Oracle® Procurement

Buyer's Guide to Punchout and Transparent Punchout Release 11*i* Part No. B13856-01

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Oracle Procurement Buyer's Guide to Punchout and Transparent Punchout, Release 11i

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Preface

Welcome to the Oracle Procurement Buyer's Guide to Punchout and Transparent Punchout, Release 11*i*.

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

- The principles and customary practices of your business area.
- Oracle Procurement.

If you have never used Oracle Procurement, Oracle suggests you attend one or more of the Oracle Applications 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.

Note: This guide covers Oracle Procurement Release 11*i*10 (Family Pack J) and Oracle Exchange Release 6.2.5.

How To Use This Guide

The Oracle Procurement Buyer's Guide to Punchout and Transparent Punchout describes how to use the punchout or transparent punchout capability of Oracle iProcurement and Oracle Exchange to provide access to remote catalogs.

This guide is intended for purchasing managers or administrators who wish to do the following:

- Enable and control punchout capability from Oracle iProcurement or Oracle Exchange.
- Enable and control transparent punchout capability from Oracle iProcurement.

This guide contains the following chapters:

- Chapter 1 explains what punchout and transparent punchout are, describes the different models and the benefits of each, and helps buyers choose a model.
- Chapter 2 explains how a buyer implements a punchout or transparent punchout.
- Chapter 3 provides an overview of how both the buyer and supplier can control access to punchout and transparent punchout catalogs.
- Chapter 4 describes common implementation problems and solutions.
- Appendix A expands on the overview of each punchout and transparent punchout model by describing how the process works at a more detailed level.
- Appendix B displays the DTD used by punchout and transparent punchout, descriptions of the XML fields for the DTDs, and examples of punchout and transparent punchout documents.
- Appendix C provides a basic overview of the authentication and security in Oracle iProcurement and Oracle Exchange, and explains how these applications handle encoding in the punchout and transparent punchout XML documents.
- Appendix D provides the maximum field lengths that Oracle iProcurement and Oracle Exchange support for the transfer of data.
- Appendix E describes an alternate method to perform supplier mapping that was used in previous releases and is still supported. (For easier maintenance, however, the recommended way to perform supplier and site mapping is by using the instructions provided in Chapter 2.)

A separate guide, *Oracle Procurement Supplier's Guide to Punchout and Transparent Punchout*, exists for suppliers.

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Other Information Sources

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

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).

- PDF Documentation- See the Online Documentation CD for current PDF documentation for your product with each release. This Documentation CD is also available on Oracle*MetaLink* and is updated frequently.
- **Online Help** You can refer to Oracle Applications Help for current HTML online help for your product. Oracle provides patchable online help, which you can apply to your system for updated implementation and end user documentation. No system downtime is required to apply online help.
- Release Content Document See the Release Content Document for descriptions of new features available by release. The Release Content Document is available on Oracle*MetaLink*.
- **About document -** Refer to the About document for information about your release, including feature updates, installation information, and new documentation or documentation patches that you can download. The About document is available on Oracle*MetaLink*.

Related Guides

Oracle Procurement shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other guides when you set up and use Oracle Procurement.

You can read the guides online 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.

Guides 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). 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 most Oracle Applications help files, such as Oracle Purchasing.

Guides Related to This Product

Oracle iProcurement Installation Guide

This guide describes how to install Oracle iProcurement for the first time.

Oracle iProcurement Implementation Guide

This guide provides an overview of the functionality in Oracle iProcurement and setup steps for implementing Oracle iProcurement.

Oracle Purchasing User's Guide

This guide provides complete setup and usage information for Oracle Purchasing.

Oracle Exchange Installation Guide

This guide describes how to install Oracle Exchange.

Oracle Exchange and Oracle Sourcing Company Administration Guide

This guide describes how administrators can set up Oracle Exchange or Oracle Sourcing for use by their company and its employees.

Oracle Procurement Supplier's Guide to Punchout and Transparent Punchout

This guide describes supplier-side setup for punchout and transparent punchout. It contains much of the same information in the Oracle Procurement Buyer's Guide to Punchout and Transparent Punchout that is equally relevant to suppliers, but replaces the setup chapter with supplier-only setup steps. By excluding buyer-only setup steps, this guide is more easily used by suppliers.

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 and the Oracle 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 guides and implementation guides.

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.

"About" Document

For information about implementation and user documentation, instructions for applying patches, new and changed setup steps, and descriptions of software updates, refer to the "About" document for your product. "About" documents are available on Oracle*MetaLink* for most products starting with Release 11.5.8.

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 and describes the Oracle Application Object Library components that are needed to implement the Oracle Applications user interface described in the Oracle Applications User Interface Standards for Forms-Based Products. This manual also provides information to help you build your custom Oracle Forms Developer forms so that the forms 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

Oracle Applications Product Update Notes

Use this guide as a reference for upgrading an installation of Oracle Applications. It provides a history of the changes to individual Oracle Applications products between Release 11.0 and Release 11*i*. It includes new features, enhancements, and changes made to database objects, profile options, and seed data for this interval.

Oracle Workflow Administrator's Guide

This guide explains how to complete the setup steps necessary for any Oracle Applications product that includes workflow-enabled processes, as well as how to monitor the progress of runtime workflow processes.

Oracle Workflow Developer's Guide

This guide explains how to define new workflow business processes and customize existing Oracle Applications-embedded workflow processes. It also describes how to define and customize business events and event subscriptions.

Oracle Workflow User's Guide

This guide describes how Oracle Applications users can view and respond to workflow notifications and monitor the progress of their workflow processes.

Oracle Workflow API Reference

This guide describes the APIs provided for developers and administrators to access Oracle Workflow.

Oracle Applications Flexfields Guide

This guide provides flexfields planning, setup and reference information for the Oracle Procurement implementation team, as well as for users responsible for the ongoing maintenance of Oracle Applications product data. This guide 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 Oracle*Metalink*

Oracle Applications Message Manual

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

Training and Support

Training

Oracle offers a complete set of training courses to help you and your staff master Oracle Procurement and reach full productivity quickly. These courses are organized into functional learning paths, so you take only those courses appropriate to your job or area of responsibility.

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 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 Procurement 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 Oracle server, and your hardware and software environment.

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 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.

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l Overview

This chapter covers the following topics:

- Benefits of Punchout and Transparent Punchout on page 1-1
- Choosing Between Punchout and Transparent Punchout on page 1-3
- Punchout on page 1-4
- Transparent Punchout on page 1-13
- Contract Numbers on page 1-16
- Configurations and Re-Punchout on page 1-20
- Reordering, Copied Requisitions, Favorites Lists, and Requisition Templates on page 1-29

Note: This guide covers Oracle iProcurement Release 11*i*10 (Family Pack J) and Oracle Exchange Release 6.2.5.

Benefits of Punchout and Transparent Punchout

The ability to access remote catalogs using punchout or transparent punchout benefits both the supplier and the buyer. It enables suppliers to maintain and host their own catalog information, while buyers can search for items from within their own Oracle iProcurement or Oracle Exchange system. The burden of maintaining the hosted catalog is removed from the buying organization, reducing catalog maintenance and data storage costs. In addition to the local catalog, both punchout and transparent punchout provide a single point of entry to catalog content regardless of where the content resides. Remote catalogs are particularly useful for products that are configurable or include highly variable or dynamic items and pricing. These products are difficult and costly to maintain in a buyer-hosted (local) catalog. Catalogs with these kinds of items are better maintained by the supplier, to ensure the latest content and pricing are available and to eliminate inefficiencies (such as purchase order revisions to correct pricing).

Remote catalogs may not suit every commodity type or supplier, however. The following table shows the kinds of catalog items remote catalogs are ideal for, as compared to local catalog items:

Model	Commodity (Catalog Items)
Local Catalog	Best suited for direct material (such as mass-produced mechanical parts); products with prenegotiated or stable prices; items for which blanket purchase agreements and quotations already exist in Oracle Purchasing; or indirect material that you want to manage locally.
Punchout or Transparent Punchout to Oracle Exchange	Best suited for indirect material (such as office supplies); standard maintenance, repair, and operation (MRO) items items; and products with stable pricing. (You can also link contract purchase agreements in Oracle Purchasing to items on Oracle Exchange.)
Punchout to Supplier	Best suited for products requiring a high degree of configuration (such as computer hardware or office furniture) and specialized services (such as printing or media services). For example, the supplier site may have special features unique to the industry that the punchout can use. (In an XML punchout, the supplier can also link its items to contract purchase agreements in Oracle Purchasing.)
Transparent Punchout to Supplier	Best suited for products with fluctuating prices, or extremely large or specialized catalogs, such as chemical supplies, that you want the supplier to manage. (The supplier can also link its items to contract purchase agreements in Oracle Purchasing.)

Table 1–1 Catalog Models

Note: A local catalog allows all searching methods: standard, expanded, and advanced searching; filtering and sorting search results; and browsing categories. A transparent punchout catalog allows standard searching and sorting by price. (A punchout catalog uses whatever search capabilities and tools the external site provides.)

Punchout supports both cXML and Oracle native XML standards, depending on the punchout model used. Transparent punchout supports Oracle native XML only. (The model names indicate whether the model supports XML, cXML, or both.)

Oracle native XML is XML that Oracle has adapted to today's business needs, as shown by the document type definitions (DTDs) and XML samples in this guide. For more information on cXML, see http://www.cxml.org.

Choosing Between Punchout and Transparent Punchout

Punchout and transparent punchout offer the same basic benefits—mainly, the benefit of the supplier maintaining its own item information, reducing maintenance costs for the buyer and supplier, and a single point of access to catalog content regardless of where it resides.

The main distinctions between punchout and transparent punchout are as follows:

- With transparent punchout, the requester does not visibly access the supplier site. Transparent punchout accesses the site in the background and returns the items directly to Oracle iProcurement, with no changes to the requester's user interface. Requesters perform no additional navigation to return to Oracle iProcurement.
- Whereas transparent punchout is ideally suited for products with fluctuating prices, punchout is ideally suited for configurable products. In addition, the supplier's site may have special features unique to the industry or to the buyer-supplier relationship that a punchout can take advantage of.

In a transparent punchout, the supplier sets up integration with its search engine to properly return search results to Oracle iProcurement. In a punchout, the supplier sets up integration to access its catalog and provide a mechanism for returning the requester to Oracle iProcurement. (If the supplier has already implemented a punchout, the supplier can leverage some of that setup when implementing a transparent punchout.)

Punchout

Punchout enables buyers to click a link that goes to a supplier's catalog, search for items on the supplier's site, and return those items directly to the buyer's shopping cart. If punching out from Oracle Exchange, buyers add the supplier's items to their shopping cart on Oracle Exchange. If punching out from Oracle iProcurement, requesters add the external items to their shopping cart in Oracle iProcurement.

Punchout offers seven models:

- Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)
- Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML)
- Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML)
- Model 3a: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML)
- Model 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (cXML)
- Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)
- Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)

Punchout Models and Comparisons

Oracle iProcurement and Oracle Exchange support various punchout models. It is important for buyers and suppliers to decide on the model they want to use before implementing the punchout.

The following table compares the punchout models:

Model	Buyer Benefits	Supplier Benefits
Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)	iProcurement requesters have access to all supplier catalogs defined on Exchange. They have a similar user interface	Suppliers load their catalog items once on Exchange and reach many iProcurement customers in addition to the buyers already registered on Exchange.
	experience as in iProcurement.	The Exchange catalog supports features such as buyer or group pricing (the ability to create prices visible only to a specified buyer or group of buyers), pricing approval by the buyer, price breaks, price effective dates, and automated catalog loading by the supplier.
Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML)	This model offers a unique, point-to-point solution between the buyer and supplier.	Supplier closely manages the content. Supplier can control access by allowing only certain buyers to access the site. (Any punchout changes such as the catalog URL's changing, however, must be communicated to all buyer organizations.)
		Suppliers already maintaining cXML catalogs can continue to use those.
Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML)	Buyers have access to a centralized collection of punchouts simply by registering with Exchange. Purchasing Managers on Exchange can control buyer access to specific punchouts using the Control Punchout Access page.	Suppliers only have to define their punchouts on Exchange once and reach multiple customers.
		Suppliers can control the visibility of their punchout definitions by publishing or unpublishing the punchout on Exchange.
		Instead of or in addition to creating a punchout link on Exchange, the supplier can also load catalog items directly to Exchange and take advantage of the special pricing features of Exchange. (See the benefits for Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML) above.)
		Suppliers already maintaining cXML catalogs can continue to use those.
Models 4 and 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML or cXML)	iProcurement requesters have access to a centralized collection of punchouts.	Suppliers only have to define their punchouts on Exchange once, rather than configuring punchout separately for each iProcurement customer.
	iProcurement administrator does not have to configure a punchout for each supplier, but can just download the supplier's punchout definition from Exchange.	Suppliers can control the visibility of their punchout definitions by publishing or unpublishing the punchout on Exchange.
		Suppliers already maintaining cXML catalogs can continue to use those.

 Table 1–2
 Punchout Model Benefits

An additional punchout option is the *double punchout*. A double punchout goes from Oracle iProcurement to Oracle Exchange, then from Oracle Exchange to the supplier. In a double punchout, the requester clicks a punchout link to Oracle Exchange and shops on Oracle Exchange; the Exchange itself contains punchout links to suppliers directly, and the requester can additionally click any of these. The details and setup for the double punchout are the same as those for Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML), plus Model 3a or 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML). The double punchout is sometimes used as a diagnostic tool for the via-Exchange punchouts, to see whether a particular problem is happening during the punchout *to* Oracle Exchange or *from* Oracle Exchange. The only difference between a double punchout and a via-Exchange punchout is that in a via-Exchange punchout, the via-Exchange is one (visible) step, and punching out from Oracle Exchange to a supplier's catalog is a second visible step.

Choosing Your Punchout

If you need more help choosing a punchout model, use the following diagram:

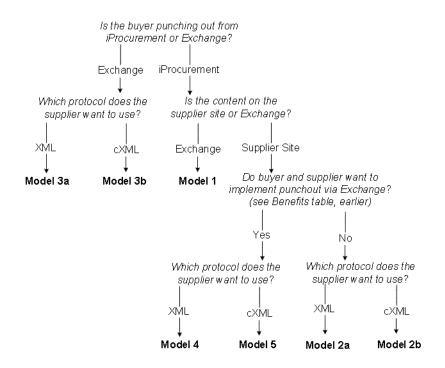


Figure 1–1 Punchout Model Decision Tree

After you have selected your model, see Chapter 2 for a setup checklist specific to that model.

Punchout Flow

The following illustration shows a punchout from Oracle iProcurement on the **Shop** home page:



The following illustration shows a punchout from Oracle iProcurement on the **Search Results Summary** page, when a punchout matches the search keywords entered for a store:

	€' iProcurement		Shoppin	<u>q Cart Home Loqout Preferences Help</u>
R (Shop Requisition:	Receiving Contractors
	ories Shopping Lists Non-Cata		Jest	
Search Office Su	pplies Go	Advanced Search		Shop Other Stores
Search Res	ults Summary from Re	gular Office Supplie	Results from local or transpare punchout catalog es: folder	ent Shopping Cart Your cart is empty.
		-	/iew all results from Regular Office Supplies	
(Hide Images)				Compare Items
	Standard Classification Folders, L	<u>egal, Blue</u>		No items selected.
			25-Point covers are made of a heavyweight ''' metal fasteners are on the 2, 17 pt. kraft	Catalog Language
	Category: File Folders	Supplier: Acme Supplies	Supplier Item: FDR-0008	Your current catalog language: American English
1.10	Manufacturer: National	Manufacturer Item:	Contract Number:	Change Catalog Language
	Supplies Price: 4.95 USD	Unit: Each		
	Quantity 1 Add to Cart		(Add to Favorites) (Add to Compare)	
	Hanging Partition Fastener Folder	s, Ruby Red		
		n strong metal fasteners. Tear-i	filing sections for documents and resistant Tyvek gussets allow for 2 1/4""	
	Category: File Folders Manufacturer: National Supplies	Supplier: Acme Supplies Manufacturer Item:	Supplier Item: FDR-0007 Contract Number:	Note: In an actual Search ← Results Summary page,
	Price: 5.99 USD	Unit: Each		the first three matching items would be displayed.
	Quantity 1 Add to Cart		(Add to Favorites) (Add to Compare)	items would be displayed.
Search Res (Hide Images)	sults Summary from Or	acle Exchange: fol	der Results from Exchange punct	
	<u>Oracle Exchange</u>			
Exchang	Visit exchange.oracle.com to	find all of your office supplies.		
Search Res	sults Summary from Ac	me Office: folder 🔺		
(Hide Images)	Acme Office Visit the Web site of Acme O services.	ffice to find office supplies and	punchout cata	nog

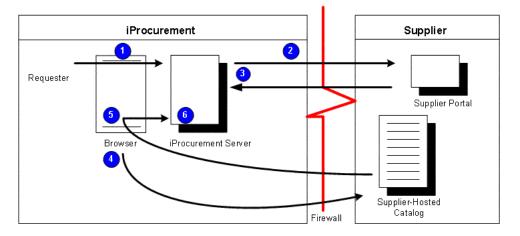
In Oracle Exchange, the punchout links to supplier sites display in the Shop Supplier Sites box on the **Shopping** home page. These links also appear in other areas of Oracle Exchange.

The following illustration shows a punchout from Oracle Exchange:

Exchange.Oracle.com	Home Log Off My Profile Shopping Cart Help
Catalog Favorites List	ng Sourcing Purchases Intelligence
Search	Shop Supplier Sites
To search for an item, enter as many words as you can that describe it. <u>Search Tips</u> Example: blue pen bic ballpoint is better than pen .	You can also buy some items directly from select Supplier stores.
Note: Click <u>here</u> to change your search options. Search Go Advanced Search	Office Products Systems Centers Inc more

The following illustration gives a basic overview of the punchout process, using a punchout from Oracle iProcurement to the supplier:

Figure 1–2 Example Punchout Flow from Oracle iProcurement to Supplier



For an illustration of a punchout using Oracle Exchange, see Appendix A.

At certain steps in the punchout process, the details differ by model, but the basic flow is the same:

1. The requester in Oracle iProcurement or buyer in Oracle Exchange clicks a punchout link to the external catalog site.

In Oracle iProcurement, punchout links are available from the following pages:

- **Shop** home page when the requester clicks a store whose only catalog is a punchout.
- **Shop Store** page when the requester clicks a store that contains a punchout catalog.
- **Search Results Summary** page when a punchout matches the search keywords.
- **2.** The *punchout from* application (Oracle iProcurement or Oracle Exchange) sends the login request to the catalog site.
- **3.** The *punchout to* application (Oracle Exchange or the supplier site) authenticates the requester or buyer and returns a login response.
- **4.** The *punchout from* application redirects the requester's or buyer's browser to the catalog site.
- **5.** The requester or buyer browses or searches for items on the external catalog site and completes shopping on the site.
- **6.** Via the requester's or buyer's browser, the *punchout to* application returns the shopping cart with the items to the *punchout from* application.

The requester or buyer completes the checkout process for the items in the shopping cart, and the *punchout from* application processes the order.

Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)

In this model, the supplier loads its catalog items directly to the Oracle Exchange catalog, the Oracle iProcurement administrator sets up Oracle iProcurement to use Oracle Exchange as the punchout hub, and requesters see a punchout link to Oracle Exchange displayed in their search results.

After clicking the punchout link to Oracle Exchange, the requester sees the Oracle Exchange **Shopping** home page.

For detailed descriptions of this model's flow, see Appendix A.

Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML)

In this model, the supplier hosts the catalog at its own site or Web store, the Oracle iProcurement administrator sets up Oracle iProcurement to use the supplier as a punchout site, and requesters see a punchout link to the supplier site displayed on the Oracle iProcurement home page.

For detailed descriptions of this model's flow, see Appendix A.

Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML)

In this model, the supplier hosts the catalog at its own site or Web store, and buyers registered on Oracle Exchange see a punchout link to the supplier site from the **Shopping** home page or **Search Results** page on Oracle Exchange. In addition to providing punchouts to Oracle Exchange registrants, suppliers often use this model to test a punchout to their site before buyers implement any of the other models.

For detailed descriptions of this model's flow, see Appendix A.

Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)

In this model, the supplier hosts the catalog at its own site or Web store, which the requester in Oracle iProcurement accesses (invisibly) via Oracle Exchange. Using Oracle Exchange for the punchout simplifies the initial setup process and the authentication and maintenance of the punchout. The supplier must set up a punchout from Oracle Exchange to its Web store. The Oracle iProcurement administrator, using the eContent Manager in Oracle iProcurement, must download the supplier's punchout definition from Oracle Exchange.

For detailed descriptions of this model's flow, see Appendix A.

Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)

In this model, the supplier hosts a cXML catalog at its own site or Web store, which the requester in Oracle iProcurement accesses (invisibly) via Oracle Exchange. Using Oracle Exchange for the punchout simplifies the initial setup process and the authentication and maintenance of the punchout. The supplier must set up a punchout from Oracle Exchange to its Web store. The Oracle iProcurement administrator, using the eContent Manager in Oracle iProcurement, must download the supplier's punchout definition from Oracle Exchange. For detailed descriptions of this model's flow, see Appendix A.

Transparent Punchout

A transparent punchout (also known as a distributed search) allows requesters to search for items on an external site without leaving Oracle iProcurement. Unlike punchout, requesters do not access the site directly. Instead, when the requester searches for items, the transparent punchout works in the background to access the external site and return the matching items directly to the **Search Results** page. Requesters do not necessarily know the items came from an external site. From the **Search Results** page, requesters add the items returned from the transparent punchout to their shopping cart just as they would any other item in the local catalog.

