Hd_Tax_Detail_Tbl       OUT  Aso_Quote_Pub.Tax_Detail_Tbl_Type,
X_hd_Attr_Ext_Tbl         OUT  Aso_Quote_Pub.Line_Attribs_Ext_Tbl_Type,
X_hd_Sales_Credit_Tbl     OUT  Aso_Quote_Pub.Sales_Credit_Tbl_Type,
X_hd_Quote_Party_Tbl      OUT  Aso_Quote_Pub.Quote_Party_Tbl_Type,
```

```
x_Line_Attr_Ext_Tbl       OUT  Aso_Quote_Pub.Line_Attribs_Ext_Tbl_Type,
X_line_rltship_tbl        OUT  Aso_Quote_Pub.Line_Rltship_Tbl_Type,
X_Price_Adjustment_Tbl    OUT  Aso_Quote_Pub.Price_Adj_Tbl_Type,
X_Price_Adj_Attr_Tbl      OUT  Aso_Quote_Pub.Price_Adj_Attr_Tbl_Type,
X_Price_Adj_Rltship_Tbl   OUT  Aso_Quote_Pub.Price_Adj_Rltship_Tbl_Type,
X_Ln_Price_Attributes_Tbl OUT  Aso_Quote_Pub.Price_Attributes_Tbl_Type,
X_Ln_Payment_Tbl          OUT  Aso_Quote_Pub.Payment_Tbl_Type,
X_Ln_Shipment_Tbl         OUT  Aso_Quote_Pub.Shipment_Tbl_Type,
X_Ln_Freight_Charge_Tbl   OUT  Aso_Quote_Pub.Freight_Charge_Tbl_Type,
X_Ln_Tax_Detail_Tbl       OUT  Aso_Quote_Pub.Tax_Detail_Tbl_Type,
X_Ln_Sales_Credit_Tbl     OUT  Aso_Quote_Pub.Sales_Credit_Tbl_Type,
X_Ln_Quote_Party_Tbl      OUT  Aso_Quote_Pub.Quote_Party_Tbl_Type,
X_Return_Status           OUT  VARCHAR2,
X_Msg_Count               OUT  NUMBER,
X_Msg_Data                OUT  VARCHAR2);
```

Current Version

1.0

Parameter Descriptions

The following table describes the IN parameters associated with this API.

Table A–11 IN Parameters in Create_Quote

Parameter	Data Type	Descriptions and Validations
p_api_version	NUMBER	See "Standard IN Parameters" for details.
p_init_msg_list	VARCHAR2 := FND_API.G_FALSE	See "Standard IN Parameters" for details.
p_commit	VARCHAR2 := FND_API.G_FALSE	See "Standard IN Parameters" for details.
p_validation_level	NUMBER := FND_API.G_VALID_LEVEL_FULL	See "Standard IN Parameters" for details.
P_Control_Rec	Control_Rec_Type := G_Miss_Control_Rec,	This Record type is used in Quote APIs and determines functionality that is provided. For e.g. Tax is calculated only if the calculate_tax_flag is set to 'Y'.
P_Qte_Header_Rec	ASO_QUOTE_PUB.Qte_Header_Rec_Type := ASO_QUOTE_PUB.G_MISS_Qte_Header_Rec	This Record type is used in Quote APIs and represents the data it can capture while creating Quote Header. Defined in ASO_QUOTE_PUB package.

Table A–11 IN Parameters in Create_Quote

Parameter	Data Type	Descriptions and Validations
P_hd_Price_ Attributes_Tbl	ASO_QUOTE_PUB.Price_Attributes_Tbl_ Type := ASO_QUOTE_PUB.G_Miss_Price_ Attributes_Tbl,	Defined in ASO_QUOTE_PUB package.
P_hd_Payment_Tbl	ASO_QUOTE_PUB.Payment_Tbl_Type := ASO_QUOTE_PUB.G_MISS_PAYMENT_ TBL	Defined in ASO_QUOTE_PUB package.
P_hd_Shipment_Rec	ASO_QUOTE_PUB.Shipment_Rec_Type:= ASO_QUOTE_PUB.G_MISS_SHIPMENT_ REC	Defined in ASO_QUOTE_PUB package.
P_hd_Freight_ Charge_Tbl	ASO_QUOTE_PUB.Freight_Charge_Tbl_ Type := ASO_QUOTE_PUB.G_Miss_ Freight_Charge_Tbl	Defined in ASO_QUOTE_PUB package.
P_hd_Tax_Detail_Tbl	ASO_QUOTE_PUB.Tax_Detail_Tbl_Type := ASO_QUOTE_PUB.G_Miss_Tax_ Detail_Tbl	Defined in ASO_QUOTE_PUB package.
P_hd_Attr_Ext_Tbl	ASO_QUOTE_PUB.Line_Attribs_Ext_Tbl_ Type := ASO_QUOTE_PUB.G_MISS_Line_ Attribs_Ext_TBL	Defined in ASO_QUOTE_PUB package.
P_hd_Sales_Credit_ Tbl	ASO_QUOTE_PUB.Sales_Credit_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Sales_ Credit_Tbl	Defined in ASO_QUOTE_PUB package
P_hd_Quote_Party_ Tb	ASO_QUOTE_PUB.Quote_Party_Tbl_ Type := ASO_QUOTE_PUB.G_MISS_ Quote_Party_Tbl	Defined in ASO_QUOTE_PUB package.
P_Qte_Line_Tbl	ASO_QUOTE_PUB.Qte_Line_Tbl_Type := ASO_QUOTE_PUB.G_MISS_QTE_LINE_ TBL,	This table of records type represents the data that can be captured as part of Quote Lines.
P_Qte_Line_Dtl_Tbl	ASO_QUOTE_PUB.Qte_Line_Dtl_Tbl_ Type := ASO_QUOTE_PUB.G_MISS_QTE_ LINE_DTL_TBL	Defined in ASO_QUOTE_PUB package.
P_Line_Attr_Ext_Tbl	ASO_QUOTE_PUB.Line_Attribs_Ext_Tbl_ Type := ASO_QUOTE_PUB.G_MISS_Line_ Attribs_Ext_TBL	Defined in ASO_QUOTE_PUB package.
P_line_rltship_tbl	ASO_QUOTE_PUB.Line_Rltship_Tbl_ Type := ASO_QUOTE_PUB.G_MISS_Line_ Rltship_Tbl	Defined in ASO_QUOTE_PUB package.

Table A–11 IN Parameters in Create_Quote

Parameter	Data Type	Descriptions and Validations
P_Price_Adjustment_Tbl	ASO_QUOTE_PUB.Price_Adj_Tbl_Type := ASO_QUOTE_PUB.G_Miss_Price_Adj_Tbl	Defined in ASO_QUOTE_PUB package.
P_Price_Adj_Attr_Tbl	ASO_QUOTE_PUB.Price_Adj_Attr_Tbl_Type := ASO_QUOTE_PUB.G_Miss_PRICE_ADJ_ATTR_Tbl,	Defined in ASO_QUOTE_PUB package.
X_Qte_Line_Dtl_TBL	Qte_Line_Dtl_TBL_Type	Defined in ASO_QUOTE_PUB package.
P_Price_Adj_Rltship_Tbl	ASO_QUOTE_PUB.Price_Adj_Rltship_Tbl_Type := ASO_QUOTE_PUB.G_Miss_Price_Adj_Rltship_Tbl	Defined in ASO_QUOTE_PUB package.
P_Ln_Price_Attributes_Tbl	ASO_QUOTE_PUB.Price_Attributes_Tbl_Type := ASO_QUOTE_PUB.G_Miss_Price_Attributes_Tbl	Defined in ASO_QUOTE_PUB package.
P_Ln_Payment_Tbl	ASO_QUOTE_PUB.Payment_Tbl_Type := ASO_QUOTE_PUB.G_MISS_PAYMENT_TBL,	Defined in ASO_QUOTE_PUB package.
P_Ln_Shipment_Tbl	ASO_QUOTE_PUB.Shipment_Tbl_Type := ASO_QUOTE_PUB.G_MISS_SHIPMENT_TBL,	Defined in ASO_QUOTE_PUB package.
P_Ln_Tax_Detail_Tbl	ASO_QUOTE_PUB.Tax_Detail_Tbl_Type := ASO_QUOTE_PUB.G_Miss_Tax_Detail_Tbl	Defined in ASO_QUOTE_PUB package.
P_ln_Sales_Credit_Tbl	ASO_QUOTE_PUB.Sales_Credit_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Sales_Credit_Tbl	Defined in ASO_QUOTE_PUB package.
P_ln_Quote_Party_Tbl	ASO_QUOTE_PUB.Quote_Party_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Quote_Party_Tbl	Defined in ASO_QUOTE_PUB package.

The following table describes the OUT parameters associated with this API.

Table A–12 OUT Parameters in Create_Quote API

Parameters	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" for details.
x_msg_count	VARCHAR2	See "Standard OUT Parameters" for details.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" for details.

Table A–12 OUT Parameters in Create_Quote API

Parameters	Data Type	Description
x_Qte_Header_Rec	ASO_QUOTE_PUB.Qte_Header_Rec_Type	Defined in ASO_QUOTE_PUB package.
X_Qte_Line_Tbl	ASO_QUOTE_PUB.Qte_Line_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Hd_Price_ Attributes_Tbl	ASO_QUOTE_PUB.Price_Attributes_Tbl_ Type	Defined in ASO_QUOTE_PUB package.
X_Hd_Payment_Tbl	ASO_QUOTE_PUB.Payment_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Hd_Shipment_Rec	ASO_QUOTE_PUB.Shipment_Rec_Type	Defined in ASO_QUOTE_PUB package.
X_Hd_Freight_ Charge_Tbl	ASO_QUOTE_PUB.Freight_Charge_Tbl_ Type	Defined in ASO_QUOTE_PUB package.
X_Hd_Tax_Detail_ Tbl	ASO_QUOTE_PUB.Tax_Detail_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_hd_Attr_Ext_Tbl	ASO_QUOTE_PUB.Line_Attribs_Ext_Tbl_ Type	Defined in ASO_QUOTE_PUB package.
X_hd_Sales_Credit_ Tbl	ASO_QUOTE_PUB.Sales_Credit_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_hd_Quote_Party_ Tbl	ASO_QUOTE_PUB.Quote_Party_Tbl_ Type	Defined in ASO_QUOTE_PUB package.
x_Line_Attr_Ext_Tbl	ASO_QUOTE_PUB.Line_Attribs_Ext_Tbl_ Type	Defined in ASO_QUOTE_PUB package.
X_line_rltship_tbl	ASO_QUOTE_PUB.Line_Rltship_Tbl_ Type	Defined in ASO_QUOTE_PUB package.
X_Price_Adjustment_ Tbl	ASO_QUOTE_PUB.Price_Adj_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Price_Adj_Attr_ Tbl	ASO_QUOTE_PUB.Price_Adj_Attr_Tbl_ Type	Defined in ASO_QUOTE_PUB package.
X_Price_Adj_Rltship_ Tbl	ASO_QUOTE_PUB.Price_Adj_Rltship_ Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Ln_Price_ Attributes_Tbl	ASO_QUOTE_PUB.Price_Attributes_Tbl_ Type	Defined in ASO_QUOTE_PUB package.
X_Ln_Payment_Tbl	ASO_QUOTE_PUB.Payment_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Ln_Shipment_Tbl	ASO_QUOTE_PUB.Shipment_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Ln_Freight_ Charge_Tbl	ASO_QUOTE_PUB.Freight_Charge_Tbl_ Type	Defined in ASO_QUOTE_PUB package.

Table A–12 OUT Parameters in Create_Quote API

Parameters	Data Type	Description
X_Ln_Tax_Detail_Tbl	ASO_QUOTE_PUB.Tax_Detail_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Ln_Sales_Credit_Tbl	ASO_QUOTE_PUB.Sales_Credit_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Ln_Quote_Party_Tbl	ASO_QUOTE_PUB.Quote_Party_Tbl_Type	Defined in ASO_QUOTE_PUB package.

A.4.2 Update_Quote

Procedure Specification