Transparent punchout offers two models:

- Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)
- Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)

Transparent Punchout Models and Comparisons

Oracle iProcurement supports two transparent punchout models. The following table compares the models:

Model	Buyer Benefits	Supplier Benefits
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Requesters have access to all supplier catalog items defined on Oracle Exchange.	Suppliers load their catalog items once on Oracle Exchange and reach many Oracle iProcurement customers in addition to the buyers already registered on Exchange.
		The Exchange catalog supports features such as buyer or group pricing (the ability to create prices visible only to a specified buyer or group of buyers), pricing approval by the buyer, price effective dates, and automated catalog loading by the supplier.
		Note: Transparent punchout does not honor price breaks that the supplier created on Oracle Exchange.
Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)	This model offers a unique, point-to-point solution between the buyer and supplier.	Supplier closely manages the content. Supplier can control access by allowing only certain buyers to access the site. (Any changes such as the site's URL's changing, however, must be communicated to all buyer organizations.)

Table 1–3 Transparent Punchout Model Benefits

Choosing Your Transparent Punchout

Whether to conduct a transparent punchout to Oracle Exchange or to the supplier depends on whether the supplier's catalog content exists on Oracle Exchange or its own site. For example, for more dynamic pricing and item information, the supplier may choose to host the content on its own site.

If the supplier chooses to host its content on Oracle Exchange, the supplier does not have to implement its own transparent punchout; Oracle Exchange has the transparent punchout capability built in. Oracle Exchange also provides buyer and group pricing, pricing approval by the buyer, and price effective dates. If the supplier's site does not offer these features, the buyer and supplier can decide to use a transparent punchout to Oracle Exchange.

Transparent Punchout Flow

The following diagram shows the basic flow of transparent punchout:

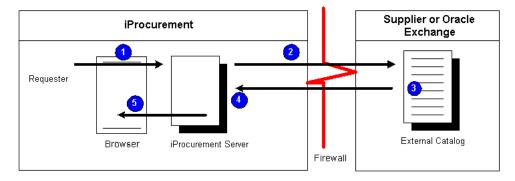


Figure 1–3 Models 1 and 2: Transparent Punchout to Oracle Exchange or Supplier (XML)

If the purchasing administrator has configured stores in the eContent Manager, the requester selects a store be fore searching.

		ng Cart Home Logout Preferences Help
Stores Categories Shopping Lists Non-Catalog Request Contra	Ctor Request	Receiving Contractors
Search Office Supplies	Go Advanced Search	
Welcome, Rachel Korte! iProcurement		Shopping Cart
Stores		Your cart is empty.
Industrial Supplies Hammers, nails, tapes	ts, Promotional Items Gifts for customers	Catalog Language Your current catalog language:
Wireless Phones, pagers & services Report of the services Report of	Legal Services Contracts, immigration	American English Change Catalog Language

The basic flow is as follows:

- 1. The requester in Oracle iProcurement conducts a search.
- **2.** If the store includes a transparent punchout catalog, Oracle iProcurement sends a search request XML document to the external site with which the transparent punchout has been set up.
- **3.** The external site authenticates the request, processes the request, and generates search results.

- **4.** The external site returns a search results XML document to Oracle iProcurement.
- **5.** Oracle iProcurement parses the search results XML document from the external site to display search results, as shown in the following illustration.

ORACL	🗧 iProcurement		Shoppin	<u>q Cart Home Loqout Preferences Help</u>
			Shop Requisitions	Receiving Contractors
Stores Catego	rries Shopping Lists Non	-Catalog Request Contractor Reque	est	
Search Office Su	pplies	Go Advanced Search		Shop Other Stores
				Shopping Cart
Search Res	ults Summary from	Regular Office Supplies	s: folder	Your cart is empty.
		Vi	ew all results from Regular Office Supplies	
(Hide Images)				Compare Items
	Standard Classification Fold			No items selected.
			5-Point covers are made of a heavyweight metal fasteners are on the 2, 17 pt. kraft	Catalog Language
	Category: File Folders	Supplier: Acme Supplies	Supplier Item: FDR-0008	Your current catalog language: American English
1	Manufacturer: National Supplies	Manufacturer Item:	Contract Number:	Change Catalog Language
	Price: 4.95 USD	Unit: Each		
	Quantity 1 Add to	Cart	(Add to Favorites) (Add to Compare)	
	Hanging Partition Fastener F	Folders, Ruby Red		
			iling sections for documents and sistant Tyvek gussets allow for 2 1/4""	
T TR	Category: File Folders	Supplier: Acme Supplies	Supplier Item: FDR-0007	
	Manufacturer: National Supplies	Manufacturer Item:	Contract Number:	
	Price: 5.99 USD	Unit: Each		
	Quantity 1 (Add to	Cart	Add to Favorites Add to Compare	

After viewing the transparent punchout results, the requester clicks Add to Cart for the desired items. The requester then completes the checkout process for the items in the shopping cart, and Oracle iProcurement processes the order.

For detailed descriptions of each step, see Appendix A.

Contract Numbers

Depending on the model, either the supplier or the buying company can specify a contract number along with the item information, as shown in the table below.

Model	Who Provides the Contract Number	XML Field
Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)	Buying company	<contractnumber> (in <buyercontract> field)</buyercontract></contractnumber>
Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML)	Supplier	<contractnumber> (in <buyercontract> field)</buyercontract></contractnumber>
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)	Supplier	<contractnumber> (in <buyercontract> field)</buyercontract></contractnumber>
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Buying company	<buyercontract></buyercontract>
Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)	Supplier	<buyercontract></buyercontract>

For instructions on how the buying company can specify a contract number in the two models above, see Associate Contract Numbers with Oracle Exchange Items on page 2-14.

Oracle iProcurement recognizes contract numbers only in an XML (not cXML) punchout.

If provided, the contract number travels with the requisition for the item. If the contract number matches an approved, effective contract purchase agreement in Oracle Purchasing, then Oracle Purchasing creates a purchase order against that contract, using either AutoCreate or the PO Create Documents workflow, depending on which method Oracle Purchasing was set up to use. (The PO Create Documents workflow creates a purchase order against the contract if the workflow attribute "Should contract be used to autocreate the Document?" is set to Yes. By default, the attribute is set to No. For instructions on modifying the attribute, see the *Oracle iProcurement Implementation Guide*.)

On the purchase order, the contract number displays in the Reference Documents tabbed region, in the Contract field for the purchase order line for the item. Oracle Purchasing adds the total amount of the purchase order line to the Released amount on the contract purchase agreement.

The contract must be a valid contract purchase agreement for the supplier. The effective, approved contract must not be cancelled, on hold, or finally closed. The

following validations are performed when the item referencing the contract purchase agreement is added to the shopping cart in Oracle iProcurement:

- Is there a matching contract agreement, with this supplier, that was created in (or owned by) the requester's operating unit? If so, use the contract.
- If no matching contract agreement is found that was created in the requester's operating unit, then is there one matching global contract agreement (with that supplier) that was created in (owned by) another operating unit? Was the contract also enabled in the requester's operating unit? If the answer to both of these is Yes, then use the contract.
- If a matching contract agreement is found, then Oracle Procurement uses the supplier site specified on the contract agreement, not the supplier site specified by the punchout. (In the case of a global agreement, the Purchasing Site that is associated with the requester's operating unit, as specified on the contract, is used.)

If no valid, matching contract is found using the above rules, or if more than one matching contract number is found, then the contract number is dropped from the shopping cart. Otherwise, the contract number stays with the requisition line and is referenced on the purchase order. (The contract purchase agreement number stays with the item even when the item is added to the favorites list; copied, changed, or resubmitted on a requisition; or saved in the shopping cart.)

Note: If requisitions are set up to use contract purchase agreements as source documents in the Document Types window in Oracle Purchasing, then a contract number does not have to be specified in the punchout. Instead, Oracle Procurement always tries to find a valid contract agreement for the specified supplier and site. If found, that contract agreement is referenced in the shopping cart for the requisition line. (If a contract number is explicitly given in the punchout or transparent punchout, however, then that contract is used.)

If a valid contract purchase agreement number is specified for a punchout item, the requester sees the contract number on the **Shopping Cart** page as shown below, if the Source Document Number field is set to be displayed in the cart (otherwise, it's a hidden field).

С		ocureme	nt						Shopp Shop V Requisition	ing Cart <u>Home Loqout</u> is Receiving	Preferences Help Contractors
Sho	opping Cart										
										<u></u>	ave Checkout
.ine	Item Description	Special Info	Unit	Quantity	Price		Supplier Config ID	Delete	Source Document Type	Source Document Number	Source Document Line
	RLK Red Pencil Config Number			3 9	9.99 USD	29.97		Î	Contract Purchase Agreement	10501	
					Total	29.97					
	need a purchase order r P Purchase Order numb				ting check	out.			Note: These of	columns are hidde	en by default.
letu	rn to Shopping									<u></u>	ave) Checkou
opvr	ight 2004 Oracle Corporation		<u>{equis</u> eservec		ng <u>Con</u> t	tractors S	hopping Ca	rt <u>Home</u>	I Logout Preferen	ices <u>Help</u>	Privacy Statem

If a valid contract purchase agreement number is specified for a transparent punchout item, the requester sees the contract number on the **Item Details** page as shown below.

If the Contract Number in the transparent punchout is valid as described above, then the number is carried into the cart, in the Source Document Number field. (Otherwise, it is dropped from the cart as described above.)

	urement		Shopping	a Cart Home Loqou	Preferences Help
		Shop	Requisitions	Receiving	Contractors
Stores Categories Sho	oping Lists Non-Catalog Request Contracto	r Request			
Search Office Supplies	Go Advanced Search				Shop Other Stores
Item Details				Shopping Car	t
				Your cart is emp	ty.
5	Super Roller II Rollerball Pen				
G	Quantity: 1 Add to Cart				
Supplier	CE Office Supply				
Supplier Site					
Supplier Item	CR008521				
Internal Item Number					
Manufacturer Item	CR08521				
Manufacturer	BIC				
Unit	EA				
Unit Price	400				
Currency	JPY				
Contract Number	852				
Long Description	Cross refills for Selectip Rollerball pens.				
Category Name	Cartridge Pen Ink Refills				
Ink Color	Blue				
Model	21				
Point Style	Fine				
	Add to Favorites				

Configurations and Re-Punchout

If the supplier site uses configuration numbers, then Oracle iProcurement and Oracle Purchasing carry that number onto the requisition and purchase order. In addition, if the supplier allows re-punchout, requesters or approvers in Oracle iProcurement can view the configuration details later, using a re-punchout.

Configurations

In the punchout shopping cart, the supplier can specify a configuration number, in addition to the item number. For example, personal computers are often configurable and come with a configuration number. Oracle iProcurement assumes

that configuration numbers are unique for each configuration, rather than a predefined configuration agreed upon by the buyer and supplier. (A predefined configuration should be treated as a standard item number.)

The <supplierReferenceNumber> field in the XML shopping cart and the <SupplierPartAuxiliaryID> field in a cXML shopping cart allow the supplier to identify the exact configuration that the requester selected. If the supplier specifies a configuration number, then this number travels with the requisition in Oracle iProcurement and with the purchase order in Oracle Purchasing. In both applications, the number is a hidden field called Supplier Config ID. (The number is also included in Oracle iSupplier Portal as a hidden field.)

Once the Supplier Config ID is returned to Oracle iProcurement, it cannot be edited, by neither buyer nor supplier, in neither Oracle iProcurement nor Oracle Purchasing. These applications do not check whether the Supplier Config ID is still valid during purchase order creation, but assume that it is. Only standard purchase orders support the Supplier Config ID field.

The configuration number is supported by the following models only:

- Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML)
- Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML)
- Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)
- Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)

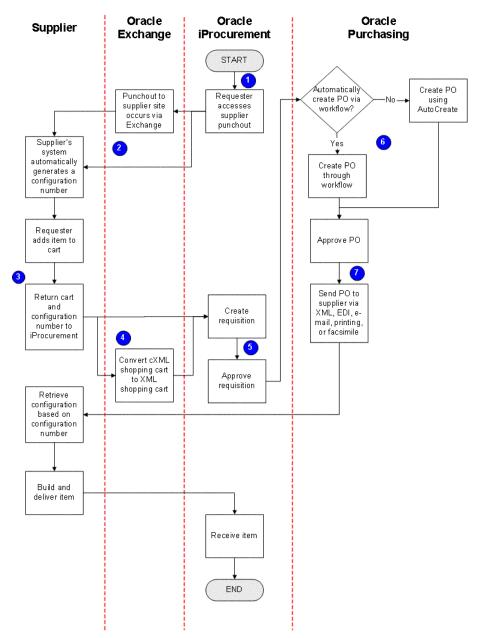


Figure 1–4 Configuration Flow

Figure 1–4 shows the following process for configuration numbers:

- 1. The requester accesses the punchout in Oracle iProcurement.
- **2.** For the models that use Oracle Exchange, the punchout goes through Oracle Exchange. Otherwise, the punchout goes directly to the supplier, using XML or cXML.
- **3.** The supplier site populates the shopping cart with the configuration number in the <SupplierPartAuxiliaryID> cXML field or the <supplierReferenceNumber> XML field.

For examples, see the XML shoppingCart on page B-23 or the cXML PunchOutOrderMessage on page B-40.

Note: Do not confuse the <SupplierPartAuxiliaryID> field in a cXML document with the Supplier Part Auxiliary ID descriptor in the local catalog in Oracle iProcurement. These fields are used for different purposes. The Supplier Part Auxiliary ID descriptor in the local catalog is used by the bulk loader to specify augmentative item information. For details, see the *Oracle iProcurement Implementation Guide* or the downloadable bulk load instructions in the eContent Manager.

- 4. For Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML), Oracle Exchange converts the cXML cart to an XML cart, transferring the <supplierPartAuxiliaryID> cXML value to the <supplierReferenceNumber> XML value.
- **5.** The requester completes the checkout process, after which the requisition is created and approved.
- **6.** Oracle Purchasing creates the purchase order (PO) automatically using Oracle Workflow, if the buyer's implementation uses workflow to automatically create purchase orders. Otherwise, the buyer uses the AutoCreate window in Oracle Purchasing to place the requisitioned item on a purchase order. The Supplier Config ID is a hidden field in the AutoCreate window and in the Purchase Order Lines Summary window.
- 7. In Oracle Purchasing, the purchase order is approved and sent to the supplier. The configuration number is included in XML, electronic data interchange (EDI), e-mail, print, and facsimile versions of the purchase order. (It is not "hidden" in these formats.)

The following illustrations show the configuration number (Supplier Config ID) hidden field in Oracle iProcurement:

	iProc	E' curen	ner	ıt						:	Shopping Car	Home) 🛞 Logout	Preference	s Help) Person	nalize Pa	ae Diagnos) <u>tics</u>
_		RTT PROPAGA	11.10	1.00.01								Sho	op R	equisition	s R	eceivin	g C	ontractors	
Sh	opping Cart										s link to a config ID						Save	Check	out
Line 1 2	Item Description 67 67	Special Info	<mark>Unit</mark> Each Each		6	Price 9.00 ANY 9.00 ANY	54.00	I ANY	Amount (USD) D 57.22 57.22)elete Î	Rate 1.0596363 1.0596363		Doc Nur 793	irce cument nber		urce cument		Source)ocument l	.ine
								Total	114.44										
Cop Abo	yright 2003 Oracle ut this Page	Requisitions Corporation	<u>s</u> <u>R</u> e All right	eceiving s reserved	Cont		Ŭ		t <u>Hom</u> e		Digout Pr	ß			nalize F)	Save Diagn) Checko ostics Privacy State	ment
Sh	opping Cart											Dire	Sp I	equipreron		cecer m	9	-one decors	
	opping ear	↓ T		- 2		umn dis ersonali											<u>S</u> ave	Check	out
Lin 1 2	ltem e Description 67 67	Supplier Config ID RLK12312		Special Info	Uni Eac Eac		- 6	Pric 9.00 AN 9.00 AN	Y 54.00 A Y 54.00 A	NY	Amount (USD) 57.22 57.22 114.44		Source Numbei	Document		ce ment Ty		ource ocument Li	ine
	need a purchas IP Purchase Or					r complet	ing ch	eckout.											

In Oracle iProcurement, the administrator can use the personalization feature to add the Supplier Config ID column to the **Shopping Cart** page, if the procurement department wants requesters to see this information. The administrator can also personalize the Supplier Config ID to display when viewing or editing the requisition, approving the requisition, and receiving the requisition, and when viewing the purchase order in Oracle iSupplier Portal.

Note: A personalization link displays only if the Oracle Applications Framework personalization profile option is set to display it. See the *Oracle Applications System Administrator's Guide* for more information.

The following illustration shows the configuration number (Supplier Config ID) field in the Purchase Orders window in Oracle Purchasing:

🕮 Purchase Ord	er Su	mmary to Purchas	e Orders	(Vision Operat	ions) - 10495 (202		xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
PO,	Rev	10495	0	Туре	Standard Purch	as Created	22-MAR-2004 15:0
Supp	olier	Advanced Netv	v01	Site	FRESNO	Contact	
Ship)-To	M1- Seattle		Bill-To	V1- New York C	ity Currency	USD
Bu	iyer	Korte, Rachel		Status	Approved	Total	29.97 []
Descript	tion						
P-C	ard						
Lines		Price Reference	e Refer	ence Docume	ents More	Agreement	Temporary Labor
Num		d-By S IAR-2004 00:01	Supplier It 456	em	Supplier Config II RLK12312301	D	Amount []
						000	D
ltem			RLK	Red Pencil C	Config Number		
Catalo	og	Curr	ency		Ter <u>m</u> s	Shipments	Approve

The Supplier Config ID field displays in the Purchase Orders window. It is a hidden field in the Purchase Order Lines Summary and AutoCreate Documents windows. (To view the Supplier Config ID field in these windows, the buyer chooses the

folder icon and selects the correct region, such as PO Lines, for which to display the hidden fields.) AutoCreate does not allow grouping two or more lines together if their Supplier Config ID numbers are different.

In Oracle iProcurement, requesters cannot copy a requisition line that contains a Supplier Config ID. If a requisition contains a line with a Supplier Config ID, copying the requisition will copy all lines except for the line with the Supplier Config ID. An online message will inform the requester that items with configuration numbers were not copied.

In Oracle Purchasing, buyers also cannot copy or duplicate a requisition or purchase order line that contains a Supplier Config ID. They also cannot use the Supplier Config ID to find or query an item.

Re-punchout

A re-punchout enables the requester or the requester's approver to revisit the configuration details of an item, after the initial punchout. For example, the requester can save the requisition and come back to it later. If re-punchout is allowed, then the item description is hyperlinked so that the user can click it, punch out to the supplier site (the punchout occurs in a new browser window), and view (not change) the configuration details of the item.

Note: Re-punchout is supported by Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML) only.

The following illustration shows how the Item description is hyperlinked when a re-punchout is allowed:

		iProcurement								ices <u>Help</u> Per	sonalize Page
	-:4: bl-	Alfanting I. Annuala					Shop	Requisitio	ns Receiv	ving Con	tractors
	ions : Requisi	tifications Approvals									
-	sition Deta										
requi	Sidon Dete						(Сору То Са	rt Cance	Requisition) (Change)
Dee		20									
Req	uisition 900	59								View Ann	oval History)
		RLK Re-Punchout Enabled Korte, Rachel	Status Note to	Approve	d					(view Appi	ovarmstory
	Creation Date	24-MAR-2004	Approver Note to Buyer								
	Urgent Requisition	No	Attachment	None							
		90 Fifth Avenue New York, Nev York, NY, 10022-3422	N								
	Additional	Information									
		Re	-Punchout is ena	bled							
Deta	ails										
	ndicates cano	elled line									
	Description	+	Need-By	Del	liver-To	Unit	Quantity	Price	Amount	Amount (USD)	Details Order
1	Contraction of the second second	tion - Mainstream Mobility (C640) :):00:00 ∨1- City		Each	CARD CARD CARD	899.00 GBP		1,348.50	
2	Delivery		26-MAR-2004 00):00:00 V1- City		Each	1	25.00 GBP	25.00 GBP	37.50	
									Total	1,386.00	

Re-punchout must be set up by the supplier. If the operationAllowed header attribute in the shopping cart cXML document that the supplier returns is set to "inspect," then a re-punchout is allowed (the item description is hyperlinked). If it is set to "create," then a re-punchout is not allowed. The supplier can also specify "edit," but Oracle iProcurement treats this like the "inspect" option. Oracle iProcurement does not support editing configuration details, only viewing them.

If enabled, re-punchout is available in Oracle iProcurement when viewing or adding to the shopping cart; when creating, viewing, changing, or approving the requisition; and when receiving against the requisition.

The re-punchout process flows as follows:

- **1.** A requester accesses a supplier site via punchout (Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML) only).
- 2. The requester selects an item and returns to Oracle iProcurement.

In the cXML shopping cart, PunchOutOrderMessage, the supplier returns a value of "inspect" or "edit" in the operationAllowed attribute (understanding that "edit" is treated the same as "inspect").

3. Later, the requester or approver wants to view the configuration details of the punchout item.

Since re-punchout is enabled, the item description is hyperlinked, and the requester or approver can click the link.

4. A new browser window opens, which accesses the supplier site using re-punchout.

During the re-punchout, Oracle iProcurement sends a cXML request, PunchOutSetupRequest. The request includes the following:

- The same user login information that is always contained in a PunchOutSetupRequest from this requester.
- An operation attribute with the value that the supplier specified (either "inspect" or "edit").
- The supplier item number in the <SupplierPartID> field.
- The configuration number, if one exists, in the <SupplierPartAuxiliaryID> field. (There does not have to be a configuration number.)
- 5. The requester or approver can view the configuration details.

Based on the login and item information, the supplier site displays the configuration details of the selected item.

Note: Even if the supplier allows the requester to change the configuration of the item on the supplier site, Oracle iProcurement does not return those changes. If the requester wants to make changes, the requester should delete the configured item from the shopping cart and access the punchout again via the **Shop** page.

6. When finished viewing the configuration details, the requester or approver closes the browser window and continues his or her task in Oracle iProcurement.

Suppliers should refer to the *cXML User's Guide* available at http://www.cxml.org/ for more details on the operationAllowed and operation attributes.

Re-punchout cannot be performed from within Oracle Purchasing, only in Oracle iProcurement.

Reordering, Copied Requisitions, Favorites Lists, and Requisition Templates

Oracle iProcurement preserves punchout and transparent punchout items on requisitions and saved carts, and lets requesters add these items to their personal favorites lists; however, Oracle iProcurement does not retrieve the latest information for these items. For example, if the supplier has since changed the price of the items, the new price is not reflected on the copied requisition.

Note: The Add to Favorites button displays in the shopping cart only if customized to display, using the personalization link. (This link displays only if the Oracle Applications Framework personalization profile option is set to display it. See the *Oracle Applications System Administrator's Guide* for more information.)

Requesters cannot add punchout items with a Supplier Config ID to their favorites list. (The Add to Favorites button is disabled for these items.)

For similar reasons, buyers should not place punchout or transparent punchout items on requisition templates (known as public lists). Although you cannot directly place punchout or transparent punchout items on requisition templates in Oracle Purchasing, you can create a requisition template by copying another requisition. If the copied requisition contains punchout or transparent punchout items, then these will be carried over to the requisition template; however, Oracle Procurement does not verify with the external site that the item is still a valid item at that site. Therefore, it is not recommended to place these items on requisition templates.

Oracle Exchange does not reorder punchout items. If a buyer clicks the Reorder button for an order on Oracle Exchange, all items are copied to the new order except the punchout items.

1-30 Oracle Procurement Buyer's Guide to Punchout and Transparent Punchout

Buyer Setup

This chapter contains the following topics:

- Implementation Considerations on page 2-1
- Checklists for Setting Up Punchout on page 2-2
- Checklists for Setting Up Transparent Punchout on page 2-6
- Setup Steps on page 2-7
- Updates on page 2-73

Note: Supplier setup is described in a separate guide solely for suppliers, *Oracle Procurement Supplier's Guide to Punchout and Transparent Punchout*.

Implementation Considerations

The main considerations for buyers implementing punchout or transparent punchout include the following:

- It is important to decide on the model that you and your supplier want to use. See Chapter 1.
- Depending on the model, some data mapping may be required. Decide which data mapping you and the supplier will need to do. See Understand Data Mapping on page 2-58.
- If the site that you are accessing uses secure socket layer (SSL) to authenticate the buyer, then you should review Prerequisites on page 2-8.

- The more transparent punchouts you place in a single store in Oracle iProcurement, the longer it may take to search for items in that store, depending on factors such as network and Internet traffic and the external site's performance. (A store is a grouping of catalogs that the catalog administrator can optionally create using the eContent Manager in Oracle iProcurement. See the online Help in the eContent Manager for more information on stores.)
- Consider security issues. Will the supplier implement user authentication to control who accesses its site or items? As the buyer, you can also use realms to control different requesters' access to the catalog. If you do, develop an access strategy up front. See Chapter 3.

Licensed Oracle iProcurement customers can use the Oracle Exchange site for their punchouts. See https://exchange.oracle.com/. Look for information about catalogs and Oracle iProcurement customers.

Only the models that use Oracle Exchange require the buyer and supplier to join the Exchange. If the buyer accesses the supplier directly, the Exchange is not required.

Checklists for Setting Up Punchout

In the following tables, Review Required means you should read the step to see if it applies to you.

Note: Some setup steps require basic knowledge of using windows in Oracle Applications, including how to query, add, or delete records. If you need help, see the *System Administrator's Guide* or click the Help (?) icon in any application window.

Use the following table as your checklist if you are setting up Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML):

Table 2–1Buyer Setup Steps for Model 1: Punchout from Oracle iProcurement toOracle Exchange (XML)

Step Number	Step	Required?
1	Prerequisites on page 2-8	Review Required
2	Register Buying Organization on Oracle Exchange on page 2-10	Required
3	Register Users on Oracle Exchange on page 2-12	Required

Step Number	Step	Required?
4	Associate Contract Numbers with Oracle Exchange Items on page 2-14	Optional
5	Set Up Data Mapping on Oracle Exchange on page 2-16	Optional
	See also Understand Data Mapping on page 2-58.	
6	Set Profile Options in Oracle iProcurement on page 2-22	Review Required
7	Define Oracle Exchange Punchout in Oracle iProcurement on page 2-25	Required
8	Add Catalog to Store on page 2-49	Required
9	Use Realms to Control Access on page 2-53	Optional
10	Set Up Supplier and Site Mapping on page 2-61	Optional
11	Set Up Data Mapping in Oracle e-Commerce Gateway on page 2-69	Required
	See also Understand Data Mapping on page 2-58.	

 Table 2–1
 Buyer Setup Steps for Model 1: Punchout from Oracle iProcurement to

 Oracle Exchange (XML)

Use the following table as your checklist if you are setting up Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML):

 Table 2–2
 Buyer Setup Steps for Models 2a and 2b: Punchout from Oracle

 iProcurement Directly to Supplier-Hosted Catalog (XML or cXML)

Step Number	Step	Required?
1	Prerequisites on page 2-8	Review Required
2	Set Profile Options in Oracle iProcurement on page 2-22	Review Required
3	Define Supplier Punchout in Oracle iProcurement on page 2-34	Required
4	Add Catalog to Store on page 2-49	Required
5	Use Realms to Control Access on page 2-53	Optional
6	Set Up Supplier and Site Mapping on page 2-61	Optional

Step Number	Step	Required?
7	Set Up Data Mapping in Oracle e-Commerce Gateway on page 2-69	Required
	See also Understand Data Mapping on page 2-58.	

 Table 2–2
 Buyer Setup Steps for Models 2a and 2b: Punchout from Oracle

 iProcurement Directly to Supplier-Hosted Catalog (XML or cXML)

Use the following table as your checklist if you are setting up Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML):

Table 2–3Buyer Setup Steps for Models 3a and 3b: Punchout from Oracle Exchangeto Supplier-Hosted Catalog (XML or cXML)

Step	Required?
Prerequisites on page 2-8	Review Required
Register Buying Organization on Oracle Exchange on page 2-10	Required
Register Users on Oracle Exchange on page 2-12	Required
Understand Data Mapping on page 2-58	Optional
Control Punchout Access on Oracle Exchange on page 2-20	Required
	Prerequisites on page 2-8 Register Buying Organization on Oracle Exchange on page 2-10 Register Users on Oracle Exchange on page 2-12 Understand Data Mapping on page 2-58

Use the following table as your checklist if you are setting up Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML):

Table 2–4Buyer Setup Steps for Model 4: Punchout from Oracle iProcurement toSupplier-Hosted Catalog via Oracle Exchange (XML)

Step Number	Step	Required?
1	Prerequisites on page 2-8	Review Required
2	Register Buying Organization on Oracle Exchange on page 2-10	Required
3	Register Users on Oracle Exchange on page 2-12	Required
4	Control Punchout Access on Oracle Exchange on page 2-20	Required

Step Number	Step	Required?
5	Set Profile Options in Oracle iProcurement on page 2-22	Review Required
6	Define Oracle Exchange Punchout in Oracle iProcurement on page 2-25	Required
7	Download Punchout Suppliers from Oracle Exchange on page 2-31	Required
8	Add Catalog to Store on page 2-49	Required
9	Use Realms to Control Access on page 2-53	Optional
10	Set Up Supplier and Site Mapping on page 2-61	Optional
11	Set Up Data Mapping in Oracle e-Commerce Gateway on page 2-69	Required
	See also Understand Data Mapping on page 2-58.	

 Table 2–4
 Buyer Setup Steps for Model 4: Punchout from Oracle iProcurement to

 Supplier-Hosted Catalog via Oracle Exchange (XML)

Use the following table as your checklist if you are setting up Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML):

Table 2–5Buyer Setup Steps for Model 5: Punchout from Oracle iProcurement toSupplier-Hosted Catalog via Oracle Exchange (cXML)

Step Number	Step	Required?
1	Prerequisites on page 2-8	Review Required
2	Register Buying Organization on Oracle Exchange on page 2-10	Required
3	Register Users on Oracle Exchange on page 2-12	Required
4	Set Up Data Mapping on Oracle Exchange on page 2-16	Optional
	See also Understand Data Mapping on page 2-58.	
5	Control Punchout Access on Oracle Exchange on page 2-20	Required
6	Set Profile Options in Oracle iProcurement on page 2-22	Review Required
7	Define Oracle Exchange Punchout in Oracle iProcurement on page 2-25	Required

Step Number	Step	Required?
8	Download Punchout Suppliers from Oracle Exchange on page 2-31	Required
9	Add Catalog to Store on page 2-49	Required
10	Use Realms to Control Access on page 2-53	Optional
11	Set Up Supplier and Site Mapping on page 2-61	Optional
12	Set Up Data Mapping in Oracle e-Commerce Gateway on page 2-69	Required
	See also Understand Data Mapping on page 2-58.	

 Table 2–5
 Buyer Setup Steps for Model 5: Punchout from Oracle iProcurement to

 Supplier-Hosted Catalog via Oracle Exchange (cXML)

Checklists for Setting Up Transparent Punchout

In the following tables, Review Required means you should read the step to see if it applies to you.

Use the following table as your checklist if you are setting up Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML):

Step Number	Step	Required?
1	Prerequisites on page 2-8	Review Required
2	Register Buying Organization on Oracle Exchange on page 2-10	Required
3	Register Users on Oracle Exchange on page 2-12	Required
4	Associate Contract Numbers with Oracle Exchange Items on page 2-14	Optional
5	Set Up Data Mapping on Oracle Exchange on page 2-16	Optional
	See also Understand Data Mapping on page 2-58.	
6	Set Profile Options in Oracle iProcurement on page 2-22	Review Required
7	Define Transparent Punchout in Oracle iProcurement on page 2-43	Required

 Table 2–6
 Buyer Setup Steps for Model 1: Transparent Punchout from Oracle

 iProcurement to Oracle Exchange (XML)

Step Number	Step	Required?
8	Add Catalog to Store on page 2-49	Required
9	Use Realms to Control Access on page 2-53	Optional
10	Set Up Supplier and Site Mapping on page 2-61	Optional
11	Set Up Data Mapping in Oracle e-Commerce Gateway on page 2-69	Required
	See also Understand Data Mapping on page 2-58.	

 Table 2–6
 Buyer Setup Steps for Model 1: Transparent Punchout from Oracle

 iProcurement to Oracle Exchange (XML)

Use the following table as your checklist if you are setting up Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML):

 Table 2–7
 Buyer Setup Steps for Model 2: Transparent Punchout from Oracle

 iProcurement to Supplier-Hosted Catalog (XML)

Step Number	Step	Required?
1	Prerequisites on page 2-8	Review Required
2	Set Profile Options in Oracle iProcurement on page 2-22	Review Required
3	Define Transparent Punchout in Oracle iProcurement on page 2-43	Required
4	Add Catalog to Store on page 2-49	Required
5	Use Realms to Control Access on page 2-53	Optional
6	Set Up Supplier and Site Mapping on page 2-61	Optional
7	Set Up Data Mapping in Oracle e-Commerce Gateway on page 2-69	Required
	See also Understand Data Mapping on page 2-58.	

Setup Steps

The following sections describe the buyer setup steps in detail. Refer to the tables in the previous section for the list and order of the setup steps, depending on the model.

Prerequisites

For all models, make sure of the following prerequisites:

- Make sure the supplier supports the punchout or transparent punchout.
- If the supplier's site is secure, verify your access to secure sites.

Make Sure Supplier Supports Punchout or Transparent Punchout

Make sure the supplier has set up access to its catalog using the instructions in the *Oracle Procurement Supplier's Guide to Punchout and Transparent Punchout*.

Verify Access to Secure Sites

Verify access to secure sites, if you are punching out to or via Oracle Exchange (which is a secure site) or to a secure supplier site, or if you are conducting a transparent punchout to Oracle Exchange or a secure supplier site. Contact your network administrator for more information on connecting to secure sites. See also Appendix C for more information on punching out to secure sites.

Certification Authorities List Accessing a secure site involves making sure the site is on the accessing application's certification authorities list:

- For Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML), the certification authority that Oracle Exchange uses must be on the ca-bundle.crt file in Oracle iProcurement.
- For Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML), the supplier's certification authority needs to be on the ca-bundle.crt file in Oracle iProcurement.
- For Models 4 and 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML or cXML), Oracle Exchange's certification authority needs to be on the ca-bundle.crt file in Oracle iProcurement.
- For Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML), the certification authority that Oracle Exchange uses must be on the ca-bundle.crt file in Oracle iProcurement.
- Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML), the supplier's certification authority needs to be on the ca-bundle.crt file in Oracle iProcurement.

Both ca-bundle.crt and pomdigcrt.txt come with various certification authorities already. If the supplier's certification authority is a common one, it may already be on the ca-bundle.crt and pomdigcrt.txt files.

Note: The POR : CA Certificate File Name profile option in Oracle iProcurement can be set to use some other certification authority file besides the default ca-bundle.crt file. (This profile option is described later in the setup.)

In Oracle iProcurement, the ca-bundle.crt file should be readable and accessible from the middle tier. If the Oracle iProcurement implementation has multiple Java Virtual Machines (JVMs), the ca-bundle.crt file should be accessible from all the JVMs.

Java Class Path Accessing a secure site from Oracle iProcurement also involves making sure the classpath in Oracle iProcurement contains the correct secure socket layer (SSL) library files. For all versions of Java Developer Kit (JDK), use the following SSL library files:

- wrapper.classpath=<your Internet Application Server (iAS) installation path>/iAS/jlib/jssl_1_1.jar. For example: /u06/app/oracle/devora/iAS/jlib/jssl_1_1.jar.
- wrapper.classpath=<your iAS installation path>/iAS/jlib/javax-ssl-1_1.jar.
 For example: /u06/app/oracle/devora/iAS/jlib/javax-ssl-1_1.jar.

If you are using an Advanced IBM Unix (AIX) system, rename the file ibmjsse.jar so that it does not end in a .jar extension. Otherwise, Oracle iProcurement tries to use ibmjsse.jar instead of one of the .jar files above, causing the punchout or transparent punchout to fail.

For example, change the file name from the following:

<your JDK directory>/jre/lib/ext/ibmjsse.jar

to the following:

<your JDK directory>/jre/lib/ext/ibmjsse.old

Library Path Accessing a secure site from Oracle iProcurement also requires verifying the library path. Verify that the following environment variables contain an absolute path directory name (not just the file name) for libnjssl8.so (for Unix-based systems) or libnjss8.dll (for Microsoft-based systems):

- LD_LIBRARY_PATH (used by Sun Unix systems)
- SHLIB_PATH (used by HP Unix systems)

- LIBPATH (used by AIX-based systems)
- PATH (used by Microsoft-based systems)

The library path directory name is <your Internet Application Server (iAS) installation path>/iAS/lib.

Register Buying Organization on Oracle Exchange

Perform this step for the following models:

Model	Required?
Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)	Required
Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML)	Required
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)	Required
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)	Required
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Required

To enable buyers to access sites in any of the above models, the buying company must exist as a registered company on Oracle Exchange. If your company is already registered with the Exchange, no additional or special type of registration is necessary.

If you are implementing Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML) or Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML), and you have a multiple organizations setup in Oracle iProcurement that you want to mimic on Oracle Exchange (for example, you want the operating unit in Germany to be able to access only items supplied by Supplier A on Oracle Exchange, and the US operating unit to access only items supplied by Supplier B), see Multiple Organization Punchout or Transparent Punchout with Oracle Exchange on page 3-3.

To register with Oracle Exchange:

1. Access the Exchange with which you wish to participate.

Oracle Exchange exists at https://exchange.oracle.com/. Oracle Exchange may also exist as a branded Exchange at other sites.

- **2.** Browse the site to see if there are any special requirements or other information for punchout or transparent punchout buyers before registering.
- 3. Follow the guidance on the Exchange Home page to register.

You can register as an independent entity or as an affiliate.

To make sure you are assigned the proper system tasks:

System tasks are used by Oracle Exchange to control which pages and links registrants have access to. Once the Exchange Operator approves your registration, you should check that you are assigned system tasks that enable you to administer and set up punchout or transparent punchout.

For instructions, see the *Company Administration Guide* on Oracle Exchange. To access the guide:

- Make sure you are logged in as the Company Administrator.
- Click the "Company Admin" link on the Home page.
- Click the "Download Company Administration Guide" link.

You should be assigned the following system tasks:

- Manage Punchout Access—typically contained in the Purchasing Manager job function, unless the Exchange Operator modified this job function. This system task enables you to set up and manage punchouts and transparent punchouts on Oracle Exchange.
- Punch Out to Supplier Sites—typically contained in Buyer job functions, unless the Exchange Operator modified them. This system task enables buyers to perform a punchout from Oracle Exchange.
- Create Add-to-Cart Order—typically contained in Buyer job functions, unless the Exchange Operator modified them. This system task enables buyers to shop on Oracle Exchange during the punchout.
- View All Items, View Items with Preferred Pricing, or View Items with Buyer-Restricted Pricing—typically contained in Buyer job functions, unless the Exchange Operator modified them. These system tasks enable buyers to search for items on Oracle Exchange.
- Review and Approve Price Changes—typically contained in the Purchasing Manager job function unless the Exchange Operator modified this job function.

This system task allows you to view and approve supplier price lists, which contain prices created specifically for your company. You should be assigned this system task for the following models:

- Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)
- Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)

Note: By default, suppliers' prices require your approval before the items are available on Oracle Exchange. When implementing a punchout or transparent punchout to Oracle Exchange, make sure to approve the prices to make the items available. (Alternatively, you can lift the approval requirement.) See the Purchasing Manager online Help on Oracle Exchange for more information.

Register Users on Oracle Exchange

Perform this step for the following models:

Model	Required?
Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)	Required
Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML)	Required
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)	Required
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)	Required
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Required

Once the Exchange Operator approves your company's registration, create a proxy user on Oracle Exchange for your company. The proxy user is required for punching out from Oracle iProcurement to or via Oracle Exchange, or for conducting a transparent punchout to Oracle Exchange. (In Oracle iProcurement, you will need to use this proxy user information in setup described later in this chapter.) If you are punching out from Oracle Exchange directly, your buyers must also be registered users on the Exchange.

Registering users consists of two steps:

1. Register users on Oracle Exchange.

If you are accessing Oracle Exchange from Oracle iProcurement, the Oracle iProcurement administrator should register proxy users. If you are punching out from Oracle Exchange directly, you as the Company Administrator may ask your buyers to register themselves.

2. Approve users on Oracle Exchange.

The Company Administrator (typically the person who registered the buying company in the previous step) must approve the users.

To register users on Oracle Exchange:

1. Follow the guidance on the Exchange **Home** page for registering as a user of your company.

For a proxy user, you may want to specify a name such as iProcurement User, Proxy User, or some variation. You may want to provide your own e-mail address for the proxy user. (Any notifications Oracle Exchange sends to the user, including notification of registration approval, are sent to this e-mail address.)

Remember the user name and password.

2. Create as many users as you need.

Typically you need only yourself (which you already registered when you registered your company above) and one other proxy user; however, if you want different Oracle iProcurement requesters to have different privileges on Oracle Exchange by assigning them different job functions or if you want to use realms, you could create more than one proxy user. (See Use Realms to Control Access on page 2-53.)

To approve users on Oracle Exchange:

You must approve the newly registered users. For instructions, see the *Company Administration Guide* on Oracle Exchange. To access the guide:

- Make sure you are logged in as the Company Administrator.
- Click the "Company Admin" link on the Home page.
- Click the "Download Company Administration Guide" link.

During approval, make sure you assign a job function (or job functions) to the user that contains the relevant system tasks. These system tasks were described in the previous step:

- Punch Out to Supplier Sites (used by punchout)
- Create Add-to-Cart Order (used by punchout)
- View All Items, View Items with Preferred Pricing, or View Items with Buyer-Restricted Pricing (used by punchout and transparent punchout)
- Review and Approve Price Changes (used by punchout and transparent punchout for users who will perform the Purchasing Manager function on Oracle Exchange)

The prices and items that users in your company see are based on the job functions they are assigned. For example, a user assigned a job function for viewing buyer-restricted prices only sees prices that a supplier created for your company on Oracle Exchange.

If you are implementing transparent punchout: The system task View Items with Preferred Pricing provides the user the ability to view both buyer-specific and Exchange-wide (list) prices. On Oracle Exchange, the buyer-specific price is marked as the "negotiated" price. This distinction is not returned to Oracle iProcurement in a transparent punchout. Therefore, the requester may see the same item in the search results with different prices. To avoid this situation, it is recommended that you assign the job junction that contains the View Items with Buyer-Restricted Pricing system task so that only buyer-specific prices are returned.

If you cannot find job functions with the system tasks that you need, contact the Exchange Operator.

Note: Any job functions assigned to a proxy user are available to all Oracle iProcurement requesters who conduct a punchout or transparent punchout from Oracle iProcurement using that proxy user.

Associate Contract Numbers with Oracle Exchange Items

 Model
 Required?

 Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)
 Optional

Perform this step for the following models:

Model	Required?
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Optional

Perform this step if you want to associate contract purchase agreements in Oracle Purchasing with supplier's items in Oracle Exchange. If a supplier on Oracle Exchange has created price lists, which contain prices created specifically for your company, you can view and approve those price lists on Oracle Exchange. While viewing or approving the price lists, you can also associate a contract purchase agreement in Oracle Purchasing with the items on the price list.

Online Help: For more information on viewing and approving price lists on Oracle Exchange, click the Help icon on Oracle Exchange: Buying and Selling > Purchasing Management > Managing Price Lists.

For a description of how the contract number gets carried from the item, to Oracle iProcurement, and onto the purchase order, see Contract Numbers on page 1-16.

To associate a contract number with Oracle Exchange items on a price list:

- **1.** Log on to Exchange using a logon that is assigned the Review and Approve Price Changes system task.
- 2. On the Home page, click the "Buying" link.
- **3.** Click the Purchases tab, then the "View or Edit Price Lists" link.