```
PROCEDURE Update_quote(
    P_Api_Version_Number      IN  NUMBER,
    P_Init_Msg_List           IN  VARCHAR2:= FND_API.G_FALSE,
    P_Commit                  IN  VARCHAR2:= FND_API.G_FALSE,
    P_Validation_Level        IN  NUMBER:= FND_API.G_VALID_LEVEL_FULL,
    P_Control_Rec             IN  Aso_Quote_Pub.Control_Rec_Type := Aso_Quote_Pub.G_Miss_Control_
                                  Rec,
    P_Qte_Header_Rec          IN  Aso_Quote_Pub.Qte_Header_Rec_Type:= Aso_Quote_Pub.G_MISS_Qte_
                                  Header_Rec,
    P_hd_Price_Attributes_Tbl IN  Aso_Quote_Pub.Price_Attributes_Tbl_Type := Aso_Quote_Pub.G_
                                  Miss_Price_Attributes_Tbl,
    P_hd_Payment_Tbl          IN  Aso_Quote_Pub.Payment_Tbl_Type := Aso_Quote_Pub.G_MISS_PAYMENT_
                                  TBL,
    --P_hd_Shipment_Rec       IN  ASO_QUOTE_PUB.Shipment_Rec_Type := ASO_QUOTE_PUB.G_MISS_
                                  SHIPMENT_REC,
    P_hd_Shipment_Tbl         IN  Aso_Quote_Pub.Shipment_Tbl_Type := Aso_Quote_Pub.G_MISS_
                                  SHIPMENT_TBL,
    P_hd_Freight_Charge_Tbl   IN  Aso_Quote_Pub.Freight_Charge_Tbl_Type := Aso_Quote_Pub.G_Miss_
                                  Freight_Charge_Tbl,
    P_hd_Tax_Detail_Tbl       IN  Aso_Quote_Pub.Tax_Detail_Tbl_Type := Aso_Quote_Pub.G_Miss_Tax_
                                  Detail_Tbl,
    P_hd_Attr_Ext_Tbl         IN  Aso_Quote_Pub.Line_Attribs_Ext_Tbl_Type := Aso_Quote_Pub.G_
                                  MISS_Line_Attribs_Ext_TBL,
    P_hd_Sales_Credit_Tbl     IN  Aso_Quote_Pub.Sales_Credit_Tbl_Type := Aso_Quote_Pub.G_MISS_
                                  Sales_Credit_Tbl,
    P_hd_Quote_Party_Tbl      IN  Aso_Quote_Pub.Quote_Party_Tbl_Type := Aso_Quote_Pub.G_MISS_
                                  Quote_Party_Tbl,
    P_Qte_Line_Tbl            IN  Aso_Quote_Pub.Qte_Line_Tbl_Type := Aso_Quote_Pub.G_MISS_QTE_
                                  LINE_TBL,
```