You can also enter a contract number while approving price lists, when you click the "Approve Price Changes" link.

- 4. Select the price list.
- **5.** On the **Price List Items** page, click "Edit" next to the Contract Number field. (A contract number field does not display for trading group price lists.)
- 6. Enter the contract number.

This contract number applies to all items on the price list. You can also change or delete the number. No change a supplier makes to the price list affects the contract number. The supplier does not see the contract number.

7. Click Apply.

Set Up Data Mapping on Oracle Exchange

Perform this step for the following models:

Model	Required?
Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)	Optional
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)	Optional
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Optional

Use this step to map the codes that are used in Oracle Exchange to the codes that you use, if they are different. Data mapping allows Oracle Exchange to recognize codes that are passed to it by the supplier or to send codes to the buyer that the buyer's system recognizes.

You can use Oracle Exchange to map the following attributes:

- UOM
- Currency
- Supplier (known as the trading partner on Oracle Exchange). See Set Up Supplier and Site Mapping on page 2-61.

You can also choose how Oracle Exchange sends category information to you by selecting category mapping preferences.

For an overview of data mapping, see Understand Data Mapping on page 2-58.

Note: For a punchout or transparent punchout from Oracle iProcurement, you must still map the Oracle Exchange values to the values used by Oracle iProcurement even if you perform mapping on Oracle Exchange. Oracle Exchange mapping determines what values Oracle Exchange sends to Oracle iProcurement. Oracle iProcurement still needs to map those values to internal values. See Set Up Data Mapping in Oracle e-Commerce Gateway on page 2-69.

For instructions on setting up data mapping on Oracle Exchange, see the *Company Administration Guide* on Oracle Exchange. To access the guide:

- Make sure you are logged in as the Company Administrator.
- Click the "Company Admin" link on the **Home** page.
- Click the "Download Company Administration Guide" link.

Map Currency and UOM Codes

If you perform no mapping on Oracle Exchange, the currency or UOM value is passed as is from Oracle Exchange to the buyer's system.

If you perform mapping on Oracle Exchange, enter the Exchange to My Company field on the **Data Mapping** page on Oracle Exchange:

Description	Exchange Value	My Company to Exchange	Exchange to My Company
Description of the code	The value used internally by Exchange.	For punchout or transparent punchout, you can leave this value as is.	The value you want Exchange to pass to your system in place of Exchange's value.

For example, your company may use CSE as the UOM code for *case* while Oracle Exchange uses CS. In this case, you would enter CSE in the Exchange to My Company field.

Choose Category Mapping Preferences

Use this step to select what value Oracle Exchange returns to Oracle iProcurement to identify a category. The value you choose is the one that Oracle Exchange returns to Oracle iProcurement; it is this value upon which Oracle iProcurement performs category mapping.

A category on Oracle Exchange is defined by its name, key, or description. For example, to create a category, the Exchange Operator could use the United Nations Standard Product and Service Code (UNSPSC) name as the category name, SQID number as the category key, and UNSPSC code as the category description, as follows:

- Category Name: Calculators
- Category Key: 004404
- Category Description: 44101801

If you choose the Category Description in the example above, Oracle Exchange populates 44101801 in the <categoryCode> field in the punchout shopping cart document or the <CategoryCode> field in the transparent punchout response document. Oracle iProcurement then maps 44101801 to a category name in Oracle Applications.

You may need to contact the Exchange Operator to find out category names, keys, and descriptions. (The Contact Us link at the bottom of any page, or some other link the Operator provides, may provide contact information for the Operator.)

Note: If you choose name or description, the value is returned to Oracle iProcurement in the base language of Oracle Exchange. (When Oracle Exchange is installed, it is installed in a primary, also known as the base, language.) The category key, however, is the same in all languages. Since the category key is independent of language, choosing the category key is recommended to simplify mapping.

For more information on UNSPSC codes, see http://www.eccma.org/unspsc/.

To select the category identifier:

- 1. Log on to Exchange using the login user name and password you used while registering your buying organization.
- **2.** Access the Buying application (on the **Home** page, click the "Buying" link).
- **3.** Click the Purchases tab.
- **4.** On the **Purchases** home page, click the "Punchout and Transparent Punchout Preferences" link.
- **5.** On the **Punchout and Transparent Punchout** page, specify a category identification of name, key, or description.

	Welcome	Shopping	Negotiations	Purchases	Intelligence
Purchases > Punchout and Transparent Punchout Preferences					

Punchout and Transparent Punchout

Select your preferences below and press the Apply Changes button when you are done.

Trading Partner Identification

You can configure your own hierarchy to determine what value is sent back to Oracle iProcurement to identify the supplier in the shopping cart XML. Use this hierarchy if your company is performing a punchout or transparent punchout from iProcurement to Oracle Exchange, or a punchout from iProcurement to a cXML supplier via Oracle Exchange. In order, Oracle Exchange sends one of the following values, whichever is available first:

- 1. Supplier DUNS Number value entered in the supplier's company profile.
- 2. Mapped Trading Partner ID value entered in the field "Oracle Exchange to My Company" in the Trading Partner Mapping table.
- 3. Trading Partner ID value entered in the supplier company's profile.

To choose a different order, enter your selection below, use each value once and only once.

1.	Supplier DUNS	•
2.	Mapped Trading Partner ID	¥
З.	Trading Partner ID	•

Category Identification

If your company is performing a punchout or transparent punchout from Oracle iProcurement to Oracle Exchange, you can select which value is returned to iProcurement to identify the item category. iProcurement performs category mapping on the identifier you select below. Contact the System Operator to find out what each identifier contains.

- Category Name
- C Category Key
- C Category Description

(Clear Changes) (Apply Change	s
-------------------------------	---

The Trading Partner Identification section is described in Set Up Supplier and Site Mapping on page 2-61.

6. Click Apply Changes.

Control Punchout Access on Oracle Exchange

Perform this step for the following models:

Model	Required?	
Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML)		
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)		
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)		

Many suppliers can publish punchout definitions on Oracle Exchange. Use this step to control which punchout supplier catalogs to which you want to give your buyers access. This step hides or displays the punchout catalog for all registered Oracle Exchange users in your company.

Note: Even if you are punching out via Oracle Exchange, you must perform this step to display the punchouts in Oracle iProcurement. Requesters do not have access to punchouts on or via Oracle Exchange until you give them access as described in this step.

Prerequisite

You need to be assigned the Manage Punchout Access system task to perform this step. See the information about system tasks in Register Buying Organization on Oracle Exchange on page 2-10.

To control punchout access to supplier catalogs:

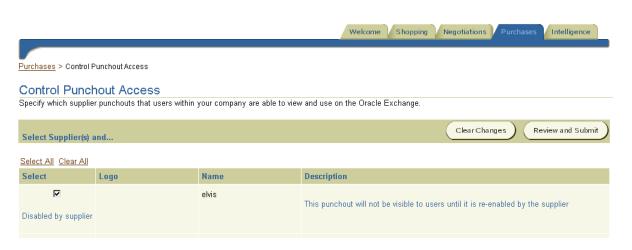
- **1.** Log on to Exchange using a logon that is assigned the Manage Punchout Access system task.
- 2. On the Home page, click the "Buying" link.
- 3. Click the Purchases tab, then the "Control Punchout Access" link.
- **4.** On the **Control Punchout Access** page, select the suppliers to whom you will give your buyers access.

			Welcome Shopping Negotiations Purchases Intelligence
Purchases > Control F			exchange.oracle.com
		your company are able to view	v and use on the Oracle Exchange.
Select Supplier(s) a	and		Clear Changes Review and Submit
Select All Clear All			
Select	Logo	Name	Description
		Catálogo IPC	Link para Catálogo Externo
	\sim	FTZone	FTZone, A Service of PMInc.
	jæ,	F Ltd	Ferry trips.
		AUTSeller Company 1178	

- 5. Click Review and Submit.
- 6. On the **Review Selected Suppliers** page, click Submit.

About Disabled Punchouts

A supplier can use Oracle Exchange to disable an Oracle Exchange punchout, preventing the punchout from being accessed by anyone on Oracle Exchange. If a supplier disables a punchout *that you had previously selected* on the **Control Punchout Access** page, the punchout continues to appear on the **Control Punchout Access** page, but it will be identified as having been disabled by the supplier as shown below.



Once you deselect the disabled punchout links on the **Control Punchout Access** page and save the change, the links are not available for reselection until the supplier re-enables the punchout.

Set Profile Options in Oracle iProcurement

Perform this step for the following models:

Model	Required?
Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)	Review Required
Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML)	Review Required
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)	Review Required
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)	Review Required
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Review Required
Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)	Review Required

The system administrator should set the following profile options by logging into Oracle Applications with the System Administrator responsibility.

For help and instructions on setting profile options, see the *Oracle Applications System Administrator's Guide* or click the Help (?) icon after logging on to Oracle Applications.

Depending on your network setup, you may need to set one or more of the profile options listed below. Set these profile options at the site level.

Note: Rapid Install sets the following profile options automatically:

- POR : Proxy Server Name was set to the Web host and domain name you entered in the Rapid Install configuration parameters (<your Web host>.<your domain name>).
- POR : Proxy Server Port was set to 80.
- POR : CA Certificate File Name was set to the default value as described below.

POR : Proxy Server Name

Enter the proxy server (Web server) name if your Oracle iProcurement implementation has a proxy setup. The proxy server name is typically the same as the proxy server that is set up in people's browsers in your company—for example, www-proxy.company.com.

POR : Proxy Server Port

Enter the proxy server port on which the proxy server listens, if your Oracle iProcurement implementation has a proxy setup. The port is typically the same as the port that is set up in people's browsers in your company—for example, 80.

Note: If you are accessing a punchout or transparent punchout catalog outside the firewall (usually you would be) and the firewall does not allow outgoing traffic without a proxy server, then you use proxy servers and you must enter your proxy information in the proxy profile options.

Any time you change the proxy profile options, you must restart the middle-tier server for the change to take effect.

POR : CA Certificate File Name

If you are accessing a secure site (including punching out via a secure site), enter the absolute file path of the certificates file that stores the certificates' names that your company will accept. The file should be readable and accessible from the middle tier. If the Oracle iProcurement implementation has multiple JVMs, the file should be accessible from all the JVMs. If you want to use the default ca-bundle.crt certificates file, which already includes certificates from various signing authorities, the default absolute path name is <root directory where application server is installed>/Apache/conf/ssl.crt/ca-bundle.crt.

POR: Transparent Punchout Timeout Limit

Set this site-level profile option if you are setting up transparent punchout. Enter the number of time, in seconds, after which you want transparent punchout catalogs to time out if the search takes longer than this time to complete. For example, if you enter 30 and a transparent punchout catalog takes longer than 30 seconds to return results, Oracle iProcurement displays a message after 30 seconds that the Web site is not responding.

By default, if this profile option is left blank, the system assumes a timeout of 60 seconds.

POR: Default Currency Conversion Rate Type

Every organization that sets up Oracle iProcurement has a functional currency associated with it. For example, an item obtained through a punchout or transparent punchout has a price of 400 JPY. When converted to the requester's organization's functional currency, the price is 3.30 USD. The functional currency price is calculated because a currency conversion rate exists in Oracle Applications that converts 400 JPY to 3.30 USD. The conversion is done when the items are added to the requester's cart.

Oracle iProcurement uses the default currency conversion rate type in the POR: Default Currency Conversion Rate Type profile option to determine the conversion rate for punchout or transparent punchout items. Punchout and transparent punchout require the following:

- This profile option must be set to Corporate or Spot (not User).
- The rate type selected for this profile option needs to include a currency conversion rate that will convert the foreign currency price used for the punchout or transparent punchout item to the functional currency price.

If the above conditions are not met, the requester will not be able to add the foreign currency priced item to the shopping cart. (The requester will get an error message after clicking Proceed to Checkout that no exchange rate exists between the foreign currency and the base, or functional, currency.) If the profile option is set to User, Oracle iProcurement cannot add the item to the cart because punchout and transparent punchout items cannot be associated with a specific (User) rate or rate type. Therefore, if the profile option is set to User, punchout or transparent punchout items in a foreign currency will always fail to be added to the shopping cart.

Define Oracle Exchange Punchout in Oracle iProcurement

Perform this step for the following models:

Model	Required?
Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)	Required
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)	Required
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)	Required

In this step, the Oracle iProcurement administrator creates a punchout link to Oracle Exchange, also known as the supplier *hub*. After completing this step, requesters will see a link to Oracle Exchange in Oracle iProcurement.

This step is also required before you can download punchout suppliers from Oracle Exchange in Download Punchout Suppliers from Oracle Exchange on page 2-31.

Note: The setup in this step applies to all operating units.

To define the Oracle Exchange punchout:

- 1. Log on to Oracle iProcurement using the Catalog Administration responsibility.
- 2. Click the "eContent Manager" link.
- 3. Expand "Manage Content," then click "Catalogs."
- 4. On the Manage Catalogs page, click Create.

- **5.** On the **Create Catalog** page, select the "Punchout catalog" option and click Continue.
- 6. On the Create External Catalog page:
 - Select a Source of Exchange.
 - Select an Access Method of Direct Punchout (Oracle Native XML).



7. Click Continue.

ORACLE		Home Logou	<u>it Preferences Help</u>
 ▶Load Data and Schema ♥ Manage Content ■ Catalogs ■ Non-Catalog Request Templates ■ Stores ● Download From Exchange ● Online Schema Maintenance 	Create Exchange Punchout Catalog Enter catalog information using the fields below and press the Submit button when you a * Indicates required field Source Exchange Access Method Direct punchout (Oracle native XML) Buyer Company Identification Enter information about your company. The supplier may use this information for aut * Company Name Oracle Corp. Company ID Oracle Punchout Identification Enter information to identify the punchout. The fields in this section are language-specifields in a different installed language. * Catalog Name Exchange Supplies Displayed to IProcument users.	nentication and validation purposes.	
	Description Order all office supplies here Keywords paper pen desk drawer cabinet calendar scissors Separate keywords with spaces. Mapping Enter mapping information below. * Key 1 OracleExchange		
	Punchout Definition Enter information to define the punchout. * Punchout URL https://exchange.oracle.cc For example, http://www.suppliercompany.com/ReceiveRequest.jsp. Image http://www.abc.com/abc.g		
	Image URL such as http://www.abc.com/abc.gif, or image file name s Voiser Name iprequester Proxy user name and password on Exchange. Password	uch as abc gif.	
	 ★ Retype Password ➡ Prevent changes to items returned from punchout site ➡ Extend user's idle session timeout during punchout ➡ All prices are negotiated. 	ित्	ancel) (Submit)
	Home Logout Preferences Help		

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8. On the **Create Exchange Punchout Catalog** page, fill in the following information.

Privacy Statement

Field Name	Required?	Description
Company Name	Yes	Enter your company name if you will be identifying yourself by your company name.
		The name you enter is sent to the Exchange in the loginRequest XML document, in the <companyname> field.</companyname>
Company ID	No	Enter a unique identifier (ID) for your company, if any. This ID is sent in the <companyduns> field in the loginRequest XML document.</companyduns>
Catalog Name *	Yes	Enter a name for the punchout catalog. This name appears on the Search Results Summary and Search Results pages after the requester conducts a search, to identify the source of the items.
		For example, if you enter <i>Acme Co.</i> , the search results pages will title results from this catalog as <i>Search Results Summary from Acme Co.</i> or <i>Search Results from Acme Co.</i>
Description *	No	Enter a description of the catalog. This description displays if the requester clicks a store before searching. If so, Oracle iProcurement displays (below the Search field) a list of the catalogs (names and descriptions) in the store.
Keywords *	No	Any words entered in this field will be included when a requester searches for items. For example, if you enter <i>fruit</i> as a keyword for this punchout, any time the requester performs a search on <i>fruit</i> in Oracle iProcurement, a punchout link to Oracle Exchange will be displayed in the search results along with any other search results. The keyword limit is 4,000 bytes.
		Oracle iProcurement returns a link to the punchout catalog if the search that the requester enters matches any part of the keywords. For example, if you enter the keywords <i>legal size paper</i> , Oracle iProcurement returns the punchout catalog if the requester's search includes the words <i>legal</i> or <i>paper</i> or <i>size</i> .
		If you want this punchout to always be included in the search results, use the Manage Stores page in the eContent Manager. When setting up the store that includes this catalog, indicate that you always want to display the catalog in the search results for any search on the store. For instructions on setting up and editing stores, click the Help icon in the eContent Manager.

 Table 2–8
 Oracle Exchange Punchout Setup

Field Name	Required?	Description
Key 1	Yes	The Key 1 field identifies which UOM and category mapping rows in the Code Conversion Values window in Oracle e-Commerce Gateway to use to perform UOM and category mapping for this punchout. For a punchout to Oracle Exchange, it is recommended that you enter a Key 1 of OracleExchange. (Enter it as one word.)
		Oracle iProcurement matches this Key 1 value to a Key 1 field in Oracle e-Commerce Gateway. Ensure that you replicate this Key 1 value in Oracle e-Commerce Gateway. (See Set Up Data Mapping in Oracle e-Commerce Gateway on page 2-69.)
		Note: If no match is found between this Key 1 and the Key 1 in Oracle e-Commerce Gateway, then Oracle iProcurement uses the Oracle e-Commerce Gateway mapping associated with the blank Key 1 field in the Code Conversion Values window.
Punchout URL	Yes	The URL that Oracle iProcurement will use to log in to Oracle Exchange. For any Oracle Exchange, the URL should be <http https="" or="">://<exchange name<br="">URL>/orders/LinkinLogin.jsp</exchange></http>
		Example: https://exchange.oracle.com/orders/LinkinLogin.jsp
Image	No	Image file name or URL you want to display next to this catalog. The image displays on the Search Results Summary page. If you enter an image name (such as abc.gif) rather than a full URL (such as http://www.abc.cm/abc.gif), make sure the image exists in the directory specified in POR: Hosted Images Directory. If you specify no image, the catalog displays its name and description only. See the search results illustration in Punchout Flow on page 1-7 to see how the catalog images look. (Behind the scenes, the catalog displays a blank image file if you specify no image. If desired, you can change this default blank image file to always display a standard "no catalog image" file or message. See the image management section of the <i>Oracle iProcurement Implementation Guide</i>).
		Note: If <i>Hide thumbnail images</i> is selected in a requester's preferences, the requester will not see the catalog's image.
User Name	Yes	The user name of the proxy user created on Oracle Exchange. This user name will be used each time an Oracle iProcurement user punches out to Oracle Exchange. Oracle Exchange validates that it is a registered user name.
Password	Yes	The password for the proxy user account created on Oracle Exchange. This is used in combination with the User Name to establish the punchout session.
Retype Password	Yes	Retype the password.

Table 2–8 Oracle Exchange Punchout Setup

Field Name	Required?	Description
Prevent changes to items returned from punchout site	No	If selected, the requester will not be allowed to modify the quantity of shopping cart items returned from the external site before submitting the cart. If you want the requester to be able to modify the quantity for items added from this external site, do not select this option.
		For example, the Exchange Operator, acting on behalf of the suppliers, may prefer to process only the quantity that was selected for the item on the Exchange. If that were the case, then you would select this option to prevent changes to this quantity after the item is returned to Oracle iProcurement.
Extend user's idle session timeout during punchout	No	Setup in Oracle iProcurement includes establishing an idle time—a period of inactivity after which Oracle iProcurement logs out the user. (This setup is performed using the ICX:Session Timeout profile option.) While the requester is shopping on Oracle Exchange, Oracle iProcurement is considered idle.
		If you select this option, the browser accesses the Oracle iProcurement server every time the requester opens an Oracle Exchange Web page, to keep the connection alive without logging out the requester. This option is used in a punchout to, but not via, Oracle Exchange.
		If you do not select this option and the session times out, when the requester returns to Oracle iProcurement, iProcurement prompts the requester to log in again, resumes the session, and retains the requester's shopping cart items. The requester can continue adding items to the cart or checking out the items.
All prices are negotiated	No	Use this field if you are or will be implementing Daily Business Intelligence (DBI) for Procurement. If you select this field, then DBI for Procurement considers all items from this supplier to have negotiated prices, for reporting purposes. For more information, see the <i>Oracle E-Business Intelligence Daily Business Intelligence User Guide</i> .

 Table 2–8
 Oracle Exchange Punchout Setup

* These fields can be language-specific in a multiple language installation of Oracle iProcurement. To create language-specific versions, change your session language (click "Preferences" at the top of any page, then select a Language) and reenter the data in that language. For example, you have three languages installed—English, French, and Japanese. The first time you enter these fields, your session language is English. The data you enter, such as the keyword *apple*, is propagated to French and Japanese as well as English. Any change you make in English, such as adding *orange* to the keyword list, is made in all languages; however, once you change your session language to one other than the language in which you first entered the data, you must maintain that language separately. For example, you change your session language to French and change *apple* to *pomme*. Later, you change your session language to English and add *banana* to the keyword list. That addition is now made only in English and Japanese. The application detects that you already made a language-specific change to the French version, and no longer propagates changes to French, unless your session language is currently French. Changes made in the "initial" language (the language in which you first entered the data) are propagated to *all* languages *until* you access another session language and change the data. Note that if the catalog data does not exist in French (for example), the French keywords will not find it.

- 9. Click Submit, then OK, to complete the punchout catalog definition.
- **10.** To activate the catalog, include it in a store. See Add Catalog to Store on page 2-49.

Download Punchout Suppliers from Oracle Exchange

Perform this step for the following models:

Model	Required?
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)	Required
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)	Required

Once the supplier has defined its punchout on Oracle Exchange, use this step to download the supplier's punchout definition to Oracle iProcurement.

The download occurs only in the Oracle Exchange languages. For example, assume that Oracle Exchange is set up in Russian, French, and English. (When you log on to Oracle Exchange, the valid languages are displayed on the **Home** page.) In this example, the punchout definition is downloaded in three language versions: Russian, French, and English. If a requester in Oracle iProcurement is using a Korean language version of Oracle iProcurement, then the downloaded punchout in this example will not display. It does not display because the punchout definition does not exist in Korean.

Note: The setup in this step applies to all operating units.

Prerequisites

- Perform the step Define Oracle Exchange Punchout in Oracle iProcurement on page 2-25. If you do not perform this prerequisite, you will not be able to download the punchout suppliers from Oracle Exchange.
- Perform the step Control Punchout Access on Oracle Exchange on page 2-20. If you do not perform this prerequisite, then requesters will not be able to access the punchout suppliers that you download.

To download punchout suppliers from Oracle Exchange:

- 1. Log on to Oracle iProcurement using the Catalog Administration responsibility.
- 2. Click the "eContent Manager" link.
- **3.** Expand "Download from Exchange," then click "Download Supplier Punchout Definition."
- **4.** On the **Download Supplier Punchout Definition** page, click the Download icon for the Exchange from which you want to download the definition.

You will be presented with a list of suppliers that have set up a punchout on the selected Exchange.

If you have trouble accessing the Exchange, you may not be connecting successfully. (Oracle iProcurement connects to the Exchange to download the suppliers.) See Chapter 4.

5. On the **Supplier Web Stores** page, select the suppliers whose punchout definitions you want to download to Oracle iProcurement. Each supplier represents one punchout.

Note: If you are not able to find a punchout supplier on this page, then the supplier may have disabled its punchout.

Exchange Name	Home Exit ap	905sun.us.oracle.com My Profile Shopping Cart Conference Help
	Welcome	Shopping Negotiations Purchases Intelligence
Catalog		
Search Go Search Tips		Advanced Search Browse Categories Edit Search Options
Supplier Web Stores		
Supplier Web Stores		
Select Supplier(s) for synchronization with iProcurement a	nd	Synchronize Suppliers
Select All Clear All		S Previous 1 - 25 shown of 74 <u>Next</u> ⊗
Select Logo	Company Name	Company Description
	F — — F — — Ltd	Ferry trips.
	OEX 6.2	OEX to OEX Linkout.
	R— Holdings Ltd	Rental property company

6. Click Synchronize Suppliers.

The page will return you to Oracle iProcurement and display a confirmation message letting you know whether the punchout definitions for the suppliers you selected were successfully saved.

7. If you want to edit the punchout name, description, keywords, or mapping for the downloaded punchouts, see Updating Punchout Setup on page 2-74.

Note: For easier maintenance, it is recommended that you edit the mapping for the downloaded punchouts. The mapping fields are the Key 1, Supplier, and Supplier Site fields. See Updating Punchout Setup on page 2-74.

Define Supplier Punchout in Oracle iProcurement

Perform this step for the following models:

Model	Required?
Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML)	Required
Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML)	Required
After the supplier has set up punchout access to its Web store, use th a punchout link in Oracle iProcurement to the supplier's site. The su have followed the steps in the <i>Oracle Procurement Supplier's Guide to I Transparent Punchout</i> to be able to accept a punchout request from Or	pplier must Punchout and

iProcurement.

Note: The setup in this step applies to all operating units.

To create a punchout link directly to the supplier's site:

- 1. Log on to Oracle iProcurement using the Catalog Administration responsibility.
- 2. Click the "eContent Manager" link.
- 3. Expand "Manage Content," then click "Catalogs."
- 4. On the Manage Catalogs page, click Create.
- 5. On the Create Catalog page, select "Punchout catalog" and click Continue.
- 6. On the Create External Catalog page:
 - Select a Source of Supplier.
 - Select an Access Method of Direct Punchout (Oracle native XML) if you are setting up a punchout to a supplier using XML. Select Direct Punchout (cXML) if you are setting up a punchout to a supplier who uses cXML.

ORACLE		<u>Home</u>	Logout	Preferences	Help
 ▶Load Data and Schema ♥ Manage Content • Catalogs • Non-Catalog Request Templates • Stores > Download From Exchange ▶ Online Schema 	Create External Catalog Define the type of external catalog by selecting a Source and Access Method, then press the Continue button Source C Exchange © Supplier Access Method © Direct punchout (Oracle native XML) © Direct punchout (cXML) © Transparent Punchout		Canc	e <u>l</u>)(<u>C</u> onti	nue)
Maintenance Copyright 2004 Oracle Corpor	Home Logout Preferences Help ration. All rights reserved.		Cance	el) <u>Conti</u> Privacy Sta	

7. Click Continue.

	Hame Lagaut Preferences	Help
		-
▶ <u>Load Data and</u> Schema	Create Supplier Punchout (XML) Catalog	
 ✓<u>Manage Content</u> <u>Catalogs</u> 	Enter catalog information using the fields below and press the Submit button when you are finished. * Indicates required field	<u>n</u> it
 <u>Non-Catalog</u> 	Source Supplier	
<u>Request</u> <u>Templates</u>	Access Method Direct punchout (Oracle native XML)	
<u>Stores</u>	Buyer Company Identification	
Download From	Enter information about your company. The supplier may use this information for authentication and validation purposes.	
<u>Exchange</u> ▶ <u>Online Schema</u>	* Company Name Acme, Inc.	
Maintenance	Company ID	
	Punchout Identification	
	Enter information to identify the punchout. The fields in this section are language-specific. Change your session language to modify th fields in a different installed language.	е
	* Catalog Name Acme Office Furniture	
	Displayed to iProcument users.	
	Description Custom-developed	
	office furniture	
	Keywords office desk cabinet	
	chair shelves	
	Separate keywords with spaces.	
	Mapping Entermoneting information below	
	Enter mapping information below.	
	* Key 1 Acme	
	Supplier Acme LTD	
	Supplier Site SAN FRANCISCO	
	Punchout Definition	
	Enter information to define the punchout.	
	* Punchout URL http://www.suppler.compa	
	For example, http://www.suppliercompany.com/ReceiveRequest.jsp.	
	Image http://www.supplier.compa	
	Image URL such as http://www.abc.com/abc.gif, or image file name such as abc.gif. * Password	
	 Password provided by the supplier. 	
	* Retype Password	
	+ Encoding Method UTF-8	
	Recommended encoding method is UTF-8.	
	Prevent changes to items returned from punchout site	
	Send optional user and company information to punchout supplier site.	
	Extend user's idle session timeout during punchout This option requires additional setup at the supplier site.	
	All prices are negotiated.	

Home | Logout | Preferences | Help

Cancel Submit

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The **Create Supplier Punchout (XML) Catalog** page or **Create Supplier Punchout (cXML) Catalog** page displays depending on whether you chose the XML or cXML option.

8. On the **Create Supplier Punchout Catalog** page, enter the following information:

Field Name	Required?	cXML or XML?	Description
Company Name	Yes	XML	Your company name. If the supplier validates this name when requesters access the punchout, the supplier needs to provide you with the value. If the supplier does not validate a company name, enter any value. This value is sent in the <companyname> field in the loginRequest XML document.</companyname>
Company ID	No	XML	Your company's unique identifier (ID), if any. If the supplier validates a company ID when requesters access the punchout, the supplier needs to provide you with the value. If the supplier does not validate a company ID, enter any value or leave this field blank. This ID, if provided, is sent in the <companyduns> field in the loginRequest XML document</companyduns>
Domain	Yes	cXML	Enter the method by which you will be identifying yourself (the buying company). For example, enter DUNS if you will be identifying yourself by a DUNS number. Enter Name if you will be identifying yourself by your name.
			The domain you enter is sent to the supplier in the PunchOutSetupRequest cXML document in the domain attribute of the <from><credential> and <sender><credential> fields.</credential></sender></credential></from>
Identity	Yes	cXML	Enter the value you will use to identify yourself (the buying company). For example, enter your DUNS number if you entered DUNS for the domain. Enter your company name if you entered Name for the domain.
			The identity you enter is sent to the supplier in the PunchOutSetupRequest cXML document in the <from><credential><identity> and <sender><credential><identity> fields. The supplier may use this field to identify and authenticate the buying company. If the supplier validates your identity, the supplier needs to provide you with the value. If the supplier does not validate your identity, enter any value.</identity></credential></sender></identity></credential></from>

Table 2–9	Direct Punchout Setup
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Table 2–9	Direct	Punchout	Setup
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Field Name	Required?	cXML or XML?	Description
Catalog Name *	Yes	Both	Enter a name for the punchout catalog. This name appears on the Search Results Summary and Search Results pages after the requester conducts a search, to identify the source of the items.
			For example, if you enter <i>Acme Co.</i> , the search results pages will title results from this catalog as <i>Search Results Summary from Acme Co.</i> or <i>Search Results from Acme Co.</i>
Description *	No	Both	Enter a description of the catalog. This description displays if the requester clicks a store before searching. If so, Oracle iProcurement displays (below the Search field) a list of the catalogs (names and descriptions) in the store.
Keywords *	No	Both	Any words entered in this field will be included when a requester searches for items. For example, if you enter <i>fruit</i> as a keyword for this supplier site, any time the requester performs a search on <i>fruit</i> in Oracle iProcurement, a punchout link to this supplier site will be displayed in the search results along with any other search results. The keyword limit is 4,000 bytes.
			Oracle iProcurement returns the link to this supplier site if the search that the requester enters matches any part of the keywords. For example, if you enter the keywords <i>legal size paper</i> , Oracle iProcurement returns the supplier site if the requester's search includes the words <i>legal</i> or <i>paper</i> or <i>size</i> .
			If you want this punchout to always be included in the search results, use the Manage Stores page in the eContent Manager. When setting up the store that includes this catalog, indicate that you always want to display the catalog in the search results for any search on the store. For instructions on setting up and editing stores, click the Help icon in the eContent Manager.

Field Name	Required?	cXML or XML?	Description
Key 1	Yes	Both	The Key 1 field identifies which UOM and category mapping rows in the Code Conversion Values window in Oracle e-Commerce Gateway to use to perform UOM and category mapping for this punchout.
			Oracle iProcurement matches this Key 1 value to a Key 1 field in Oracle e-Commerce Gateway. Enter any value, and ensure that you replicate the value in Oracle e-Commerce Gateway. If UOM and category mapping for this supplier is already defined in Oracle e-Commerce Gateway, enter the Key 1 associated with the existing mapping. (See Set Up Data Mapping in Oracle e-Commerce Gateway on page 2-69.)
			Note: If no match is found between this Key 1 and the Key 1 in Oracle e-Commerce Gateway, then Oracle iProcurement uses the Oracle e-Commerce Gateway mapping associated with the blank Key 1 field in the Code Conversion Values window.
Supplier, Supplier Site	Recom- mended	Both	Use the flashlight icon to select the supplier and supplier site in Oracle Applications with whom you are setting up the punchout. This field maps all items in this punchout to a valid supplier and supplier site in Oracle Applications. This supplier and supplier site then default onto the requisition and purchase order.
			If you leave these fields blank, then the values in the XML documents are used to map against a valid supplier and site in Oracle Applications; see Appendix E for details.
			Note: Although optional, entering a Supplier and Supplier Site is recommended because you control the mapping. It is easier to see and maintain the supplier and site mapping here than in the XML documents that the supplier sends.
			These fields are not operating unit-specific. For example, if you are set up as a user in Operating Unit A, then you can select a Supplier Site that is defined only for Operating Unit B. Make sure that the requesters who will be accessing this punchout exist in an operating unit for which the Supplier Site is defined. If not, this Supplier Site will not be used. (Instead, the method described in Appendix E will be used.)
Supplier Name	Yes	cXML	Enter the name of the supplier. This name is sent in the <to><credential><identity> field in the PunchOutSetupRequest cXML document, to identify the supplier.</identity></credential></to>

Table 2–9 Direct Punchout Setup

Field Name	Required?	cXML or XML?	Description	
Supplier ID	No	cXML	Enter the code, if any, by which you identify the supplier. If you entered a Supplier and Supplier Site, you do not have to enter a Supplier ID. If you did not enter a Supplier and Supplier Site, the Supplier ID is used to perform supplier and supplier site mapping. (See Appendix E for details.) If provided, the Supplier ID is also sent in the <to><credential><identity> field in the PunchOutSetupRequest cXML document instead of the Supplier Name.</identity></credential></to>	
			For easier maintenance, it is recommended that you use the Supplier and Supplier Site fields, instead of the Supplier ID field, to perform supplier and site mapping.	
Punchout URL	Yes	Both	The URL that Oracle iProcurement will use to log in to the supplier site. It should include not only the URL, but the program name that will receive and process the login request.	
			Example: http://www.suppliersite.com/buyerLogin.jsp	
Image	No	Both	Image file name or URL you want to display next to this catalog. The image displays on the Search Results Summary page. If you enter an image name (such as abc.gif) rather than a full URL (such as http://www.abc.cm/abc.gif), make sure the image exists in the directory specified in POR: Hosted Images Directory. If you specify no image, the catalog displays its name and description only. See the search results illustration in Punchout Flow on page 1-7 to see how the catalog images look. (Behind the scenes, the catalog displays a blank image file if you specify no image. If desired, you can change this default blank image file to always display a standard "no catalog image" file or message. See the image management section of the <i>Oracle iProcurement Implementation Guide</i>).	
			Note: If <i>Hide thumbnail images</i> is selected in a requester's preferences, the requester will not see the catalog's image.	
Password	Yes	Both	The password required by the supplier. The password will be used as a site-level password to access the supplier site. The supplier needs to provide you with the value.	
Retype Password	Yes	Both	Retype the password.	

Table 2–9 Direct Punchout Setup

Field Name	Required?	cXML or XML?	Description
Encoding Method	Yes	XML	Character set in which to send the XML login request document. The method you enter is sent in the encoding field of the XML document.
			The recommended encoding to enter is UTF-8; however, if the supplier's middle-tier server uses an encoding other than UTF-8, enter that encoding here (for example, SHIFT-JIS). See Encoding on page C-4 for more information.
Prevent changes to items returned from punchout site	No	Both	If selected, the requester will not be allowed to modify the quantity of shopping cart items returned from the external site before submitting the cart. If you want the requester to be able to modify the quantity for items added from this external site, do not select this option.
			For example, the supplier may process only the quantity that was selected for the item on the supplier's site. If that were the case, then you would select this option to prevent changes to this quantity after the item is returned to Oracle iProcurement.

Table 2–9 Direct Punchout Setup

Field Name	Required?	cXML or XML?	Description
Send optional user and company information to	No	XML	If selected, the loginRequest XML document will include additional user information when it is sent to the supplier site. It is up to the supplier to decide whether or how to use this information to perform additional validation of the user.
punchout supplier site			The loginRequest XML document always sends basic user information fields, such as operatingUnit, userEmail, and appUserName. If you select this option, the loginRequest XML document sends additional user and company information, such as workPhone, title, manager, and functional currency. For a complete list, see loginRequest on page B-9; look for the fields described as "optional extended data."
Extend user's idle session timeout during punchout	No	XML	Setup in Oracle iProcurement includes establishing an idle time—a period of inactivity after which Oracle iProcurement logs out the user. (This setup is performed using the ICX:Session Timeout profile option.) While the requester is shopping on the supplier site, Oracle iProcurement is considered idle.
			This option works only if the supplier site is set up to access the Oracle iProcurement server every time the requester opens a Web page on the supplier's site, to keep the connection alive without logging out the requester.
			If you do not select this option (or if the supplier site is not set up to make use of this option) and the session times out, when the requester returns to Oracle iProcurement, iProcurement prompts the requester to log in again, resumes the session, and retains the requester's shopping cart items. The requester can continue adding items to the cart or checking out the items.
All prices are negotiated	No	Both	Use this field if you are or will be implementing Daily Business Intelligence (DBI) for Procurement. If you select this field, then DBI for Procurement considers all items from this supplier to have negotiated prices, for reporting purposes. For more information, see the Oracle E-Business Intelligence Daily Business Intelligence User Guide.

Table 2–9 Direct Punchout Setup

* These fields can be language-specific in a multiple language installation of Oracle iProcurement. To create language-specific versions, change your session language (click "Preferences" at the top of any page, then select a Language) and reenter the data in that language. For example, you have three languages installed—English, French, and Japanese. The first time you enter these fields, your session language is English. The data you enter, such as the keyword *apple*, is propagated to French and Japanese as well as English. Any change you make in English, such as adding *orange* to the keyword list, is made in all languages; however, once you change your session language to one other than the language in which you first entered the data, you must maintain that language separately. For example, you change your session language to French and change *apple* to *pomme*. Later, you change your session language to English and add *banana* to the keyword list. That addition is now made only in English and Japanese. The application detects that you already made a language-specific change to the French version, and no longer propagates changes to French, unless your session language is currently French. Changes made in the "initial" language (the language in which you first entered the data) are propagated to *all* languages *until* you access another session language and change the data. Note that if the catalog data does not exist in French (for example), the French keywords will not find it.

- **9.** Click Submit, then OK, to complete the punchout catalog definition.
- **10.** To activate the catalog, include it in a store. See Add Catalog to Store on page 2-49.

Define Transparent Punchout in Oracle iProcurement

Model	Required?
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Required
Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)	Required

Perform this step for the following models:

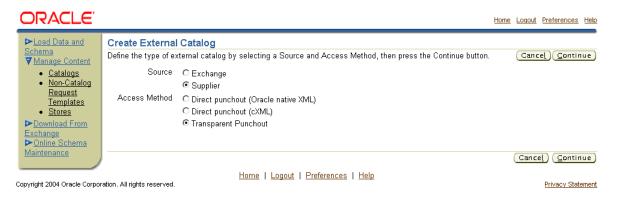
After the supplier has enabled transparent punchout support for its Web store, use this step to create your transparent punchout access to the store. The supplier must have followed the transparent punchout setup steps in the *Oracle Procurement Supplier's Guide to Punchout and Transparent Punchout* to be able to accept a transparent punchout request from Oracle iProcurement.

Note: The setup in this step applies to all operating units.

To create a transparent punchout catalog:

- 1. Log on to Oracle iProcurement using the Catalog Administration responsibility.
- 2. Click the "eContent Manager" link.

- 3. Expand "Manage Content," then click "Catalogs."
- 4. On the Manage Catalogs page, click Create.
- **5.** On the **Create Catalog** page, select the "Punchout catalog" option and click Continue.
- 6. On the Create External Catalog page:
 - Select a Source of Exchange if implementing a transparent punchout to Oracle Exchange. Select Supplier if implementing a transparent punchout directly to a supplier.
 - Select an Access Method of Transparent Punchout.



7. Click Continue.

ORACLE			Home Logout Preferences Help			
► <u>Load Data and</u>	Create Transparent Punchou	t Catalog				
Schema ▼Manage Content • Catalogs		ds below and press the Submit button when you are finished.	Cancel Submit			
 <u>Non-Catalog</u> <u>Request</u> 	Source Supplier Access Method Transparent Punchout					
<u>Templates</u> • <u>Stores</u>	Buyer Company Identificatio	n				
Download From	Enter information about your comp	any. The supplier may use this information for authentication and v	validation purposes.			
Exchange <u>Online Schema</u>	* Domain Name					
Maintenance	Enter the type of creden	tial. For example, DUNS.				
	* Identity Oracle Enter the corresponding	value of the credential.				
	Transparent Punchout Ident	ification				
	Enter information to identify the tra language to modify the fields in a d	nsparent punchout catalog. The fields in this section are language ifferent installed language.	-specific. Change your session			
	* Catalog Name Acme Printin Displayed to iPro					
	Description Ink, paper, ca					
	and other prin supplies	ting T				
	Mapping					
	Enter mapping information below.					
	* Key 1 Acme					
	Supplier Acme LTD	Supplier Acme LTD 🦪				
	Supplier Site SAN FRANCISCO					
	Transparent Punchout Definition					
		Enter information to define the transparent punchout catalog.				
	+ Supplier Name Acme Supplies					
	Supplier ID					
	* Transparent Punchout URL http://www.suppliercompa For example, http://www.suppliercompany.com/ReceiveRequest.jsp.					
	* User Name					
	* Password	User name and password provided by the supplier.				
	* Password * Retype Password	 				
	* Retype Password	Send optional user information to supplier.				
		□ Send optional user information to supplier. □ All prices are negotiated.				
	Supplemental Information					
		o five name and value pairs to be used in the transparent punchou	t request XML document.			
	Name	Value				
	Division	San Francisco				
			(Cancel) (Submit)			
		Home Logout Preferences Help	Cancel Submit			
Copyright 2004 Oracle Corpo		Teleforences Help	Privacy Statement			

8. On the **Create Transparent Punchout Catalog** page, enter the following information:

Field Name	Required	Description
Domain	Yes	Enter the method by which you will be identifying yourself (the buying company). For example, enter DUNS if you will be identifying yourself by a DUNS number, or enter Name if you will be identifying yourself by your company name.
		The domain you enter is sent to the supplier or Oracle Exchange in the ItemSearchRequest XML document in the domain attribute of the <from><credential> field.</credential></from>
Identity	Yes	Enter the value you will use to identify yourself (the buying company). For example, enter your DUNS number if you entered DUNS for the domain.
		The identity you enter is sent to the supplier or Oracle Exchange in the ItemSearchRequest XML document in the <from><credential><identity> field. The supplier may use this field to identify and authenticate the buying company. If the supplier validates your identity, the supplier needs to provide you with the value. If the supplier does not validate your identity, enter any value by which you want to identify your company.</identity></credential></from>
Catalog Name *	Yes	Enter a name for the transparent punchout catalog. This name appears on the Search Results Summary and Search Results pages after the requester conducts a search, to identify the source of the items.
		For example, if you enter <i>Acme Co.</i> , the search results pages will title results from this catalog as <i>Search Results Summary from Acme Co.</i> or <i>Search Results from Acme Co.</i>
Description *	No	Enter a description of the catalog. This description displays if the requester clicks a store before searching. If so, Oracle iProcurement displays (below the Search field) a list of the catalogs (names and descriptions) in the store.
Key 1	Yes	The Key 1 field identifies which UOM and category mapping rows in the Code Conversion Values window in Oracle e-Commerce Gateway to use to perform UOM and category mapping for this punchout.
		Oracle iProcurement matches this Key 1 value to a Key 1 field in Oracle e-Commerce Gateway.
		For a transparent punchout to Oracle Exchange, it is recommended that you enter a Key 1 of OracleExchange. (Enter it as one word.) For a transparent punchout to a supplier, enter any value, and ensure that you replicate the value in Oracle e-Commerce Gateway. If UOM and category mapping for this supplier is already defined in Oracle e-Commerce Gateway, enter the Key 1 associated with the existing mapping. (See Set Up Data Mapping in Oracle e-Commerce Gateway on page 2-69.)
		Note: If no match is found between this Key 1 and the Key 1 in Oracle e-Commerce Gateway, then Oracle iProcurement uses the Oracle e-Commerce Gateway mapping associated with the blank Key 1 field in the Code Conversion Values window.