```
P_Qte_Line_Dtl_Tbl       IN  Aso_Quote_Pub.Qte_Line_Dtl_Tbl_Type := Aso_Quote_Pub.G_MISS_
                             QTE_LINE_DTL_TBL,
P_Line_Attr_Ext_Tbl      IN  Aso_Quote_Pub.Line_Attribs_Ext_Tbl_Type := Aso_Quote_Pub.G_
                             MISS_Line_Attribs_Ext_TBL,
P_line_rltship_tbl       IN  Aso_Quote_Pub.Line_Rltship_Tbl_Type := Aso_Quote_Pub.G_MISS_
                             Line_Rltship_Tbl,
P_Price_Adjustment_Tbl   IN  Aso_Quote_Pub.Price_Adj_Tbl_Type := Aso_Quote_Pub.G_Miss_Price_
                             Adj_Tbl,
P_Price_Adj_Attr_Tbl     IN  Aso_Quote_Pub.Price_Adj_Attr_Tbl_Type := Aso_Quote_Pub.G_Miss_
                             PRICE_ADJ_ATTR_Tbl,
P_Price_Adj_Rltship_Tbl  IN  Aso_Quote_Pub.Price_Adj_Rltship_Tbl_Type := Aso_Quote_Pub.G_
                             Miss_Price_Adj_Rltship_Tbl,
P_Ln_Price_Attributes_TblIN  Aso_Quote_Pub.Price_Attributes_Tbl_Type := Aso_Quote_Pub.G_
                             Miss_Price_Attributes_Tbl,
P_Ln_Payment_Tbl         IN  Aso_Quote_Pub.Payment_Tbl_Type := Aso_Quote_Pub.G_MISS_PAYMENT_
                             TBL,
P_Ln_Shipment_Tbl        IN  Aso_Quote_Pub.Shipment_Tbl_Type := Aso_Quote_Pub.G_MISS_
                             SHIPMENT_TBL,
P_Ln_Freight_Charge_Tbl  IN  Aso_Quote_Pub.Freight_Charge_Tbl_Type := Aso_Quote_Pub.G_Miss_
                             Freight_Charge_Tbl,
P_Ln_Tax_Detail_Tbl      IN  Aso_Quote_Pub.Tax_Detail_Tbl_Type := Aso_Quote_Pub.G_Miss_Tax_
                             Detail_Tbl,
P_ln_Sales_Credit_Tbl    IN  Aso_Quote_Pub.Sales_Credit_Tbl_Type := Aso_Quote_Pub.G_MISS_
                             Sales_Credit_Tbl,
P_ln_Quote_Party_Tbl     IN  Aso_Quote_Pub.Quote_Party_Tbl_Type := Aso_Quote_Pub.G_MISS_
                             Quote_Party_Tbl,
x_Qte_Header_Rec         OUT Aso_Quote_Pub.Qte_Header_Rec_Type,
X_Qte_Line_Tbl           OUT Aso_Quote_Pub.Qte_Line_Tbl_Type,
X_Qte_Line_Dtl_Tbl       OUT Aso_Quote_Pub.Qte_Line_Dtl_Tbl_Type,
X_Hd_Price_Attributes_TblOUT Aso_Quote_Pub.Price_Attributes_Tbl_Type,
X_Hd_Payment_Tbl         OUT Aso_Quote_Pub.Payment_Tbl_Type,
X_Hd_Shipment_Rec        OUT ASO_QUOTE_PUB.Shipment_Rec_Type,
X_Hd_Shipment_Tbl        OUT Aso_Quote_Pub.Shipment_Tbl_Type,
X_Hd_Freight_Charge_Tbl  OUT Aso_Quote_Pub.Freight_Charge_Tbl_Type,
X_Hd_Tax_Detail_Tbl      OUT Aso_Quote_Pub.Tax_Detail_Tbl_Type,
X_hd_Attr_Ext_Tbl        OUT Aso_Quote_Pub.Line_Attribs_Ext_Tbl_Type,
X_hd_Sales_Credit_Tbl    OUT Aso_Quote_Pub.Sales_Credit_Tbl_Type,
X_hd_Quote_Party_Tbl     OUT Aso_Quote_Pub.Quote_Party_Tbl_Type,
x_Line_Attr_Ext_Tbl      OUT Aso_Quote_Pub.Line_Attribs_Ext_Tbl_Type,
X_line_rltship_tbl       OUT Aso_Quote_Pub.Line_Rltship_Tbl_Type,
X_Price_Adjustment_Tbl   OUT Aso_Quote_Pub.Price_Adj_Tbl_Type,
X_Price_Adj_Attr_Tbl     OUT Aso_Quote_Pub.Price_Adj_Attr_Tbl_Type,
X_Price_Adj_Rltship_Tbl  OUT Aso_Quote_Pub.Price_Adj_Rltship_Tbl_Type,
X_Ln_Price_Attributes_TblOUT Aso_Quote_Pub.Price_Attributes_Tbl_Type,
X_Ln_Payment_Tbl         OUT Aso_Quote_Pub.Payment_Tbl_Type,
```

```
    X_Ln_Shipment_Tbl        OUT  Aso_Quote_Pub.Shipment_Tbl_Type,
    X_Ln_Freight_Charge_Tbl  OUT  Aso_Quote_Pub.Freight_Charge_Tbl_Type,
    X_Ln_Tax_Detail_Tbl      OUT  Aso_Quote_Pub.Tax_Detail_Tbl_Type,
    X_Ln_Sales_Credit_Tbl    OUT  Aso_Quote_Pub.Sales_Credit_Tbl_Type,
    X_Ln_Quote_Party_Tbl     OUT  Aso_Quote_Pub.Quote_Party_Tbl_Type,
    X_Return_Status          OUT  VARCHAR2,
    X_Msg_Count              OUT  NUMBER,
    X_Msg_Data               OUT  VARCHAR2
);
```

Current Version

1.0

Parameter Descriptions

The following table describes the IN parameters associated with this API.

Table A–13 IN Parameters in Update_Quote API

Parameter	Data Type	Description
	NUMBER,	See "Standard IN Parameters" for details.
P_Init_Msg_List	VARCHAR2 := FND_API.G_FALSE,	See "Standard IN Parameters" for details.
P_Commit	VARCHAR2 := FND_API.G_FALSE,	See "Standard IN Parameters" for details.
P_Validation_Level	NUMBER := FND_API.G_VALID_ LEVEL_FULL	See "Standard IN Parameters" for details.
P_Control_Rec	Control_Rec_Type := G_Miss_ Control_Rec,	Defined in ASO_QUOTE_PUB package.
P_Qte_Header_Rec	ASO_QUOTE_PUB.Qte_Header_Rec_ Type := ASO_QUOTE_PUB.G_MISS_ Qte_Header_Rec	Defined in ASO_QUOTE_PUB package.
P_hd_Price_Attributes_ Tbl	ASO_QUOTE_PUB.Price_Attributes_ Tbl_Type := ASO_QUOTE_PUB.G_ Miss_Price_Attributes_Tbl,	Defined in ASO_QUOTE_PUB package.
P_hd_Payment_Tbl	ASO_QUOTE_PUB.Payment_Tbl_ Type := ASO_QUOTE_PUB.G_MISS_ PAYMENT_TBL	Defined in ASO_QUOTE_PUB package.
P_hd_Shipment_Rec	ASO_QUOTE_PUB.Shipment_Rec_ Type := ASO_QUOTE_PUB.G_MISS_ SHIPMENT_REC	Defined in ASO_QUOTE_PUB package.

Table A–13 IN Parameters in Update_Quote API

Parameter	Data Type	Description
	ASO_QUOTE_PUB.Freight_Charge_Tbl_Type := ASO_QUOTE_PUB.G_Miss_Freight_Charge_Tbl	Defined in ASO_QUOTE_PUB package.
P_hd_Tax_Detail_Tbl	ASO_QUOTE_PUB.Tax_Detail_Tbl_Type := ASO_QUOTE_PUB.G_Miss_Tax_Detail_Tbl	Defined in ASO_QUOTE_PUB package.
P_hd_Attr_Ext_Tbl	ASO_QUOTE_PUB.Line_Attribs_Ext_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Line_Attribs_Ext_TBL	Defined in ASO_QUOTE_PUB package.
P_hd_Sales_Credit_Tbl	ASO_QUOTE_PUB.Sales_Credit_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Sales_Credit_Tbl	Defined in ASO_QUOTE_PUB package.
P_hd_Quote_Party_Tb	ASO_QUOTE_PUB.Quote_Party_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Quote_Party_Tbl	Defined in ASO_QUOTE_PUB package.
P_Qte_Line_Tbl	ASO_QUOTE_PUB.Qte_Line_Tbl_Type := ASO_QUOTE_PUB.G_MISS_QTE_LINE_TBL,	Defined in ASO_QUOTE_PUB package.
P_Qte_Line_Dtl_Tbl	ASO_QUOTE_PUB.Qte_Line_Dtl_Tbl_Type := ASO_QUOTE_PUB.G_MISS_QTE_LINE_DTL_TBL	Defined in ASO_QUOTE_PUB package.
P_Line_Attr_Ext_Tbl	ASO_QUOTE_PUB.Line_Attribs_Ext_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Line_Attribs_Ext_TBL	Defined in ASO_QUOTE_PUB package.
P_line_rltship_tbl	ASO_QUOTE_PUB.Line_Rltship_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Line_Rltship_Tbl	Defined in ASO_QUOTE_PUB package.
P_Price_Adjustment_Tbl	ASO_QUOTE_PUB.Price_Adj_Tbl_Type := ASO_QUOTE_PUB.G_Miss_Price_Adj_Tbl	Defined in ASO_QUOTE_PUB package.
P_Price_Adj_Attr_Tbl	ASO_QUOTE_PUB.Price_Adj_Attr_Tbl_Type := ASO_QUOTE_PUB.G_Miss_PRICE_ADJ_ATTR_Tbl,	Defined in ASO_QUOTE_PUB package.
X_Qte_Line_Dtl_TBL	Qte_Line_Dtl_TBL_Type	Defined in ASO_QUOTE_PUB package.
P_Price_Adj_Rltship_Tbl	ASO_QUOTE_PUB.Price_Adj_Rltship_Tbl_Type := ASO_QUOTE_PUB.G_Miss_Price_Adj_Rltship_Tbl	Defined in ASO_QUOTE_PUB package.

Table A–13 IN Parameters in Update_Quote API

Parameter	Data Type	Description
	ASO_QUOTE_PUB.Price_Attributes_Tbl_Type := ASO_QUOTE_PUB.G_Miss_Price_Attributes_Tbl	Defined in ASO_QUOTE_PUB package.
P_Ln_Payment_Tbl	ASO_QUOTE_PUB.Payment_Tbl_Type := ASO_QUOTE_PUB.G_MISS_PAYMENT_TBL,	Defined in ASO_QUOTE_PUB package.
P_Ln_Shipment_Tbl	ASO_QUOTE_PUB.Shipment_Tbl_Type := ASO_QUOTE_PUB.G_MISS_SHIPMENT_TBL,	Defined in ASO_QUOTE_PUB package.
P_Ln_Tax_Detail_Tbl	ASO_QUOTE_PUB.Tax_Detail_Tbl_Type := ASO_QUOTE_PUB.G_Miss_Tax_Detail_Tbl	Defined in ASO_QUOTE_PUB package.
P_ln_Sales_Credit_Tbl	ASO_QUOTE_PUB.Sales_Credit_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Sales_Credit_Tbl	Defined in ASO_QUOTE_PUB package.
P_ln_Quote_Party_Tbl	ASO_QUOTE_PUB.Quote_Party_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Quote_Party_Tbl	Defined in ASO_QUOTE_PUB package.

The following table describes the OUT parameters associated with this API.

Table A–14 OUT Parameters in Update_Quote API

Parameter	Data Type	Description
X_Return_Status	VARCHAR2	See "Standard OUT Parameters" for details.
X_Msg_Count	VARCHAR2	See "Standard OUT Parameters" for details.
X_Msg_Data	VARCHAR2	See "Standard OUT Parameters" for details.
x_Qte_Header_Rec	ASO_QUOTE_PUB.Qte_Header_Rec_Type	Defined in ASO_QUOTE_PUB package.
X_Qte_Line_Tbl	ASO_QUOTE_PUB.Qte_Line_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Hd_Price_Attributes_Tbl	ASO_QUOTE_PUB.Price_Attributes_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Hd_Payment_Tbl	ASO_QUOTE_PUB.Payment_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Hd_Shipment_Rec	ASO_QUOTE_PUB.Shipment_Rec_Type	Defined in ASO_QUOTE_PUB package.

Table A–14 OUT Parameters in Update_Quote API

Parameter	Data Type	Description
X_Hd_Freight_Charge_Tbl	ASO_QUOTE_PUB.Freight_Charge_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Hd_Tax_Detail_Tbl	ASO_QUOTE_PUB.Tax_Detail_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_hd_Attr_Ext_Tbl	ASO_QUOTE_PUB.Line_Attribs_Ext_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_hd_Sales_Credit_Tbl	ASO_QUOTE_PUB.Sales_Credit_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_hd_Quote_Party_Tbl	ASO_QUOTE_PUB.Quote_Party_Tbl_Type	Defined in ASO_QUOTE_PUB package.
x_Line_Attr_Ext_Tbl	ASO_QUOTE_PUB.Line_Attribs_Ext_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_line_rltship_tbl	ASO_QUOTE_PUB.Line_Rltship_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Price_Adjustment_Tbl	ASO_QUOTE_PUB.Price_Adj_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Price_Adj_Attr_Tbl	ASO_QUOTE_PUB.Price_Adj_Attr_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Price_Adj_Rltship_Tbl	ASO_QUOTE_PUB.Price_Adj_Rltship_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Ln_Price_Attributes_Tbl	ASO_QUOTE_PUB.Price_Attributes_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Ln_Payment_Tbl	ASO_QUOTE_PUB.Payment_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Ln_Shipment_Tbl	ASO_QUOTE_PUB.Shipment_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Ln_Freight_Charge_Tbl	ASO_QUOTE_PUB.Freight_Charge_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Ln_Tax_Detail_Tbl	ASO_QUOTE_PUB.Tax_Detail_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Ln_Sales_Credit_Tbl	ASO_QUOTE_PUB.Sales_Credit_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Ln_Quote_Party_Tbl	ASO_QUOTE_PUB.Quote_Party_Tbl_Type	Defined in ASO_QUOTE_PUB package.

A.4.3 Create_Quote_Line

The following table describes the IN parameters associated with this API.

Table A–15 IN Parameters in Create_Quote_Line API

Parameter	Data Type	Description
P_Api_Version_Number	NUMBER,	See "Standard IN Parameters" for details.
P_Init_Msg_List	VARCHAR2 := FND_API.G_FALSE,	See "Standard IN Parameters" for details.
P_Commit	VARCHAR2 := FND_API.G_FALSE,	See "Standard IN Parameters" for details.
P_Qte_line_Rec	ASO_QUOTE_PUB.qte_line_Rec_Type	Defined in ASO_QUOTE_PUB package.
P_Control_Rec	ASO_QUOTE_PUB.Control_rec_Type	Defined in ASO_QUOTE_PUB package.
P_Qte_Line_Dtl_Tbl	ASO_QUOTE_PUB.Qte_Line_Dtl_Tbl_Type:= ASO_QUOTE_PUB.G_MISS_qte_line_dtl_TBL	Defined in ASO_QUOTE_PUB package.
P_Line_Attribs_Ext_Tbl	ASO_QUOTE_PUB.Line_Attribs_Ext_Tbl_type := ASO_QUOTE_PUB.G_Miss_Line_Attribs_Ext_Tbl	Defined in ASO_QUOTE_PUB package.
P_Payment_Tbl	ASO_QUOTE_PUB.Payment_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Payment_TBL	Defined in ASO_QUOTE_PUB package.
P_Price_Adj_Tbl	ASO_QUOTE_PUB.Price_Adj_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Price_Adj_TBL	Defined in ASO_QUOTE_PUB package.
P_Price_Attributes_Tbl	ASO_QUOTE_PUB.Price_Attributes_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Price_attributes_TBL	Defined in ASO_QUOTE_PUB package
P_Price_Adj_Attr_Tbl	ASO_QUOTE_PUB.Price_Adj_Attr_Tbl_Type := ASO_QUOTE_PUB.G_Miss_PRICE_ADJ_ATTR_Tbl	Defined in ASO_QUOTE_PUB package.
P_Shipment_Tbl	ASO_QUOTE_PUB.Shipment_Tbl_Type := ASO_QUOTE_PUB.G_MISS_shipment_TBL	Defined in ASO_QUOTE_PUB package.

Table A–15 IN Parameters in Create_Quote_Line API

Parameter	Data Type	Description
P_Tax_Detail_Tbl	ASO_QUOTE_PUB.Tax_Detail_Tbl_ Type:= ASO_QUOTE_PUB.G_MISS_tax_ detail_TBL	Defined in ASO_QUOTE_PUB package.
P_Freight_Charge_Tbl	ASO_QUOTE_PUB.Freight_Charge_ Tbl_Type := ASO_QUOTE_PUB.G_ MISS_freight_charge_TBL	Defined in ASO_QUOTE_PUB package.
P_Update_Header_Flag	VARCHAR2 := FND_API.G_TRUE	Should Header record be updated or NOT?

The following table describes the OUT parameters associated with this API.

Table A–16 OUT Parameters in Create_Quote_Line API

Parameter	Data Type	Description
X_Return_Status	VARCHAR2	See "Standard OUT Parameters" for details.
X_Msg_Count	VARCHAR2	See "Standard OUT Parameters" for details.
X_Msg_Data	VARCHAR2	See "Standard OUT Parameters" for details.
X_Qte_Line_Rec	ASO_QUOTE_PUB.Qte_Line_Rec_Type	Defined in ASO_QUOTE_PUB packages
X_Qte_Line_Dtl_TBL	ASO_QUOTE_PUB.Qte_Line_Dtl_TBL_ Type	Defined in ASO_QUOTE_PUB package.
X_Line_Attribs_Ext_Tbl	ASO_QUOTE_PUB.Line_Attribs_Ext_ Tbl_type	Defined in ASO_QUOTE_PUB package.
X_Payment_Tbl	ASO_QUOTE_PUB.Payment_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Price_Adj_Tbl	ASO_QUOTE_PUB.Price_Adj_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Price_Attributes_Tbl	ASO_QUOTE_PUB.Price_Attributes_ Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Price_Adj_Attr_Tbl	ASO_QUOTE_PUB.Price_Adj_Attr_Tbl_ Type	Defined in ASO_QUOTE_PUB package.
X_Shipment_Tbl	ASO_QUOTE_PUB.Shipment_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Tax_Detail_Tbl	ASO_QUOTE_PUB.Tax_Detail_Tbl_ Type	Defined in ASO_QUOTE_PUB package.
X_Freight_Charge_Tbl	ASO_QUOTE_PUB.Freight_Charge_ Tbl_Type	Defined in ASO_QUOTE_PUB package.

A.4.4 Update_Quote_Line

The following table describes the IN parameters associated with this API.

Table A–17 IN Parameters in Update_Quote_Line API

Parameter	Data Type	Description
P_Api_Version_Number	NUMBER,	See "Standard IN Parameters" for details.
P_Init_Msg_List	VARCHAR2 := FND_API.G_FALSE,	See "Standard IN Parameters" for details.
P_Commit	VARCHAR2 := FND_API.G_FALSE,	See "Standard IN Parameters" for details.
P_Validation_Level	NUMBER	See "Standard IN Parameters" for details.
P_Qte_line_Rec	ASO_QUOTE_PUB.qte_line_Rec_Type	Defined in ASO_QUOTE_PUB package.
P_Control_Rec	ASO_QUOTE_PUB.Control_rec_Type	Defined in ASO_QUOTE_PUB package.
P_Qte_Line_Dtl_Tbl	ASO_QUOTE_PUB.Qte_Line_Dtl_Tbl_Type:= ASO_QUOTE_PUB.G_MISS_qte_line_dtl_TBL	Defined in ASO_QUOTE_PUB package.
P_Line_Attribs_Ext_Tbl	ASO_QUOTE_PUB.Line_Attribs_Ext_Tbl_type := ASO_QUOTE_PUB.G_Miss_Line_Attribs_Ext_Tbl	Defined in ASO_QUOTE_PUB package.
P_Payment_Tbl	ASO_QUOTE_PUB.Payment_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Payment_TBL	Defined in ASO_QUOTE_PUB package.
P_Price_Adj_Tbl	ASO_QUOTE_PUB.Price_Adj_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Price_Adj_TBL	Defined in ASO_QUOTE_PUB package.
P_Price_Attributes_Tbl	ASO_QUOTE_PUB.Price_Attributes_Tbl_Type := ASO_QUOTE_PUB.G_MISS_Price_attributes_TBL	Defined in ASO_QUOTE_PUB package.
P_Price_Adj_Attr_Tbl	ASO_QUOTE_PUB.Price_Adj_Attr_Tbl_Type := ASO_QUOTE_PUB.G_Miss_PRICE_ADJ_ATTR_Tbl	Defined in ASO_QUOTE_PUB package.
P_Shipment_Tbl	ASO_QUOTE_PUB.Shipment_Tbl_Type := ASO_QUOTE_PUB.G_MISS_shipment_TBL	Defined in ASO_QUOTE_PUB package.

Table A–17 IN Parameters in Update_Quote_Line API

Parameter	Data Type	Description
P_Tax_Detail_Tbl	ASO_QUOTE_PUB.Tax_Detail_Tbl_Type:= ASO_QUOTE_PUB.G_MISS_tax_detail_TBL	Defined in ASO_QUOTE_PUB package.
P_Freight_Charge_Tbl	ASO_QUOTE_PUB.Freight_Charge_Tbl_Type := ASO_QUOTE_PUB.G_MISS_freight_charge_TBL	Defined in ASO_QUOTE_PUB package.
P_Update_Header_Flag	VARCHAR2 := FND_API.G_TRUE	Should Header Record be updated?

The following table describes the OUT parameters associated with this API.

Table A–18 OUT Parameters in Update_Quote_Line API

Parameter	Data Type	Description
X_Return_Status	VARCHAR2	See "Standard OUT Parameters" for details.
X_Msg_Count	VARCHAR2	See "Standard OUT Parameters" for details.
X_Msg_Data	VARCHAR2	See "Standard OUT Parameters" for details.
X_Qte_Line_Rec	ASO_QUOTE_PUB.Qte_Line_Rec_Type	Defined in ASO_QUOTE_PUB package.
X_Qte_Line_Dtl_TBL	ASO_QUOTE_PUB.Qte_Line_Dtl_TBL_Type	Defined in ASO_QUOTE_PUB package.
X_Line_Attribs_Ext_Tbl	ASO_QUOTE_PUB.Line_Attribs_Ext_Tbl_type	Defined in ASO_QUOTE_PUB package.
X_Payment_Tbl	ASO_QUOTE_PUB.Payment_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Price_Adj_Tbl	ASO_QUOTE_PUB.Price_Adj_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Price_Attributes_Tbl	ASO_QUOTE_PUB.Price_Attributes_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Price_Adj_Attr_Tbl	ASO_QUOTE_PUB.Price_Adj_Attr_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Shipment_Tbl	ASO_QUOTE_PUB.Shipment_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Tax_Detail_Tbl	ASO_QUOTE_PUB.Tax_Detail_Tbl_Type	Defined in ASO_QUOTE_PUB package.
X_Freight_Charge_Tbl	ASO_QUOTE_PUB.Freight_Charge_Tbl_Type	Defined in ASO_QUOTE_PUB package.

A.4.5 Delete_Quote_Line

The following table describes the IN parameters associated with this API.

Table A–19 IN Parameters in the Delete_Quote_Line API

Parameter	Date Type	Description
P_Api_Version_Number	NUMBER,	See "Standard IN Parameters" for details.
P_Init_Msg_List	VARCHAR2 := FND_API.G_FALSE,	See "Standard IN Parameters" for details.
P_Commit	VARCHAR2 := FND_API.G_FALSE,	See "Standard IN Parameters" for details.
P_Qte_line_Rec	ASO_QUOTE_PUB.qte_line_Rec_Type	Defined in ASO_QUOTE_PUB package.
P_Control_Rec	ASO_QUOTE_PUB.Control_rec_Type	Defined in ASO_QUOTE_PUB package.
P_Update_Header_Flag	VARCHAR2	Should the Header Record be updated?

The following table describes the OUT parameters associated with this API.

Table A–20 OUT Parameters in the Delete_Quote_Line API

Parameter	Date Type	Description
X_Return_Status	VARCHAR2	See "Standard OUT Parameters" for details.
X_Msg_Count	VARCHAR2	See "Standard OUT Parameters" for details.
X_Msg_Data	VARCHAR2	See "Standard OUT Parameters" for details.

A.4.6 Submit_Quote

The following table describes the IN parameters associated with this API.

Table A–21 IN Parameters in the Submit_Quote API

Parameter	Date Type	Description
P_Api_Version_Number	NUMBER,	See "Standard IN Parameters" for details.
P_Init_Msg_List	VARCHAR2 := FND_API.G_FALSE,	See "Standard IN Parameters" for details.
P_Commit	VARCHAR2 := FND_API.G_FALSE,	See "Standard IN Parameters" for details.
P_Control_Rec	Control_Rec_Type := G_Miss_Control_Rec,	Defined in ASO_QUOTE_PUB package.
P_qte_header_id	Number	Unique Identifier for the Quote.

The following table describes the OUT parameters associated with this API.

Table A–22 OUT Parameters in the Submit_Quote API

Parameter	Date Type	Description
x_order_Header_Rec	order_Header_Rec_Type,	Defined in ASO_QUOTE_PUB package
X_Return_Status	VARCHAR2,	See "Standard OUT Parameters" for details.
X_Msg_Count	NUMBER,	See "Standard OUT Parameters" for details.
X_Msg_Data	VARCHAR2	See "Standard OUT Parameters" for details.

A.4.7 Data Structure Specifications

The following data structures are used in XNC_QUOTE_PUB:

A.4.7.1 Qte_Header_Rec_Type

Record Specification (Example)

Record Types