 Table 2–10
 Transparent Punchout Setup

Field Name	Required	Description
Supplier, Supplier Site	No	These fields are available only for a transparent punchout directly to a supplier.
		Use the flashlight icon to select the supplier and supplier site in Oracle Applications with whom you are setting up the transparent punchout. This field maps all items in this transparent punchout to a valid supplier and supplier site in Oracle Applications. This supplier and supplier site then default onto the requisition and purchase order.
		If you leave these fields blank, then the values in the XML documents are used to map against a valid supplier and site in Oracle Applications; see Appendix E for details.
		Note: Although optional, entering a Supplier and Supplier Site is recommended because you control the mapping. It is easier to see and maintain the supplier and site mapping here than in the XML documents that the supplier sends.
		These fields are not operating unit-specific. For example, if you are set up as a user in Operating Unit A, then you can select a Supplier Site that is defined only for Operating Unit B. Make sure that the requesters who will be accessing this transparent punchout exist in an operating unit for which the Supplier Site is defined. If not, this Supplier Site will not be used. (Instead, the method described in Appendix E will be used.)
Supplier Name or Exchange Name	Yes	If implementing a transparent punchout to a supplier directly, enter the supplier name. If implementing a transparent punchout to Oracle Exchange, enter Oracle Exchange. (There is a space between "Oracle" and "Exchange.")
		This name is sent in the <to><credential><identity> field in the ItemSearchRequest document to identify the supplier (or Oracle Exchange).</identity></credential></to>
Supplier ID	No	If implementing a transparent punchout to a supplier directly, enter the code, if any, by which you identify the supplier. If you entered a Supplier and Supplier Site, you do not have to enter a Supplier ID. If you did not enter a Supplier and Supplier Site, the Supplier ID is used to perform supplier and supplier site mapping. (See Appendix E for details.) If provided, the Supplier ID is also sent in the <to><credential<identity> field in the ItemSearchRequest document, instead of the Supplier Name.</credential<identity></to>
		For easier maintenance, it is recommended that you use the Supplier and Supplier Site fields, instead of the Supplier ID field, to perform the supplier and site mapping.

 Table 2–10
 Transparent Punchout Setup

Field Name	Required	Description		
Transparent Punchout URL	Yes	The URL that Oracle iProcurement will use to access the supplier site. It should include not only the URL, but the program name that will receive and process the ItemSearchRequest.		
		Example: http://www.suppliersite.com/buyerLogin.jsp		
User Name	Yes	The user name required by the supplier. The user name will be used as a site-level user name to access the supplier site. The supplier needs to provide you with the value.		
		If implementing a transparent punchout to Oracle Exchange, enter the user name of the proxy user created on Oracle Exchange. This user name will be used each time an Oracle iProcurement user accesses Oracle Exchange via transparent punchout. Oracle Exchange validates that it is a registered Exchange user name.		
Password	Yes	The password required by the supplier. The password will be used as a site-level password to access the supplier site. The supplier needs to provide you with the value.		
		If implementing a transparent punchout to Oracle Exchange, enter the password for the proxy user account created on Oracle Exchange. This is used in combination with the User Name to establish the transparent punchout session.		
Retype Password	Yes	Retype the password.		
Send optional user information to supplier	No	If selected, the ItemSearchRequest XML document will include additional user information when it is sent to the supplier site. It is up to the supplier to decide whether or how to use this information to perform additional validation of the user. This field is not available for a transparent punchout to Oracle Exchange.		
		The ItemSearchRequest XML document always sends basic user information. If you select this option, the ItemSearchRequest XML document also sends the appUserName. See ItemSearchRequest on page B-43 for a description.		
All prices are negotiated	No	Use this field if you are or will be implementing Daily Business Intelligence (DBI) for Procurement. If you select this field, then DBI for Procurement considers all items from this supplier to have negotiated prices, for reporting purposes. For more information, see the <i>Oracle E-Business Intelligence Daily Business Intelligence User Guide</i> .		
Supplemental Information	No	If implementing a transparent punchout to a supplier directly, enter supplemental information you want to send in the ItemSearchRequest XML document (in the UserArea field) to the supplier. For example, if the supplier offers special prices for your division, the supplier may request that you provide your division name. If so, enter a Name of Division and a Value of (for example) Boston Group—or however the supplier requires.		

Table 2–10 Transparent Punchout Setup

* These fields can be language-specific in a multiple language installation of Oracle iProcurement. To create language-specific versions, change your session language (click "Preferences" at the top of any page, then select a Language) and reenter the data in that language. For example, you have three languages installed—English, French, and Japanese. The first time you enter these fields, your session language is English. The data you enter is propagated to French and Japanese as well as English. Any change you make in English is made in all languages; however, once you change your session language to one other than the language in which you first entered the data, you must maintain that language separately. For example, you change your session language to French and change *apple* to *pomme* in a catalog description. Later, you change your session language to English and add *banana* to the description. That addition is now made only in English and Japanese. The application detects that you already made a language-specific change to the French version, and no longer propagates changes to French, unless your session language is currently French. Changes made in the "initial" language (the language in which you first entered the data) are propagated to *all* languages *until* you access another session language and change the data.

- 9. Click Submit, then OK, to complete the transparent punchout catalog definition.
- **10.** To activate the catalog, include it in a store. See Add Catalog to Store on page 2-49.

Add Catalog to Store

Perform this step for the following models:

Model	Required?
Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)	Required
Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML)	Required
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)	Required
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)	Required
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Required
Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)	Required

Any catalog you create must be assigned to a store to be searchable. Once your punchout or transparent punchout catalog is ready for use, assign it to a store.

While assigning catalogs to a store, you can also optionally use the resequencing feature to change the order in which multiple catalogs in a store display to requesters on the Oracle iProcurement search pages.

The following example shows that the catalogs display in the search results in the following order:

- 1. Regular Office Supplies
- 2. Oracle Exchange
- 3. Acme Office

ORACL	€' iProcurement			ng Cart Home Logout Preferences Help		
Stores Catego	ories Shopping Lists Non-	Catalog Request Contractor Requ	Shop Requisition	s Receiving Contractors		
Search Office Su	pplies	Go Advanced Search		Shop Other Stores		
Search Res	ults Summary from	Regular Office Supplie	Results from local or transpar punchout catalog es: folder	ent Shopping Cart Your cart is empty.		
(Hide Images)				Compare Items		
	Standard Classification Fold	Standard Classification Folders, Legal, Blue				
	Ideal for case histories, tax r durable Pressboard bonded inner partitions.	No items selected. Catalog Language Your current catalog language:				
	Category: File Folders Manufacturer: National Supplies	Supplier: Acme Supplies Manufacturer Item:	Supplier Item: FDR-0008 Contract Number:	American English Change Catalog Language		
	Price: 4.95 USD Quantity 1 (Add to)	Unit: Each Cart)	(Add to Favorites) (Add to Compare)			
		filing sections for documents and resistant Tyvek gussets allow for 2 1/4""				
	Category: File Folders Manufacturer: National Supplies Price: 5.99 USD Quantity 1 Add to	Supplier: Acme Supplies Manufacturer Item: Unit: Each Cart	Supplier Item: FDR-0007 Contract Number: (Add to Favorites) (Add to Compare)	 Note: In an actual Search Results Summary page, the first three matching items would be displayed. 		
Search Res (Hide Images)	sults Summary from	Oracle Exchange: fol	der Results fror Exchange punct			
Exchang	Visit exchange.oracle.co	om to find all of your office supplies.				
	ults Summary from	Acme Office: folder 🔺	Results from supp punchout cata			
(Hide Images)	Acme Office Visit the Web site of Ac services.	me Office to find office supplies and	furniture. Acme Office also offers color copy			

To add catalog to a store (required) and sequence it (optional):

- 1. Log on to Oracle iProcurement using the Catalog Administration responsibility.
- 2. Click the "eContent Manager" link.
- 3. Expand "Manage Content," then click "Stores."
- 4. On the Manage Stores page, do either of the following:
 - Click a store's Edit icon to add the catalog to an already-created store.
 - Click Create to create your own store and add the catalog to it.

Follow the guidance online and in the Help icon if you need more help creating and editing stores.

Note: The Update Sequence button is for sequencing stores on the **Shop** home page, not for sequencing catalogs within a store. Click a store's Edit icon to resequence the catalogs within a store.

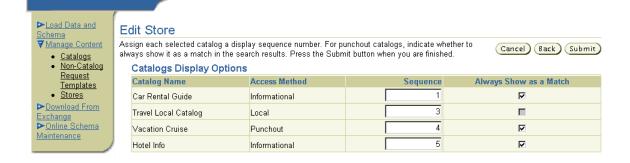
- **5.** Once you have selected the catalogs you want to include in the store, click Continue.
- **6.** Sequence the order in which multiple catalogs display on the **Search Results Summary** page; otherwise, the stores display in a system-specified order.

Return to Portal

Help Help

Diagnostics





You can reuse a sequence number or use decimals. Those catalogs with the same sequence number will display at that sequence. Within the list of them, however, they will display in the default Oracle iProcurement order.

- 7. Click Submit to save your list.
- **8.** Click OK to confirm the change.

Use Realms to Control Access

Perform this step for the following models:

Model	Required?
Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)	Optional
Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML)	Optional
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)	Optional
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)	Optional
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Optional
Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)	Optional

Prerequisite

Realms can be used in conjunction with other methods to control punchout access. Before setting up realms, you may want to review these methods in Chapter 3.

Overview of Realms

Use realms to assign punchout or transparent punchout (remote) catalogs to certain Oracle Applications responsibilities or requesters (users). Realms control remote catalog access at the responsibility and user level only. (A responsibility determines which applications and functions a user can access. For example, you may create a responsibility called Desktop Requisitioner - North America, which gives access to Oracle iProcurement.)

For example, assume the following remote catalogs are defined in Oracle iProcurement:

- Exchange.Oracle.com (transparent punchout)
- Office Supplies Unlimited (transparent punchout)
- Computer Components Corporation (punchout site)

Company policy limits the purchasing of computer hardware to the Information Technology (IT) department. To adhere to this policy and restrict certain users from ordering these types of items, two realms are created. One realm grants access to all of the remote catalogs mentioned above and is assigned to members of the IT department. The other realm grants access only to Exchange.Oracle.com and Office Supplies Unlimited. This realm is assigned to all other employees.

Until you assign realms, users have access to all remote catalogs defined in Oracle iProcurement. Once you assign a realm, the affected user or users have access only to remote catalogs in the assigned realm.

Realms are *additive*. For example, when you assign a realm to a responsibility, all users assigned that responsibility have access to that realm; however, you can assign additional realms to any of these individual users that only they have access to.

In the following example, users 1 and 2 are assigned the Internet Procurement responsibility.

Realm 1	Realm 2	Responsibility: Internet Procurement	User 1	User 2	Result
Includes Exchange.	Includes Computer	Assigned to Realm 1	Not assigned additional	Assigned to Realm 2	User 1 has access to Exchange.Oracle.com.
Oracle.com	Components		realms		User 2 has access to Exchange.Oracle.com and Computer Components.

Note: If you restrict a user's access, using realms, to all catalogs in a store, the store does not display at all to the requester.

Set Up Realms

To use realms:

- **1.** Create the realm.
- 2. Assign the realm to a responsibility.

3. Optionally assign realms to individual users if desired.

To use realms, you must at a minimum "secure" the responsibility that the users use to access Oracle iProcurement. Securing a responsibility consists of entering ICX_POR_REALM_ID in the Name field for the responsibility as described below. Next, as described below, assign a realm ID to that responsibility, to users in that responsibility, or both, as your needs require.

For more information on realms, see the Oracle iProcurement Implementation Guide.

To create a realm:

- 1. Log in to Oracle Purchasing and use the following navigation path to open the Realms window: Setup > E-Catalog Admin > Realms.
- 2. In the Realms window, enter your own Name and Description for the realm.

🗱 Realms 📯 🖓 🖓	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
Realm Name	Med/Surge Access		
Realm Id	465		
Description	Access to Med/Surge Items		
Component Type	Item Source		
Components			
PSeller Company	4182		
PSeller Company	110		
Certification Exch	ange		
	⊡ 3		
	문		

3. Select Item Source as the Component Type. (Item Source means you are defining a realm for remote catalogs.)

You cannot define category realms for remote catalogs.

- **4.** In the Components section, use the list of values (LOV) to select the catalog definitions to which anyone assigned this realm has access.
- **5.** Save your changes.

6. Note the Realm ID that is automatically assigned to the realm. You will need to reference this ID later.

To assign the realm to a responsibility:

- 1. Log on to Oracle Applications using the System Administrator responsibility.
- **2.** Open the Responsibilities window using the following navigation path: Security > Responsibility > Define.
- **3.** Query the responsibility to which you will assign the realm.

🗱 Responsibilities 👾 👾 👾	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			**********	२२२२२२२२२२ ≚ ज ×े
Responsibility Name	IPG iProcurement		_ Е	ffective Dates —	
Application	Oracle Self-Service Web Ap	plications		From	25-FEB-2002
Responsibility Key	IPG_IP_PROJ			To	
Description	IPG iProcurement				
Available From		- Data G	roup		
○ <u>O</u> racle Applications			Name	Standard	
Oracle Self Service Web Appli	cations	Application Oracle Self-Service Web Applicati			vice Web Applicati
Oracle Mobile Applications					
Menu Interne	t Procurement Home	Reque	st Group	[]
Web Host Name			Name	ļ	
Web Agent Name			Application		
Menu Exclusions Exclude	ed Items 🗍 Securing Attribute	s			
Name		Applicatio	on		
ICX_POR_REALM_ID			Oracle Self-Service Web Applications		
					
		•		\square	Values

- **4.** In the Securing Attributes tabbed region, in the Name field, use the LOV to select ICX_POR_REALM_ID.
- 5. Choose the Values button.
- **6.** In the Values fields, enter the Realm ID that you noted earlier for each realm you want to assign to this responsibility.

465			٦f
			-

- 7. Click OK.
- **8.** Save your changes.
- **9.** Repeat these steps for each responsibility to which you want to assign the realms.

To assign the realm to users (optional):

- 1. Log on to Oracle Applications using the System Administrator responsibility.
- **2.** Open the Users window using the following navigation path: Security > User > Define.
- **3.** Query the user (person) to whom you want to assign the realm.
- **4.** In the Securing Attributes tabbed region, in the Attribute field, use the LOV to select ICX_POR_REALM_ID.

User Name	RKORTE		Per	son Korte, Rac	nel
Description	Rachel		Custo		
Description	Indenen		Sup		
Password			_	Mail	
- Password E	vniration			Fax	
1 03344010 L	⊙Days			Effective D	atos
	O Accesses			Fro	
	None				0
	_				
esponsibilities Attribute	Securing At		Value		
Attribute		Application	Value e Web Appl 465		
Attribute		Application			
Attribute		Application			

- **5.** For the Value, enter the Realm ID that you noted earlier for the realm you want to assign to the user.
- **6.** In the Securing Attributes tabbed region, create a line for each realm you want to assign to the user. Select ICX_POR_REALM_ID in the Name field and the Realm ID for each realm.
- **7.** Save your work.

Understand Data Mapping

Data mapping enables you to define the conversions between buyer codes and supplier codes. For example, a buyer uses the unit of measure (UOM) code EA for Each. The supplier uses E. You can use either Oracle iProcurement (specifically, Oracle e-Commerce Gateway), or both Oracle iProcurement and Oracle Exchange to map these codes for you, as shown in the following illustration.

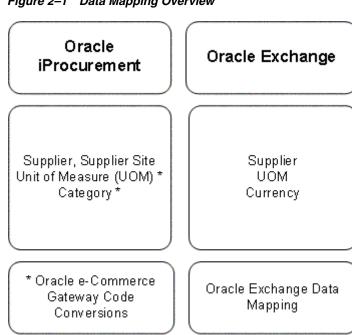


Figure 2–1 Data Mapping Overview

* Required by buyer

In summary:

- At a minimum, category and unit of measure data mapping is required by the buyer, in Oracle e-Commerce Gateway.
- For easier maintenance, it is recommended that Supplier and Supplier Site are *not* mapped using Oracle e-Commerce Gateway. See Table 2–11 for the recommended supplier and site mapping by model.
- Mapping on Oracle Exchange is required only of the supplier in Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML), and only if the supplier uses different codes than Oracle Exchange.

The following diagram and table summarize the mapping methods by model.

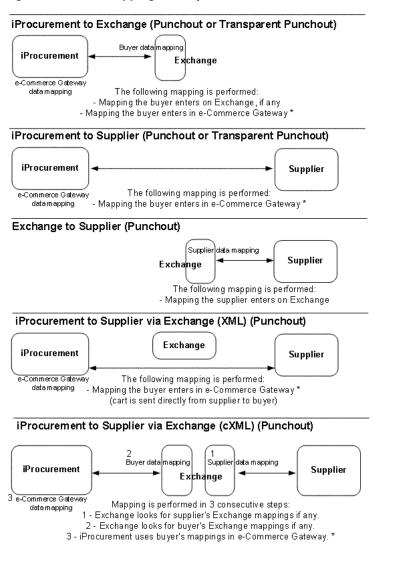


Figure 2–2 Data Mapping Flow by Model

* e-Commerce Gateway mapping is required

For mapping that occurs on Oracle Exchange, Oracle Exchange performs the mapping at the following points:

- After the requester finishes shopping on Oracle Exchange, for a punchout to Oracle Exchange.
- Just before the requester returns the cart to Oracle iProcurement, for a cXML punchout via Oracle Exchange.
- Just before the search results are returned to Oracle iProcurement, for a transparent punchout.

For mapping that occurs in Oracle iProcurement, Oracle e-Commerce Gateway performs the mapping once the requester returns the cart to Oracle iProcurement.

To set up data mapping on Oracle Exchange, see Set Up Data Mapping on Oracle Exchange on page 2-16. To set up data mapping in Oracle e-Commerce Gateway, see Set Up Data Mapping in Oracle e-Commerce Gateway on page 2-69.

See also Set Up Supplier and Site Mapping on page 2-61.

Set Up Supplier and Site Mapping

Perform this step for the following models:

Model	Required?
Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)	Optional
Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML)	Optional
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)	Optional
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)	Optional
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Optional
Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)	Optional

The following tables summarize the recommended supplier and supplier site mapping method for each model:

Model	Mapping Methods	Applicable Steps	
Model 1: Punchout from Oracle iProcurement to Oracle	Use the Exchange and EDI Location field method. *	To decide how to identify the supplier: on page 2-64	
Exchange (XML)		To enter the EDI Location field: on page 2-67	
Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML)	Use the Supplier and Supplier Site fields on the punchout setup page.	Define Supplier Punchout in Oracle iProcurement on page 2-34	
Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML)	Use the Supplier and Supplier Site fields on the punchout setup page.	Define Supplier Punchout in Oracle iProcurement on page 2-34	
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)	Edit the Supplier and Supplier Site fields after downloading the punchout.	Updating Punchout Setup on page 2-74	
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)	Edit the Supplier and Supplier Site fields after downloading the punchout.	Updating Punchout Setup on page 2-74	
Model 1: Transparent Punchout from Oracle iProcurement to	Use the Exchange and EDI Location field method. *	To decide how to identify the supplier: on page 2-64	
Oracle Exchange (XML)		To enter the EDI Location field: on page 2-67	
Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)	Use the Supplier and Supplier Site fields on the transparent punchout setup page.	Define Transparent Punchout in Oracle iProcurement on page 2-43	

 Table 2–11
 Supplier and Site Mapping Methods by Model

* You cannot use Oracle e-Commerce Gateway because, in these models, supplier site information is not passed back to Oracle iProcurement for Oracle e-Commerce Gateway to map; however, use of the Exchange and EDI Location field method does accomplish the supplier site mapping.

The following table summarizes how the mapping is performed for each model:

Model	Mapping Details		
Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)	Maps the <supplierduns> or <suppliertradingpartnercode> value, whichever exists in the XML file, to the EDI Location field. This value will be the supplier DUNS number, mapped trading partner ID, or Exchange-assigned trading partner ID—whichever you chose in To decide how to identify the supplier: on page 2-64.</suppliertradingpartnercode></supplierduns>		
Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML)	Uses the Supplier and Supplier Site fields on the punchout setup page to default the supplier and site for all items in this punchout.		
Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML)	Uses the Supplier and Supplier Site fields on the punchout setup page to default the supplier and site for all items in this punchout.		
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)	Uses the Supplier and Supplier Site fields on the edit punchout page to default the supplier and site for all items in this punchout.		
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)	Uses the Supplier and Supplier Site fields on the edit punchout page to default the supplier and site for all items in this punchout.		
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Maps <suppliercode> in the XML file to the EDI Location field. The <suppliercode> will be the supplier DUNS number, mapped trading partner ID, or Exchange-assigned trading partner ID—whichever you chose in To decide how to identify the supplier: on page 2-64.</suppliercode></suppliercode>		
Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)	Uses the Supplier and Supplier Site fields on the transparent punchout setup page to default the supplier and site for all items in this transparent punchout.		

 Table 2–12
 Supplier and Site Mapping Details

If a supplier mapping is not set up or is not successful, then Oracle iProcurement populates the Supplier field on the requisition with the value in the following fields:

- The <supplierName> tag, for a punchout XML document.
- The Supplier Name field on the punchout setup page, for a cXML punchout.
- The <SupplierName> tag, for a transparent punchout document.

If the supplier is defined in Oracle Applications in the Suppliers window, this supplier will also default on to the purchase order; otherwise, the buyer in Oracle Purchasing must enter a defined supplier and site on the purchase order.

Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)

For this model, use the following steps to perform the supplier and site mapping:

- **1.** Decide how to identify the supplier.
- 2. Define the order of trading partner identification values.
- 3. Identify the supplier's DUNS number or trading partner ID.
- 4. Enter the EDI Location field.

To decide how to identify the supplier:

First choose how you want to identify the supplier before you map it. Oracle Exchange can pass one of the following values to Oracle iProcurement to identify the supplier:

- Supplier DUNS number if the supplier provided one when registering on Oracle Exchange. (After registration, the supplier can supply a DUNS number by editing its Company Profile in the Company Administration application.)
- The buyer-mapped trading partner ID on Oracle Exchange if the buyer mapped the supplier's trading partner ID to its own ID using the **Data Mapping** page.
- The trading partner ID that Oracle Exchange assigns to the supplier. (You can find this ID in the Trading Partner Directory, accessible from the Welcome tab in any application on Oracle Exchange.)

By default, Oracle Exchange uses the above order to identify the supplier. First, it looks for a DUNS number if any; if none, it looks for a buyer-mapped trading partner ID if any; if none, it uses the Exchange-assigned trading partner ID.

You can change this default order to better suit your system's needs, following the next steps. For example, if the buying company chooses to use the trading partner ID that Oracle Exchange assigns or its own mapped trading partner ID, the supplier can change its DUNS number without affecting the buyer's mapping.

To define the order of trading partner identification values:

- 1. Log on to Exchange using the login user name and password you used while registering your buying organization.
- 2. Access the Buying application (on the Home page, click the "Buying" link).
- **3.** Click the Purchases tab.
- **4.** On the **Purchases** home page, click the "Punchout and Transparent Punchout Preferences" link.

5. On the **Punchout and Transparent Punchout** page, in the Trading Partner Identification section, specify the order in which the three possible identification values listed above should be passed. An order must be defined for each value and each value can be defined only once.

	Welcome	Shopping	Negotiations	Purchases	Intelligence
Purchases > Punchout and Transparent Punchout Preferences					

Punchout and Transparent Punchout

Select your preferences below and press the Apply Changes button when you are done.

Trading Partner Identification

You can configure your own hierarchy to determine what value is sent back to Oracle iProcurement to identify the supplier in the shopping cart XML. Use this hierarchy if your company is performing a punchout or transparent punchout from iProcurement to Oracle Exchange, or a punchout from iProcurement to a cXML supplier via Oracle Exchange. In order, Oracle Exchange sends one of the following values, whichever is available first:

- 1. Supplier DUNS Number value entered in the supplier's company profile.
- 2. Mapped Trading Partner ID value entered in the field "Oracle Exchange to My Company" in the Trading Partner Mapping table.
- 3. Trading Partner ID value entered in the supplier company's profile.

To choose a different order, enter your selection below, use each value once and only once.

1.	Supplier DUNS	•
2.	Mapped Trading Partner ID	•
З.	Trading Partner ID	•

Category Identification

If your company is performing a punchout or transparent punchout from Oracle iProcurement to Oracle Exchange, you can select which value is returned to iProcurement to identify the item category. iProcurement performs category mapping on the identifier you select below. Contact the System Operator to find out what each identifier contains.

- Category Name
- O Category Key
- C Category Description



The Category Identification section is described in Set Up Data Mapping on Oracle Exchange on page 2-16.

6. Click Apply Changes.

To identify the supplier's DUNS number or trading partner ID:

1. Log on to Exchange using the login user name and password you used while registering your buying organization.

- 2. On the Home page, click the "Company Admin" link.
- **3.** In the Welcome tab, click "Trading Partner Directory" in the task bar below the tab.
- 4. Search for the supplier and click Go.
- 5. Note the supplier's Trading Partner ID and DUNS Number (if any).

Trading	g Partner Search R	tesults for %illa%			
Select T	rading Partner and				View Details
Sort by	Trading Partner 🗾	© Ascending C Descending Go			
					1 - 18 shown of 18
Select	Trading Partner	Trading Partner Type	DUNS Number	Address	Trading Partner ID
۲	<u>Camilla001</u>		123456789	123 MAIN STREET Annapolis MD United States	15303
O	<u>Godzilla</u>			6969 North South St. Maui HI United States	12552
O	<u>Gorilla</u>			500 Parkway Redwood Shores CA United States	25781

- 6. Return to the Home page and click the "Company Admin" link.
- 7. Click the Application Setup tab, then the "Data Mapping" link.
- 8. On the Data Mapping page, select Trading Partner and click Edit Mapping.

	Welcome Company Billing Application Setup
Administering for Bananas Inc. Change Company	
 Application Setup > Data Mapping	

Data Mapping

Select a data type and press the Edit Mapping button to map the Oracle Exchange values to your preferred values for transactions sent to and from your company.

Select	Description
e	Additional Service
o	Carrier for goods to be delivered
o	Collect, Prepaid, None
o	Container Type
o	Country of Origin Code
o	Currency in which monetary amounts will be expressed
c	Export, Import or Domestic
0	Facility on Decod Temps

- **9.** Search for the supplier and click Go.
- **10.** Note the value in the Exchange to My Company field (the right-most column) for the supplier.

This value, if it exists, is the mapped trading partner ID for the supplier.

To enter the EDI Location field:

- 1. In Oracle Purchasing, use the following navigation to open the Suppliers window: Supply Base > Suppliers.
- **2.** Find the Supplier Name for the supplier, then choose Sites.
- **3.** Find the Site Name for the supplier, then click the EDI tabbed region.

Suppliers (Vision Operation	s: USD)				2	تx التر	
Supplier Name	_	ion Operations: USD) - Gor	illa Enterprises,	[New] (2000000)		000000000000000000000000000000000000000	×া≚র×
Alternate Name		GORILLA			Alternate Name		
Taxpayer ID	Country	United States	ļ				
Inactive On	Address				Alterna		
					Addre	SS	
General Classification							
EDI Gateway			1				
Pa	City		State			Postal Code	
Pi	Province		County				_
	Language		Inac	tive On			[]
Rem	General Contac	cts Accounting Control	l Payment B	Bank Accounts	EDI Invoice Tax	Withholding Tax	•
Remitta							
			ation 25871				
Transa	- EDI Gateway	EDI ID Nu	umbor				
		Payment M					
		Payment Fi					
		Remittance M					
		Remittance Instru]		
		Transaction Har					
		Transaction Har					
	L						

- **4.** In the EDI Location field, enter whichever ID Oracle Exchange passes for that supplier as determined by the trading partner hierarchy described earlier: DUNS number, mapped trading partner ID, or Exchange-assigned trading partner ID.
- **5.** Save your transaction.

Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML)

For this model, use the Supplier and Supplier Site fields on the punchout setup page to perform the mapping. See Define Supplier Punchout in Oracle iProcurement on page 2-34.

Models 4 and 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML or cXML)

For these models, edit the Supplier and Supplier Site fields on the edit punchout page to perform the mapping. See Updating Punchout Setup on page 2-74.

Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)

For this model, use the trading partner hierarchy on Oracle Exchange and the EDI Location field to perform the supplier and site mapping. See the section for Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML), earlier above.

Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)

For this model, use the Supplier and Supplier Site fields on the transparent punchout setup page to perform the mapping. See Define Transparent Punchout in Oracle iProcurement on page 2-43.

Set Up Data Mapping in Oracle e-Commerce Gateway

Perform this step for the following models:

Model	Required?
Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)	Required
Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML)	Required
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)	Required
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)	Required
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Required
Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)	Required

Use Oracle e-Commerce Gateway to map the following values that the supplier sends to values you use in Oracle iProcurement:

- Supplier (optional) *
- Supplier site (optional) *
- Unit of measure (UOM) (required)
- Category (required)

* For easier maintenance, it is recommended that you use the Supplier and Supplier Site fields when defining the punchout or transparent punchout in the eContent Manager rather than using Oracle eCommerce Gateway. See Set Up Supplier and Site Mapping on page 2-61.

Punchout and transparent punchout do not use currency mapping in Oracle e-Commerce Gateway, but recognize only the International Standards Organization (ISO) currency codes.

At a minimum, Oracle iProcurement requires that all categories and units of measure sent by the supplier in the punchout shopping cart document or transparent punchout response document be mapped to values in Oracle Applications using Oracle e-Commerce Gateway. Otherwise, creation of the requisition will fail. You cannot create a "catchall" category for any category that has not been mapped. *All* categories that the supplier sends must be mapped to a specific or corresponding category defined in Oracle Applications, following the steps below, even if they use the same name.

For an overview of data mapping, see Understand Data Mapping on page 2-58.

To set up mapping in Oracle e-Commerce Gateway:

 In Oracle Applications, access the eCommerce Gateway application and use the following navigation to open the Code Conversion Values window: Setup > Code Conversion > Define Code Conversion Values.

The code conversions you define here apply to all operating units.

- 2. In the Category field, choose one of the following values:
 - ITEM_CATEGORY to map a category
 - UOM to map a UOM

If you want to use VENDOR_NAME and VENDOR_SITE to perform supplier and site mapping (although it is not recommended), see Appendix E for details.

- 3. Enter your own Description for the mapping.
- 4. For the Direction, enter IN or BOTH.

IN means that the mapping applies to incoming codes. BOTH means the mapping applies to both incoming codes and codes that you send if you are using the mapping for purposes outside of punchout or transparent punchout. Use IN if there is more than one supplier code value to map to one Oracle Applications code value. (BOTH will not work in this case.)

5. For Key 1, enter the same value that was entered in the Key 1 field on the punchout or transparent punchout setup page.

If you leave Key 1 blank, the mapping applies to all suppliers and Exchanges.

- **6.** Key 2 through Key 5 are not used.
- 7. For the Internal Value, enter the code that Oracle Applications uses.
- **8.** For the External 1 value, enter the code that Oracle Exchange or the supplier passes to you.

Recall how mapping is performed for each model:

- Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML). Enter the code that Oracle Exchange uses. Enter the Exchange code, such as EA for *each*. If you have set up data mapping on Oracle Exchange (though, typically, you would map codes such as UOM *either* in Oracle Exchange or Oracle e-Commerce Gateway), enter the mapped code. For example, if you mapped the Exchange UOM code of EA to EACH on Exchange, EACH is the code that Oracle Exchange passes to Oracle iProcurement, and you would enter EACH here.
- Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML). Enter the code the supplier uses.
- Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML). (Not applicable. The supplier sets up mapping on Oracle Exchange.)
- Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML). Enter the code the supplier uses.
- Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML). Enter the code the supplier uses, unless you have also set up data mapping on Oracle Exchange. Typically you would set up mapping *either* in Oracle Exchange or in Oracle e-Commerce Gateway, but if you performed data mapping on Oracle Exchange, use the mapped code. For example, if you mapped the Exchange UOM code of EA to EACH on Exchange, EACH is the code that Exchange passes to Oracle iProcurement, and you would enter EACH here.
- Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML). Same as Model 1 above.
- Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML). Same as Models 2a and 2b above.

- **9.** External 2 is used only where indicated in Table 2–13 below. External 3 through External 5 are not used.
- **10.** If you want to map a single internal code to more than one supplier code, create a new row for each mapping.

ategory	Description	Direction	Key 1	Internal Value	External 1	External 2	Key 5
	Punchout Cate			EXPENSE.EX			
TEM_CATEGO	Punchout Cate	IN	Supplier Inc.	MISC.MISC	Office Suppli	[
UOM	Punchout UOM	IN	OracleExcha	Each	EA		
			í ————————————————————————————————————				
 ∢							

The following table, like the illustration above, shows some examples and provides the XML tag for each mapped value:

Category	Direction	Key1	Internal Value	External 1	External 2
ITEM_ CATEGORY	IN	OracleExchange or supplier name (such as Supplier Inc.). Use the same value as entered in the Key 1 field on the punchout or transparent punchout setup page.	Internal s category code (Category field in the Category Codes window) used in Oracle Applications, such as MISC.MISC.	External category code used by the hub or supplier, such as Bond Paper, contained in the <categorycode> punchout tag or <categorycode> transparent punchout tag. Exchange places the Exchange category name in this tag (unless you used the mapping preferences on Exchange to send the category key or description).</categorycode></categorycode>	Not used.
UOM	IN	OracleExchange or supplier name (such as Supplier Inc.). Use the same value as entered in the Key 1 field on the punchout or transparent punchout setup page.	Internal UOM name used in Oracle Applications, such as Box. ¹	External UOM code used by the hub or supplier, such as BX, contained in the <supplieruomtype> punchout tag or <uomcode> transparent punchout tag.</uomcode></supplieruomtype>	If the hub or supplier provides a value, such as 12 (for Box of 12) in the <supplieruom Quantity> punchout tag, enter that value here. ²</supplieruom

Table 2–13 Example Mapping and XML Tags

1 - Oracle Applications maps to the original (untranslated, unedited) UOM name, such as Each. (In Oracle Purchasing, use the following navigation to open the Units of Measure window and view the Name field: Setup > Units of Measure > Units of Measure.)

2 - If the supplier sends a value in the <supplierUOMQuantity> punchout tag, you must provide an External 2 value; otherwise, the mapping will fail and the item will not be added to the cart.

Updates

The following sections describe updates you can perform.

Updating Punchout Setup

The following sections describe how to update punchout definitions that you downloaded from Oracle Exchange, or punchout definitions that you created directly to a supplier.

Note: Any edits that you make to the **Edit Downloaded Supplier Punchout Catalog** page require you to enter a Key 1 before submitting the edits.

To maintain downloaded punchout definitions:

- 1. Log on to Oracle iProcurement using the Catalog Administration responsibility.
- 2. Click the "eContent Manager" link.
- 3. Expand "Manage Content," then click "Catalogs."
- **4.** On the **Manage Catalogs** page, click the Edit icon for the catalog you want to edit.

A catalog that was downloaded from Oracle Exchange displays an Access Method of Punchout via Exchange.

5. The Edit Downloaded Supplier Punchout Catalog page displays as follows:

ORACLE	Home Logout Preferences Help
 ▶Load Data and Schema ♥ Manage Content • Catalogs • Non-Catalog Request Templates • Stores • Stores ▶ Download From Exchange ▶ Online Schema Maintenance 	Edit Downloaded Supplier Punchout Catalog Below are the fields you can modify for a punchout downloaded from Exchange. Enter your updates and press the Submit button when you are finished. * Indicates required field Source XML Test Exchange Access Method Punchout via Exchange Store Assignment Main Store Punchout Identification Enter information to identify the punchout. The fields in this section are language-specific. Change your session language to modify the fields in a different installed language. * Catalog Name Acme Express Description Acme Express Preparing the World for Business! Arme Express
	Keywords Separate keywords with spaces. Prevent changes to items returned from punchout site
	Mapping Enter mapping information below.
	Key 1 Supplier S
	(Cancel) (Submit)
Copyright 2004 Oracle Corpor	

- **6.** You can edit the following information, which was automatically downloaded with the punchout:
 - Catalog Name of the punchout you downloaded from Oracle Exchange.
 - Description for the punchout you downloaded from Oracle Exchange.
 - Keywords. When you first download the punchout, the keywords shown here, if any, are those the supplier entered for the punchout. You can edit or replace these entirely with your own keywords.
 - Prevent changes to items returned from punchout site. Select this option to prevent requesters from modifying the quantity of the items after they have returned the shopping cart to Oracle iProcurement. For example, the supplier may process only the quantity that was selected for the item on the supplier's site. If that were the case, then you would select this option to

prevent changes to this quantity after the item is returned to Oracle iProcurement.

 Key 1. This field identifies which UOM and category mapping rows in the Code Conversion Values window in Oracle e-Commerce Gateway to use to perform UOM and category mapping for this punchout. For Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML), it is recommended that you enter a Key 1 of OracleExchange. (Enter it as one word.)

Oracle iProcurement matches this Key 1 value to a Key 1 field in Oracle e-Commerce Gateway. Ensure that you replicate this Key 1 value in Oracle e-Commerce Gateway. (See Set Up Data Mapping in Oracle e-Commerce Gateway on page 2-69.)

Note: If no match is found between this Key 1 and the Key 1 in Oracle e-Commerce Gateway, then Oracle iProcurement uses the Oracle e-Commerce Gateway mapping associated with the blank Key 1 field in the Code Conversion Values window.

If you leave this field blank, Oracle iProcurement uses values in the XML document that the supplier sends to map to the Key 1 supplier. See Appendix E for details.

Entering a Key 1 is recommended because you, the buying company, controls the mapping. It is easier to see and maintain the mapping here than in the XML documents that the supplier sends. If you enter a value, that value is always used for the mapping rather than the value that the supplier sends in the XML document.

• Supplier and Supplier Site. Use the flashlight icon to select the supplier and supplier site in Oracle Applications with whom you are setting up the punchout. This field maps all items in this punchout to a valid supplier in Oracle Applications. This supplier and supplier site then default onto the requisition and purchase order.

If you leave this field blank, Oracle iProcurement uses values in the XML document that the supplier sends to default the supplier and site. See Appendix E for details.

Entering a Supplier and Supplier Site is recommended because you, the buying company, controls the mapping. It is easier to see and maintain the supplier mapping here than in the XML documents that the supplier sends.

These fields are not operating unit-specific. For example, if you are set up as a user in Operating Unit A, then you can select a Supplier Site that is defined only for Operating Unit B. Make sure that the requesters who will be accessing this punchout exist in an operating unit for which the Supplier Site is defined. If not, this Supplier Site will not be used. (Instead, the method described in Appendix E will be used.)

Note: Once you download a punchout, you cannot download it again. (Oracle iProcurement detects that it was already downloaded and, to avoid overwriting the original, does not download it again.) If you have to re-download a punchout, delete the original first.

To maintain direct punchout definitions:

- 1. Log on to Oracle iProcurement using the Catalog Administration responsibility.
- 2. Click the "eContent Manager" link.
- 3. Expand "Manage Content," then click "Catalogs."
- **4.** On the **Manage Catalogs** page, click the Edit icon for the catalog you want to edit.

A catalog that was created as a punchout directly to the supplier displays an Access Method of Punchout.

5. The **Edit Supplier Punchout Catalog** page displays the fields you entered while creating the direct punchout link, as shown in the following illustration.

ORACLE





Manage Catalogs and Stores Manage Catalogs

Manage Stores

Download from Exchange

Download Supplier Punchout Definition

Manage Items and Price Lists

Download Resources Bulk Load Items & Price Lists View Bulk Load Status Mass Delete

Manage Schema

Bulk Load Schema Edit Schema Build Table of Contents Map Oracle Categories

Edit Supplier Punchout (cXML) Catalog

Source Supplier Access Method Direct punchout (cXML)

Buyer Company Identification

* Identity IP Buyer Company12

Store Assignment XMLTest Store

* Domain Name

Enter catalog information using the fields below and press the Submit button when you are finished. * Indicates required field

Enter information about your company. The supplier may use this information for authentication and validation purposes



 Punchout Identification

 Enter information to identify the punchout. The fields in this section are language-specific. Change your session language to modify the fields in a different installed language.

 * Catalog Name
 CXML Supplier(DIRECT) Displayed to iProcument users.

 Description
 Image: Imag

Separate keywords with spaces

Enter the type of credential. For example, DUNS.

Enter the corresponding value of the credential

Punchout Definition

Enter information to define the punchout.

* Supplier Name	cxml seller company12
Supplier ID	
* Punchout URL	http://www.suppliercompa
	For example, http://www.suppliercompany.com/ReceiveRequest.jsp.
Image	
	Image URL such as http://www.abc.com/abc.gif, or image file name such as abc.gif.
* Password	*****
	Password provided by the supplier.
* Retype Password	*****
	\square Prevent changes to items returned from punchout site

(Cancel) Submit

See Define Supplier Punchout in Oracle iProcurement on page 2-34 for information on the fields on the **Edit Supplier Punchout Catalog** page.

6. Once you have completed your changes, click Submit, then OK.

Updating Transparent Punchout Setup

You can edit any of the fields used when first creating the transparent punchout catalog definition.

To maintain transparent punchout definitions:

- 1. Log on to Oracle iProcurement using the Catalog Administration responsibility.
- 2. Click the "eContent Manager" link.
- 3. Expand "Manage Content," then click "Catalogs."
- **4.** On the **Manage Catalogs** page, select the Edit icon next to the transparent punchout catalog you want to edit.
- 5. On the Edit Transparent Punchout Catalog page, change the desired fields.

ORACLE





Cancel) Submit

Manage Catalogs and Stores Manage Catalogs Manage Stores

Download from Exchange Download Supplier Punchout Definition

Manage Items and Price Lists

Download Resources Bulk Load Items & Price Lists View Bulk Load Status Mass Delete

Manage Schema Bulk Load Schema Edit Schema Build Table of Contents Map Oracle Categories

Map Catalog Categories

Edit	Transparent	Punchout	Catalog

Enter catalog information using the fields below and press the Submit button when you are finished.
* Indicates required field

Source Exchange Access Method Transparent Punchout Store Assignment XMLTest Store

Buyer Company Identification

Enter information about your company. The supplier may use this information for authentication and validation purposes.

* Domain Name
 Enter the type of credential. For example, DUNS.
 * Identity Oracle Corp.
 Enter the corresponding value of the credential.

Transparent Punchout Identification

Enter information to identify the transparent punchout catalog. The fields in this section are language-specific. Change your session language to modify the fields in a different installed language.

Catalog Name	Exchange Office Supplies
	Displayed to iProcument users.
Description	Desk supplies and 🛛 🔄
	paper

Transparent Punchout Definition

Enter information to define the transparent punchout catalog.