```
TYPE Qte_Header_Rec_Type IS RECORD
(
    QUOTE_HEADER_ID              NUMBER := FND_API.G_MISS_NUM,
    CREATION_DATE                DATE := FND_API.G_MISS_DATE,
    CREATED_BY                   NUMBER := FND_API.G_MISS_NUM,
    LAST_UPDATE_DATE             DATE := FND_API.G_MISS_DATE,
    LAST_UPDATED_BY              NUMBER := FND_API.G_MISS_NUM,
    LAST_UPDATE_LOGIN            NUMBER := FND_API.G_MISS_NUM,
    REQUEST_ID                   NUMBER := FND_API.G_MISS_NUM,
    PROGRAM_APPLICATION_ID       NUMBER := FND_API.G_MISS_NUM,
    PROGRAM_ID                   NUMBER := FND_API.G_MISS_NUM,
    PROGRAM_UPDATE_DATE          DATE := FND_API.G_MISS_DATE,
    ORG_ID                       NUMBER := FND_API.G_MISS_NUM,
    QUOTE_NAME                   VARCHAR2(50) := FND_API.G_MISS_CHAR,
    QUOTE_NUMBER                 NUMBER := FND_API.G_MISS_NUM,
    QUOTE_VERSION                NUMBER := FND_API.G_MISS_NUM,
    QUOTE_STATUS_ID              NUMBER := FND_API.G_MISS_NUM,
    QUOTE_SOURCE_CODE            VARCHAR2(240) := FND_API.G_MISS_CHAR,
    QUOTE_EXPIRATION_DATE        DATE := FND_API.G_MISS_DATE,
    PRICE_FROZEN_DATE            DATE := FND_API.G_MISS_DATE,
    QUOTE_PASSWORD               VARCHAR2(240) := FND_API.G_MISS_CHAR,
    ORIGINAL_SYSTEM_REFERENCE    VARCHAR2(240) := FND_API.G_MISS_CHAR,
    PARTY_ID                     NUMBER := FND_API.G_MISS_NUM,
```

```
CUST_ACCOUNT_ID              NUMBER := FND_API.G_MISS_NUM,
INVOICE_TO_CUST_ACCOUNT_ID   NUMBER := FND_API.G_MISS_NUM,
ORG_CONTACT_ID               NUMBER := FND_API.G_MISS_NUM,
PHONE_ID                     NUMBER := FND_API.G_MISS_NUM,
INVOICE_TO_PARTY_SITE_ID     NUMBER := FND_API.G_MISS_NUM,
INVOICE_TO_PARTY_ID          NUMBER := FND_API.G_MISS_NUM,
ORIG_MKTG_SOURCE_CODE_ID     NUMBER := FND_API.G_MISS_NUM,
MARKETING_SOURCE_CODE_ID     NUMBER := FND_API.G_MISS_NUM,
ORDER_TYPE_ID                NUMBER := FND_API.G_MISS_NUM,
QUOTE_CATEGORY_CODE          VARCHAR2(240) := FND_API.G_MISS_CHAR,
ORDERED_DATE                 DATE := FND_API.G_MISS_DATE,
ACCOUNTING_RULE_ID           NUMBER := FND_API.G_MISS_NUM,
INVOICING_RULE_ID            NUMBER := FND_API.G_MISS_NUM,
EMPLOYEE_PERSON_ID           NUMBER := FND_API.G_MISS_NUM,
PRICE_LIST_ID                NUMBER := FND_API.G_MISS_NUM,
CURRENCY_CODE                VARCHAR2(15) := FND_API.G_MISS_CHAR,
TOTAL_LIST_PRICE             NUMBER := FND_API.G_MISS_NUM,
TOTAL_ADJUSTED_AMOUNT        NUMBER := FND_API.G_MISS_NUM,
TOTAL_ADJUSTED_PERCENT       NUMBER := FND_API.G_MISS_NUM,
TOTAL_TAX                    NUMBER := FND_API.G_MISS_NUM,
TOTAL_SHIPPING_CHARGE        NUMBER := FND_API.G_MISS_NUM,
SURCHARGE                    NUMBER := FND_API.G_MISS_NUM,
TOTAL_QUOTE_PRICE            NUMBER := FND_API.G_MISS_NUM,
PAYMENT_AMOUNT               NUMBER := FND_API.G_MISS_NUM,
EXCHANGE_RATE                NUMBER := FND_API.G_MISS_NUM,
EXCHANGE_TYPE_CODE           VARCHAR2(15) := FND_API.G_MISS_CHAR,
EXCHANGE_RATE_DATE           DATE := FND_API.G_MISS_DATE,
CONTRACT_ID                  NUMBER := FND_API.G_MISS_NUM,
SALES_CHANNEL_CODE           VARCHAR2(30) := FND_API.G_MISS_CHAR,
ORDER_ID                     NUMBER := FND_API.G_MISS_NUM,
ORDER_NUMBER                 NUMBER := FND_API.G_MISS_NUM,
FFM_REQUEST_ID               NUMBER := FND_API.G_MISS_NUM,
QTE_CONTRACT_ID              NUMBER := FND_API.G_MISS_NUM,
ATTRIBUTE_CATEGORY           VARCHAR2(30) := FND_API.G_MISS_CHAR,
ATTRIBUTE1                   VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE2                   VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE3                   VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE4                   VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE5                   VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE6                   VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE7                   VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE8                   VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE9                   VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE10                  VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE11                  VARCHAR2(150) := FND_API.G_MISS_CHAR,
```

```
    ATTRIBUTE12                   VARCHAR2(150) := FND_API.G_MISS_CHAR,
    ATTRIBUTE13                   VARCHAR2(150) := FND_API.G_MISS_CHAR,
    ATTRIBUTE14                   VARCHAR2(150) := FND_API.G_MISS_CHAR,
    ATTRIBUTE15                   VARCHAR2(150) := FND_API.G_MISS_CHAR,
    SALESREP_FIRST_NAME           VARCHAR2(255) := FND_API.G_MISS_CHAR,
    SALESREP_LAST_NAME            VARCHAR2(255) := FND_API.G_MISS_CHAR,
    PRICE_LIST_NAME               VARCHAR2(255) := FND_API.G_MISS_CHAR,
    QUOTE_STATUS_CODE             VARCHAR2(30) := FND_API.G_MISS_CHAR,
    QUOTE_STATUS                  VARCHAR2(240) := FND_API.G_MISS_CHAR,
    PARTY_NAME                    VARCHAR2(255) := FND_API.G_MISS_CHAR,
    PARTY_TYPE                    VARCHAR2(30) := FND_API.G_MISS_CHAR,
    PERSON_FIRST_NAME             VARCHAR2(150) := FND_API.G_MISS_CHAR,
    PERSON_MIDDLE_NAME            VARCHAR2(60) := FND_API.G_MISS_CHAR,
    PERSON_LAST_NAME              VARCHAR2(150) := FND_API.G_MISS_CHAR,
    MARKETING_SOURCE_NAME         VARCHAR2(150) := FND_API.G_MISS_CHAR,
    MARKETING_SOURCE_CODE         VARCHAR2(150) := FND_API.G_MISS_CHAR,
    ORDER_TYPE_NAME               VARCHAR2(240) := FND_API.G_MISS_CHAR,
    INVOICE_TO_PARTY_NAME         VARCHAR2(255) := FND_API.G_MISS_CHAR,
    INVOICE_TO_CONTACT_FIRST_NAME VARCHAR2(150) := FND_API.G_MISS_CHAR,
    INVOICE_TO_CONTACT_MIDDLE_NAMEVARCHAR2(60) := FND_API.G_MISS_CHAR,
    INVOICE_TO_CONTACT_LAST_NAME  VARCHAR2(150) := FND_API.G_MISS_CHAR,
    INVOICE_TO_ADDRESS1           VARCHAR2(240) := FND_API.G_MISS_CHAR,
    INVOICE_TO_ADDRESS2           VARCHAR2(240) := FND_API.G_MISS_CHAR,
    INVOICE_TO_ADDRESS3           VARCHAR2(240) := FND_API.G_MISS_CHAR,
    INVOICE_TO_ADDRESS4           VARCHAR2(240) := FND_API.G_MISS_CHAR,
    INVOICE_TO_COUNTRY_CODE       VARCHAR2(80) := FND_API.G_MISS_CHAR,
    INVOICE_TO_COUNTRY            VARCHAR2(60) := FND_API.G_MISS_CHAR,
    INVOICE_TO_CITY               VARCHAR2(60) := FND_API.G_MISS_CHAR,
    INVOICE_TO_POSTAL_CODE        VARCHAR2(60) := FND_API.G_MISS_CHAR,
    INVOICE_TO_STATE              VARCHAR2(60) := FND_API.G_MISS_CHAR,
    INVOICE_TO_PROVINCE           VARCHAR2(60) := FND_API.G_MISS_CHAR,
    INVOICE_TO_COUNTY             VARCHAR2(60) := FND_API.G_MISS_CHAR,
    RESOURCE_ID                   NUMBER := FND_API.G_MISS_NUM
);


TYPE QTE_LINE_Rec_Type IS RECORD
(
    OPERATION_CODE             VARCHAR2(30) := FND_API.G_MISS_CHAR,
    QUOTE_LINE_ID              NUMBER := FND_API.G_MISS_NUM,
    CREATION_DATE              DATE := FND_API.G_MISS_DATE,
    CREATED_BY                 NUMBER := FND_API.G_MISS_NUM,
    LAST_UPDATE_DATE           DATE := FND_API.G_MISS_DATE,
    LAST_UPDATED_BY            NUMBER := FND_API.G_MISS_NUM,
    LAST_UPDATE_LOGIN          NUMBER := FND_API.G_MISS_NUM,
```

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REQUEST_ID                  NUMBER := FND_API.G_MISS_NUM,
PROGRAM_APPLICATION_ID      NUMBER := FND_API.G_MISS_NUM,
PROGRAM_ID                  NUMBER := FND_API.G_MISS_NUM,
PROGRAM_UPDATE_DATE         DATE := FND_API.G_MISS_DATE,
QUOTE_HEADER_ID             NUMBER := FND_API.G_MISS_NUM,
ORG_ID                      NUMBER := FND_API.G_MISS_NUM,
LINE_CATEGORY_CODE          VARCHAR2(30) := FND_API.G_MISS_CHAR,
ITEM_TYPE_CODE              VARCHAR2(30) := FND_API.G_MISS_CHAR,
LINE_NUMBER                 NUMBER := FND_API.G_MISS_NUM,
START_DATE_ACTIVE           DATE := FND_API.G_MISS_DATE,
END_DATE_ACTIVE             DATE := FND_API.G_MISS_DATE,
ORDER_LINE_TYPE_ID          NUMBER := FND_API.G_MISS_NUM,
INVOICE_TO_PARTY_SITE_ID    NUMBER := FND_API.G_MISS_NUM,
INVOICE_TO_PARTY_ID         NUMBER := FND_API.G_MISS_NUM,
INVOICE_TO_CUST_ACCOUNT_ID NUMBER := FND_API.G_MISS_NUM,
ORGANIZATION_ID             NUMBER := FND_API.G_MISS_NUM,
INVENTORY_ITEM_ID           NUMBER := FND_API.G_MISS_NUM,
QUANTITY                    NUMBER := FND_API.G_MISS_NUM,
UOM_CODE                    VARCHAR2(3) := FND_API.G_MISS_CHAR,
PRICING_QUANTITY_UOM        VARCHAR2(3) := FND_API.G_MISS_CHAR,
MARKETING_SOURCE_CODE_ID    NUMBER := FND_API.G_MISS_NUM,
PRICE_LIST_ID               NUMBER := FND_API.G_MISS_NUM,
PRICE_LIST_LINE_ID          NUMBER := FND_API.G_MISS_NUM,
CURRENCY_CODE               VARCHAR2(15) := FND_API.G_MISS_CHAR,
LINE_LIST_PRICE             NUMBER := FND_API.G_MISS_NUM,
LINE_ADJUSTED_AMOUNT        NUMBER := FND_API.G_MISS_NUM,
LINE_ADJUSTED_PERCENT       NUMBER := FND_API.G_MISS_NUM,
LINE_QUOTE_PRICE            NUMBER := FND_API.G_MISS_NUM,
RELATED_ITEM_ID             NUMBER := FND_API.G_MISS_NUM,
ITEM_RELATIONSHIP_TYPE      VARCHAR2(15) := FND_API.G_MISS_CHAR,
ACCOUNTING_RULE_ID          NUMBER := FND_API.G_MISS_NUM,
INVOICING_RULE_ID           NUMBER := FND_API.G_MISS_NUM,
SPLIT_SHIPMENT_FLAG         VARCHAR2(1) := FND_API.G_MISS_CHAR,
BACKORDER_FLAG              VARCHAR2(1) := FND_API.G_MISS_CHAR,
MINISITE_ID                 NUMBER := FND_API.G_MISS_NUM,
SECTION_ID                  NUMBER := FND_API.G_MISS_NUM,
SELLING_PRICE_CHANGE        VARCHAR2(1) := FND_API.G_MISS_CHAR,
RECALCULATE_FLAG            VARCHAR2(1) := FND_API.G_MISS_CHAR,
ATTRIBUTE_CATEGORY          VARCHAR2(30) := FND_API.G_MISS_CHAR,
ATTRIBUTE1                  VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE2                  VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE3                  VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE4                  VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE5                  VARCHAR2(150) := FND_API.G_MISS_CHAR,
ATTRIBUTE6                  VARCHAR2(150) := FND_API.G_MISS_CHAR,
```

```
    ATTRIBUTE7                VARCHAR2(150) := FND_API.G_MISS_CHAR,
    ATTRIBUTE8                VARCHAR2(150) := FND_API.G_MISS_CHAR,
    ATTRIBUTE9                VARCHAR2(150) := FND_API.G_MISS_CHAR,
    ATTRIBUTE10               VARCHAR2(150) := FND_API.G_MISS_CHAR,
    ATTRIBUTE11               VARCHAR2(150) := FND_API.G_MISS_CHAR,
    ATTRIBUTE12               VARCHAR2(150) := FND_API.G_MISS_CHAR,
    ATTRIBUTE13               VARCHAR2(150) := FND_API.G_MISS_CHAR,
    ATTRIBUTE14               VARCHAR2(150) := FND_API.G_MISS_CHAR,
    ATTRIBUTE15               VARCHAR2(150) := FND_API.G_MISS_CHAR,
    FFM_CONTENT_NAME          VARCHAR2(250) := FND_API.G_MISS_CHAR,
    FFM_DOCUMENT_TYPE         VARCHAR2(250) := FND_API.G_MISS_CHAR,
    FFM_MEDIA_TYPE            VARCHAR2(250) := FND_API.G_MISS_CHAR,
    FFM_MEDIA_ID              VARCHAR2(250) := FND_API.G_MISS_CHAR,
    FFM_CONTENT_TYPE          VARCHAR2(250) := FND_API.G_MISS_CHAR,
    FFM_USER_NOTE             VARCHAR2(250) := FND_API.G_MISS_CHAR
);
```

A.4.8 Messages and Notifications

Please refer to "Status Messages" for details on the status messages and their descriptions.

A.4.8.1 Common Messages

The following table lists the common messages and notifications that the Oracle Sales for Communications API can generate. Note that not all messages are returned by all APIs.

Table A–23 Common Messages

Type	Name	Text
ERROR	XNC_ADD_MANDATORY_PARAMETER	Please enter a value for mandatory parameter for item: &ITEM_NAME.
ERROR	XNC_API_INVALID_TXN_TYPE	The transaction or sub transaction type is invalid. Please contact the System Administrator.
ERROR	XNC_API_MISS_CUST_ACCT	Customer account number is required.
ERROR	XNC_APPLY_MANDATORY_CHRG	All mandatory charge items must be applied.
ERROR	XNC_ASSOCIATE_SUBSCRIPTION	Please associate subscription requiring item &ITEM_NAME with a subscription defining item.
ERROR	XNC_CANT_CHRE_SHIPPABLE	Shippable item can’t be changed or removed.
ERROR	XNC_CHANGE_SERVICE	Service can be changed only once.

Table A–23 Common Messages

Type	Name	Text
ERROR	XNC_CLEAR_CART	Do you want to clear the cart?
ERROR	XNC_COMMS_ACTIVATION	Invalid item.
ERROR	XNC_COMMS_TRACKABLE_FLAG	An item requiring a subscription or defining a subscription must be Install Base trackable.
ERROR	XNC_CONFIG_ITEM_CONFLICT	This order cannot be booked because configuration checks find a conflict with item: &ITEM.
ERROR	XNC_CONFIG_ITEM_PREREQ	Please add the prerequisite item: &ITEM.
ERROR	XNC_CONFIG_REQ_CHARGE	Please add the mandatory charge: &CHARGE
ERROR	XNC_CREATE_QUOTE_FAILURE	Quote creation failed.
NOTE	XNC_CREATE_QUOTE_SUCCESS	Success: Quote Number &QUOTE_NUMBER.
TITLE	XNC_CT_NOTE_CONFLICTS_HEADER	Incompatible Item.
TITLE	XNC_CT_NOTE_SUBSEL_HEADER	Required Items.
NOTE	XNC_CT_NOTE_SUBSEL_NT1	Associated Item Required for &SUBREQITEMDESC: &SUBDEFITEMDESC.
NOTE	XNC_CT_NOTE_SUBSEL_NT2	&SUBREQITEMDESC requires &SUBDEFITEMDESC.
NOTE	XNC_CT_NOTE_SUBSEL_NT3	Currently you have the following &SUBDEFITEMDESC product installed on order or in your shopping cart.
NOTE	XNC_CT_NOTE_SUBSEL_NT4	Please choose one &SUBDEFITEMDESC from the My Items table to be linked to your &SUBREQITEMDESC.
NOTE	XNC_CT_NOTE_SUBSEL_NT5	or add a new &SUBDEFITEMDESC to your shopping cart to link to your &SUBREQITEMDESC.
ERROR	XNC_CURRENCY_CODE_VALIDATION	Quote currency is &CURRENCY_CODE. It is not possible to add another product with different currency.
ERROR	XNC_CUSTOMER_ENABLED	Customer Orders Enabled cannot be "Yes" unless Customer Ordered is "Yes".
ERROR	XNC_DELETE_PACKAGE	Deleting this line will delete the entire package. Do you wish to continue?
ERROR	XNC_INSTALL_WAREHOUSE	No Warehouse defined for this Org.
ERROR	XNC_LABEL_ACCOUNT_NUMBER	Account Number.
ERROR	XNC_LABEL_AMOUNT	Amount.

Table A–23 Common Messages

Type	Name	Text
ERROR	XNC_MSG_INDICATION	Indicates Pending Changes.
ERROR	XNC_MSG_MANDATORY_FIELDS	Mandatory fields are not entered.
ERROR	XNC_MSG_NO_ATTRIBUTES_CAPTURED	No attributes were captured for this Order.
ERROR	XNC_MSG_NO_ATTRIBUTES_TO_SET	No attributes need to be set for this Order.
ERROR	XNC_MSG_NO_DETAILS	No details found.
ERROR	XNC_MSG_NO_ITEMS	No items found
ERROR	XNC_MSG_QUOTE_CREATION	Quote cannot be created at this time.
ERROR	XNC_MSG_REQUIRED_FIELDS	Required fields.
ERROR	XNC_NO_INVENTORY_ITEM	Inventory Item cannot be "Yes" when Support Service is set to "Yes".
ERROR	XNC_NO_RECOFIGURE	This product cannot be reconfigured.
ERROR	XNC_NO_RECONFIGURE	This product cannot be reconfigured.
ERROR	XNC_NULL_NAME	Name must be entered.
ERROR	XNC_NULL_START_DATE	Start Date Effective must be entered.
ERROR	XNC_QUANTITY_NOTNULL	Quantity should be greater than 0.
ERROR	XNC_QUOTE_LINES	Order submitted cannot add lines. Please start a new order.
ERROR	XNC_QUOTE_LINES_ADDED	&LINE_COUNT_ADDED Quote lines added.
ERROR	XNC_QUOTE_LINE_FAILURE	Failure when trying to add quote line to quote.
NOTE	XNC_QUOTE_LINE_SUCCESS	Quote line &QUOTE_LINE_NUMBER added to quote.
ERROR	XNC_QUOTE_NOT_FOUND	This order cannot be copied.
ERROR	XNC_QUOTE_NUMBER	No quote number for the quote header id.
ERROR	XNC_QUOTE_NUMBER_EXISTS	Reconfigure quote &QUOTE_NUMBER exists for this product.
ERROR	XNC_RECONFIG_SERVICE	Service can be reconfigured only once.
ERROR	XNC_REMOVE_ITEMFROM_CART	Do you want to remove this item from the cart?
ERROR	XNC_REMOVE_SERVICE	Service can be removed only once.
ERROR	XNC_SERVICE	Service item cannot be "Yes" when Serviceable Product is "Yes".

Table A–23 Common Messages

Type	Name	Text
ERROR	XNC_SERVICEABLE_QUOTE_HEADER	No quote exists for Serviceable Item.
ERROR	XNC_START_DATE_ACTIVE	Start date must be less than end date.
ERROR	XNC_SYSTEM_DATE	Date must be greater than or equal to system date.

A.4.8.2 Error Messages: Create_Quote

Table A–24 Create_Quote Error Messages

Type	Name	Text
ERROR	XNC_API_MISS_CUST_ACCT	Customer account number is required.

A.4.8.3 Error Messages: Create_Quote_Line

Table A–25 Create_Quote_Line Error Messages

Type	Name	Text
ERROR	XNC_QUOTE_LINES_ADDED	&LINE_COUNT_ADDED Quote lines added.
ERROR	XNC_QUOTE_NUMBER_EXISTS	Reconfigure quote &QUOTE_NUMBER exists for this product.
ERROR	XNC_RECONFIG_SERVICE	Service can be reconfigured only once.

A.4.8.4 Error Messages: Update_Quote_Line

Table A–26 Update_Quote_Line Error Messages

Type	Name	Text
ERROR	XNC_ADD_MANDATORY_PARAMETER	Please enter a value for mandatory parameter for item : &ITEM_NAME.
ERROR	XNC_API_INVALID_TXN_TYPE	The transaction or sub transaction type is invalid. Please contact the System Administrator.
ERROR	XNC_API_MISS_CUST_ACCT	Customer account number is required.
ERROR	XNC_APPLY_MANDATORY_CHRG	All Mandatory Charge items must be applied

A.4.8.5 Error Messages: Delete_Quote_Line

Table A–27 Delete_Quote_Line Error Messages

Type	Name	Text
ERROR	XNC_DELETE_PACKAGE	Deleting this line will delete the entire package. Do you wish to continue?

B

Navigation Paths

This appendix presents the navigation paths to the windows used for setting up Oracle Sales for Communications. It also indicates the appropriate responsibility you must assume for performing the setup task.

Window Name	Navigation Path	Responsibility
Users	Security > User > Define	System Administrator
System Profile Values	Profile > System	System Administrator
Parameters	Setup > Parameters	Order Management Super User
Menus	Application > Menu	System Administrator
Define Product	Product Catalog > Product Catalog Setup > Product Catalog Setup Navigator	Oracle Sales for Communications
Transaction Types	Setup > Transaction Types > Define	Order Management Super User
Line Workflow Assignments	Setup > Transaction Types > Define > (B) Assign Line Flows	Order Management Super User
Application Utilities: ITEM TYPE Lookups	Product Catalog Setup > Setup > Inventory > Setup > Items > Item Types	Oracle Sales for Communications
Master Item	Product Catalog Setup > Setup > Inventory > Item Setup > Master Items	Oracle Sales for Communications
Organization Assignment	From Master Item window, query up the item you want to assign. From the Tools menu, select Organization Assignment option.	Oracle Sales for Communications
Item Relationships	Product Catalog Setup > Setup > Inventory > Item Setup > Item Relationships	Oracle Sales for Communications
Bills of Material	Bills > Bills	Bills of Material
Price Lists	Product Catalog Setup > Setup > Pricing > Pricing Setup > Price Lists > Price List Setup	Oracle Sales for Communications

Window Name	Navigation Path	Responsibility
Qualifier Group	Product Catalog Setup > Setup > Pricing > Pricing Setup> Qualifier Setup	Oracle Sales for Communications
Define Modifier	Product Catalog Setup > Setup > Pricing > Pricing Setup > Modifiers > Modifier Setup	Oracle Sales for Communications
Product Catalog Setup Navigator	Product Catalog Setup > Product Catalog Setup Navigator	Oracle Sales for Communications
Action Parameters	Product Catalog Setup > Setup > Item Action Parameters	Oracle Sales for Communications
Oracle Sales for Communications Lookups	Setup > Define Lookups	Oracle Sales for Communications
Renewal Rule Defaults	Setup > Contract > Global Defaults	Service Contracts Manager
Define Groups	Maintain Resources > Groups	CRM Resource Manager
Find Resources	Maintain Resources > Resources	CRM Resource Manager
Selection Criterion	Maintain Resources > Import Resources	CRM Resource Manager
Define Services	Setup > Service Definition > Services	OP System Administrator
Installed Base Lookups	Lookups	Oracle Installed Base Admin