* Exchange Name	OracleExchange
	For example, OracleExchange.
✤ Transparent Punchout URL	http://www.suppliercompa
	For example, http://www.suppliercompany.com/ReceiveRequest.jsp.
\star User Name	ypoon
	Proxy user name and password on Exchange.
* Password	******
* Retype Password	****

Cancel Submit

See Define Transparent Punchout in Oracle iProcurement on page 2-43 for information on the fields on the **Edit Transparent Punchout Catalog** page.

- 6. Click Submit.
- 7. On the Confirmation page, click OK.

Changing Store Assignment of Catalogs

Catalogs must be assigned to a store to be searchable. To change the store assignment of a catalog, access the eContent Manager. Expand "Manage Content" and click the "Stores" link. Edit the store to add or remove a catalog from it. See the online Help in the eContent Manager if you need more information.

Deleting Catalogs

Deleting a catalog deletes the catalog definition. The catalog content still exists on the external site, but you have deleted the capability to access that catalog. Requesters cannot access the catalog, and you cannot access the catalog definition.

Note: If you delete a punchout to Oracle Exchange from which you downloaded punchouts, the downloaded punchouts are also deleted.

Updates

3

Controlling Access to Punchout or Transparent Punchout

This chapter includes the following topics:

- Buyer Control on page 3-1
- Supplier Control on page 3-2
- Buyer and Supplier Control on page 3-3

This chapter discusses the options that buyers and suppliers have for controlling requesters' access to the punchout or transparent punchout catalogs.

Buyer Control

The buyer can use any of the following methods to control access to a punchout or transparent punchout:

Realms

Buyers in Oracle iProcurement can use realms to control access to a punchout or transparent punchout. Realms restrict access by user or by responsibility.

The buying company can use realms for the following models:

- Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)
- Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML)
- Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML)

- Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)
- Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)
- Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)
- Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)

Instructions for setting up realms are discussed in the buyer setup.

Control Punchout Access on Oracle Exchange

The buying company can hide or display punchout catalogs using the **Control Punchout Access** page on Oracle Exchange. This page hides or displays the punchout catalog for all registered Oracle Exchange users in the buying company.

The buying company can use the **Control Punchout Access** page in the following models:

- Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML)
- Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)
- Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)

Instructions are discussed in the buyer setup on controlling punchout access on Oracle Exchange.

Supplier Control

The supplier can use any of the following methods to control access to a punchout or transparent punchout:

Authentication of XML or cXML Request

The supplier can use certain fields in the XML or cXML request to authenticate the requester. Some fields never change in a single punchout or transparent punchout,

and can be counted on to always be the same. Others vary by user. A list of these fields is provided in the appendix, for each of the following documents:

- loginRequest (XML Punchout)
- PunchOutSetupRequest (cXML Punchout)
- ItemSearchRequest (XML Transparent Punchout)

Disable a Punchout on Oracle Exchange

Suppliers can enable or disable their punchout definitions on Oracle Exchange by controlling punchout availability. This feature hides or displays their punchout catalog for anyone who accesses it on or via Oracle Exchange.

Suppliers can enable or disable punchout definitions in the following models:

- Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML)
- Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)
- Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)

Instructions are discussed in the supplier setup on configuring the punchout definition.

Buyer and Supplier Control

The following methods involve both buyer and supplier setup.

Multiple Organization Punchout or Transparent Punchout with Oracle Exchange

If the buying company has multiple organizations set up in Oracle Applications, the purchasing administrator can configure Oracle Exchange to mirror the multiple organizations setup.

Figure 3–1 illustrates multiple organizations in a punchout or transparent punchout to Oracle Exchange. Figure 3–2 illustrates multiple organizations in a punchout or transparent via Oracle Exchange to the supplier.

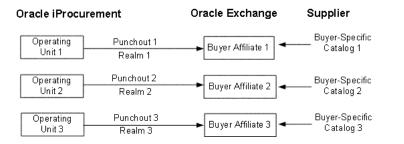
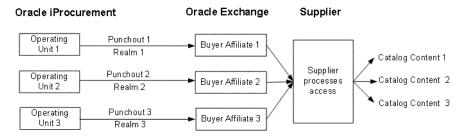


Figure 3–1 Punchout or Transparent Punchout to Oracle Exchange





Buyer Affiliates

In the following steps, assume the following scenario: the buying company's multiple organizations that are set up in Oracle Applications include the following two operating units:

- Vision Corp. Germany
- Vision Corp. USA

The supplier Acme 1 supplies goods only to Vision Corp. USA, and the supplier Acme 5 supplies goods only to Vision Corp. Germany. The buying company wants requesters (users) associated with the operating unit Vision Corp. Germany to see content only from Acme 5 when accessing Oracle Exchange. Users associated with the operating unit Vision Corp. USA should see content only from Acme 1.

Exchange Setup To accomplish a multiple organizations setup to or via Oracle Exchange, the buying company should perform the following steps on Oracle Exchange:

1. When you register your buying company on Oracle Exchange, register two companies—one for Vision Corp. Germany and one for Vision Corp. USA.

2. When you register users for your buying company on Oracle Exchange, register a proxy user for Vision Corp. Germany (you could use the user name USApunchout) and another proxy user for Vision Corp. USA (you could use the user name GERpunchout).

Oracle Applications Setup The buying company should perform the following steps in Oracle Applications and Oracle iProcurement:

- 1. Create a responsibility called (for example) Requisitioner USA.
- **2.** For the Requisitioner USA responsibility, set the profile option *MO: Operating Unit* to the operating unit Vision Corp. USA.

This step associates the Requisitioner USA responsibility with the Vision Corp. USA operating unit.

3. Create your punchout or transparent punchout for Vision Corp. USA, following the instructions for defining the punchout or transparent punchout.

You could name the punchout or transparent punchout catalog Exchange - USA. The user name and password associated with this catalog should be the same as the user name and password associated with the user you registered under Vision Corp. USA on Oracle Exchange.

- 4. Create a realm for the catalog (Exchange USA) created in the previous step.
- 5. Assign this realm to the responsibility Requisitioner USA.
- **6.** Repeat these steps for the operating unit Vision Corp. Germany.

When all of these steps are completed, the following data would exist:

Oracle Applications Operating Unit	Responsibility	Catalog	Exchange Company	Exchange User
Vision Corp. USA	Requisitioner USA	Exchange - USA	Vision Corp. USA	USApunchout
Vision Corp. Germany	Requisitioner GER	Exchange - GER	Vision Corp. Germany	GERpunchout

For a punchout or transparent punchout to Oracle Exchange When the supplier loads catalog items and pricing to the Oracle Exchange catalog, it can specify prices specifically for a buying company on Oracle Exchange. For example, Acme 5 will load prices that are visible only to Vision Corp. Germany, and Acme 1 will load prices that are visible only to Vision Corp. USA. Alternatively, a single supplier can load buyer prices that are visible only to Vision Corp. Germany and buyer prices that are visible only to Vision Corp. USA.

Furthermore, because of the realms configuration, the catalog Exchange - USA is available only to a requester who is assigned the responsibility Requisitioner USA. This requester has access only to catalog content that the supplier loaded for the company Vision Corp. USA. Similarly, the catalog Exchange - GER is available only to a requester who is assigned the responsibility Requisitioner GER. This requester has access only to catalog content that the supplier loaded for Vision Corp. Germany.

For a punchout or transparent punchout via Oracle Exchange The supplier creates specific catalogs at its site. The supplier site looks at the buyer affiliate company information sent in the login request. (For example, the supplier could process the CompanyName or From Credential.) Based on the company information, the supplier site determines whether to display one catalog or the other. For example, assume one supplier, Acme. If the company information indicates that the punchout request is coming from Vision Corp. USA, then Acme displays its Catalog Content A. If the punchout request is coming from Vision Corp. Germany, then Acme displays its Catalog Content B.

Furthermore, because of the realms configuration, the catalog Exchange - USA is available only to a requester who is assigned the responsibility Requisitioner USA. This requester has access only to catalog content that the supplier displays for the company Vision Corp. USA. Similarly, the catalog Exchange - GER is available only to a requester who is assigned the responsibility Requisitioner GER. This requester has access only to catalog content that the supplier displays for Vision Corp. Germany.

Supplier Affiliates

The supplier can also create affiliates on Oracle Exchange:

Model	Buyer Action	Supplier Action
For Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML),	Buying company creates a punchout to each supplier affiliate.	Each supplier affiliate loads its own catalog.
For Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML)	Buyer on Oracle Exchange accesses a different punchout for each supplier affiliate.	Each supplier affiliate creates its own punchout on Oracle Exchange.
For Models 4 and 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML or cXML)	Buying company downloads a punchout for each supplier affiliate.	Each supplier affiliate creates its own punchout on Oracle Exchange. Supplier must process each punchout as desired.
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Buying company creates a transparent punchout to each supplier affiliate.	Each supplier affiliate loads its own catalog.

Table 3–1 Supplier Affiliates

Multiple Organization Punchout or Transparent Punchout to Supplier

If the buying company has multiple organizations set up in Oracle Applications, the purchasing administrator may want the supplier to distinguish the requesters based on the operating unit to which they belong. For example, only requesters associated with a particular operating unit can view catalog content relevant to that operating unit.

Figure 3–3 illustrates multiple organizations in a punchout or transparent punchout directly to the supplier.

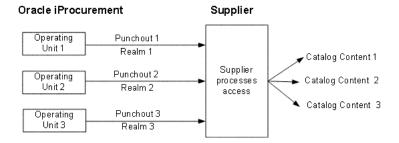


Figure 3–3 Punchout or Transparent Punchout to Supplier

Setup

Assume the following scenario: the buying company's multiple organizations that are set up in Oracle Applications include the following two operating units:

- Vision Corp. Germany
- Vision Corp. USA

Requesters (users) associated with the operating unit Vision Corp. Germany have access only to specific catalog content at the supplier site. Users associated with the operating unit Vision Corp. USA have access to different catalog content than requesters in Vision Corp. German.

To accomplish a multiple organizations punchout or transparent punchout to the supplier, the buying company should perform the following steps in Oracle Applications and Oracle iProcurement:

- **1.** Create a responsibility called (for example) Requisitioner USA and another called (for example) Requisitioner GER.
- **2.** For the Requisitioner USA responsibility, set the profile option *MO: Operating Unit* to the operating unit Vision Corp. USA.

This step associates the Requisitioner USA responsibility with the Vision Corp. USA operating unit.

3. For the Requisitioner GER responsibility, set the profile option *MO: Operating Unit* to the operating unit Vision Corp. Germany.

This step associates the Requisitioner GER responsibility with the Vision Corp. Germany operating unit.

4. Set up two punchout catalogs (or two transparent punchout catalogs) to the same supplier site, following the instructions for defining the punchout or transparent punchout.

For example, create two punchout catalogs with the following names:

- Supplier Germany
- Supplier USA
- **5.** For each punchout (or transparent punchout) setup, enter different values in the Identity field.

For example:

• For Supplier Germany, enter an Identity of VisionGermany.

• For Supplier USA, enter an Identity of VisionUSA.

For an XML punchout, enter different values in the Company Name or Company ID field.

The supplier may additionally require the buying company to enter a different Password for each punchout (or transparent punchout) setup.

6. Create a realm for the catalog Supplier USA and assign this realm to the responsibility Requisitioner USA.

This step ensures that only people using the Requisitioner USA responsibility can see the punchout.

7. Create a realm for the catalog Supplier Germany and assign the realm to the responsibility Requisitioner GER.

Oracle Applications Operating Unit	Responsibility	Catalog	Identity (cXML) or Company Name (XML)
Vision Corp. USA	Requisitioner USA	SupplierUSA	VisionUSA
Vision Corp. Germany	Requisitioner GER	SupplierGermany	VisionGermany

When all of these steps are completed, the following data would exist:

Because of the realms configuration, the requester in Vision Corp. USA, who logs into Oracle iProcurement using the Requisitioner USA responsibility, sees only the punchout catalog SupplierUSA. The requester in Vision Corp. Germany, who logs in using the Requisitioner GER responsibility sees only the punchout catalog SupplierGermany. The supplier uses the value in the appropriate field (for example, the Identity field) to determine which operating unit the requester belongs to and presents only the content relevant to that requester (or to anyone from that operating unit with access to the punchout).

Troubleshooting

This chapter covers the following topics:

- Punchout and Transparent Punchout Errors on page 4-1
- Punchout or Transparent Punchout Resolutions on page 4-6
- Automated Alerts on page 4-9
- Timeouts on page 4-12
- Location of Log Files on page 4-13
- Location of XML Files on page 4-13

Punchout and Transparent Punchout Errors

If an error occurs during the punchout or transparent punchout, an **Error** page like the following displays:



The illustration above shows the **Error** page in Oracle iProcurement. The same page displays on Oracle Exchange if there is an error during punchout:



X Error

The connection to the supplier site cannot be established at this time, please try again later. If the problem persists, please contact your system administrator.

Click here to view additional technical details of this failure.

Return to Catalog Search

To view technical or specific details about the error, click the link at the bottom of the **Error** page to display the detailed **Error** page, as shown in the following illustration:



The following table shows a complete list of punchout and transparent punchout errors you may receive on the **Error** pages; for errors without a resolution, you may need to contact your database administrator or Oracle Support Services:

Table 4–1 Punchout and Transparent Punchout Errors

Error Code	Error Description	Punchout or Transparent Punchout	Where Error Occurs	Details and Resolution
1xx	Unexpected Error			
100	Unexpected Error	Both	Exchange or iProcurement	Any error or exception not captured below.
2xx	Connection Problems			
200	Malformed Supplier Site URL		Exchange or	Malformed URL Exception when creating the URL.
			iProcurement	Check the URL entered during setup.
201	Unable To Reach Supplier Site	Both	Exchange or iProcurement	Exception when opening a URL connection or sending data.
				Check the connection. See Connectivity Issues (2xx Error Codes) on page 4-7.

Error Code	Error Description	Punchout or Transparent Punchout	Where Error Occurs	Details and Resolution	
202	Supplier Site Does Not Respond	Both	Exchange or iProcurement	Timeout exception (due to POR: Transparent Punchout Timeout Limit) when receiving response data, or no data is received from the server.	
				Check Exchange or the supplier for problems with the site itself.	
203	SSL Init Errors	Both	Exchange or iProcurement	Failure to initialize the secure socket layer (SSL) library—for example, inability to read the certification authorities (CA) file.	
				Check security setup. See Verify Access to Secure Sites on page 2-8.	
204	Server Side	Both	Exchange or iProcurement	HTTP response code received is not 200.	
	Errors			Check Exchange or the supplier for problems with the site itself.	
3xx	Database Problems				
300	Unexpected SQL Exception	Both	Exchange or iProcurement	SQLExcpetion when executing queries or inserts.	
301	Unable To Retrieve Supplier Information	Punchout	Exchange or iProcurement	Data not found when retrieving punchout information from the database for an item source identifier (ID).	
4xx	XML Format Errors				
400	Invalid XML Format In Login Response Document	Punchout	Exchange or iProcurement	XML parser exception or missing mandatory values.	
				Check Exchange or the supplier for problems with the site.	
401	Invalid XML Format In	ı	Exchange or iProcurement	XML parser exception or missing mandatory values.	
	Shopping Cart Document			Check Exchange or the supplier for problems with the site.	

Table 4–1 Punchout and Transparent Punchout Errors

Error Code	Error Description	Punchout or Transparent Punchout	Where Error Occurs	Details and Resolution	
403	Invalid XML Format In Supplier Sync Response Document	Punchout	iProcurement	XML parser exception or missing mandatory values.	
				Check Exchange or the supplier for problems with the site.	
420	Invalid XML Format in Item Search Response Document	Transparent punchout	iProcurement	XML parser exception or missing mandatory values.	
				Check Exchange or the supplier for problems with the site.	
421	Return Code Missing in Transparent Punchout Response Document	Transparent punchout	iProcurement	XML parser exception or missing mandatory values.	
				Check Exchange or the supplier for problems with the site.	
5xx	Data Mapping Errors				
500	Unexpected Error In Data Mapping	Punchout	Exchange	Any exception during mapping.	
501	Invalid Supplier	Punchout	Exchange	Currency returned or mapped is invalid on Exchange.	
	Currency			Check your currency mapping on Exchange. See Set Up Data Mapping on Oracle Exchange on page 2-16.	
7xx	Login Failures				
700	Authentication Failure	Both	Exchange or iProcurement	Incorrect user name or password; response code in XML loginResponse is A; status code in cXML PunchoutSetupResponse is 401; or status code in ItemSearchResponse is 401.	
				Check the user name and password entered during setup and any additional information in the documents that the supplier authenticates.	

 Table 4–1
 Punchout and Transparent Punchout Errors

Error Code	Error Description	Punchout or Transparent Punchout	Where Error Occurs	Details and Resolution	
701	Misc Login Failures	Both	Exchange or iProcurement	Other login failures; response code in XML loginResponse is anything other than A; status code in cXML PunchoutSetupResponse is anything other than 200 or 401; or status code in ItemSearchResponse is anything other than 200 or 401.	
8xx	Transparent Punchout Failures				
800	Misc Transparent Punchout Errors	Transparent punchout	iProcurement	Miscellaneous transparent punchout error.	
801	Sort by Criteria Not available	Transparent punchout	iProcurement	Sort-by criteria is not supported by the search server.	
				Change the sort-by criteria to one supported by the external server that is being accessed by the transparent punchout.	
802	Search Language not valid	Transparent punchout	iProcurement	Search language is not supported by the search server.	
				Change the search language to one supported by the external server that is being accessed by the transparent punchout.	
804	Search Criteria Returns Too	Transparent punchout	iProcurement	Search criteria entered by the requester returns too many matching items on the server.	
	Many Matches			Enter more detailed search criteria.	
9xx	Misc Failures				
900	Supplier Site Not	Punchout	Exchange	The supplier site has not been published on Exchange.	
	Published/ Approved			Contact the supplier to publish the punchout on Exchange using the Configure Punchout page.	

Table 4–1 Punchout and Transparent Punchout Errors

Punchout or Transparent Punchout Resolutions

Try the following tips if you experience problems with punchout or transparent punchout.

Connectivity Issues (2xx Error Codes)

Try the following tips if you experience connectivity problems:

Test the Supplier's URL

Obtain the exact catalog site location's URL from the supplier and enter that in your browser to be sure the site itself is not down. If you use proxy servers to access the site, configure the browser (if it isn't already) to access the site through the proxy servers to be sure access via the proxy servers is working.

Make Sure Proxy Profile Options Are Set Correctly

If you are conducting the punchout or transparent punchout from Oracle iProcurement and you use proxy servers to access external sites, make sure the following profile options are set to the correct proxy servers:

- POR : Proxy Server Name
- POR : Proxy Server Port

See Set Profile Options in Oracle iProcurement on page 2-22 for more information.

Test Connectivity Using Telnet

Use the telnet command to see if the server (specifically, the middle tier) can reach the server to which the punchout is being performed.

Note: This procedure does not work if your company uses proxy servers. If you use proxy servers, try the first two tips above.

In the following example, telnet is used to access Oracle Exchange from Oracle iProcurement. The port number 443 is given, indicating that this is a secure site on port number 443:

```
telnet exchange.oracle.com 443
```

If you receive feedback like the following (where xxx.xx.xx is a numeric Internet protocol (IP) address), you have connectivity:

Trying xxx.xx.xx ... Connected to www.oracleexchange.com

If you do not have connectivity, ask your network administrator to set an outbound server-to-server connection between Oracle iProcurement (or Oracle Exchange) and

the external site for HTTP and HTTPS. If you do have connectivity but still experience problems connecting—and you have checked the detailed **Error** page—look at the log files to see what else the problem may be.

Check Security Issues

If you experience problems connecting to a secure site, you may receive messages that mention SSL, handshake, or other errors relating to accessing a secure site.

If you receive errors like these, verify that the certificates file, classpath, and library path are set up correctly as described in Verify Access to Secure Sites on page 2-8.

Access Issues (7xx Error Codes)

Access issues are problems getting into the supplier Web site. The connection works, but the site is denying the requester access.

Try the following tips if you experience user access issues:

Verify User Name and Password on Oracle Exchange

If you are punching out from Oracle iProcurement to or via Oracle Exchange or conducting a transparent punchout from Oracle iProcurement to Oracle Exchange, make sure the user name and password of the requester accessing the site is valid on Oracle Exchange. Access Oracle Exchange and log in directly using the user name and password entered on the punchout or transparent punchout setup page in Oracle iProcurement.

Make Sure Requester Is an Employee

Make sure that, in Oracle Applications, the requester accessing the punchout is assigned to an employee in the Person field of the Users window. The requester must be assigned to an employee because the request document uses the employee information to provide the ship-to and deliver-to location information.

Delete and Redownload the Punchout

For Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML) or Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML), delete the downloaded punchout (using the **Manage Catalogs** page in the eContent Manager) and try to download it again.

Sometimes, the supplier may change information, causing login errors in the downloaded punchout. Deleting and re-downloading the punchout can fix these

problems. If the punchout is not displayed on the **Supplier Web Store**s page when re-downloading, then it has been disabled by the supplier.

Make Sure Punchout Access Is Enabled

If you are using Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML), Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML), or Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML), make sure you have enabled punchout access on the **Control Punchout Access** page on Oracle Exchange. (See Control Punchout Access on Oracle Exchange on page 2-20.)

Check if the Punchout Was Disabled

The supplier may have disabled its punchout. Contact the supplier. If you are using Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML), Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML), or Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML), you can check the **Control Punchout Access** page on Oracle Exchange. (See Control Punchout Access on Oracle Exchange on page 2-20.) That page will show whether the supplier disabled its punchout.

Other Issues (Other Error Codes)

For other types of errors, see Table 4–1.

If a "Supplier website is not responding" message displays to the requester, the error is likely a connection problem (2xx error codes) or the 800 error code for transparent punchout.

Except for 801, 802, and 804 error codes, which display the corresponding error on the **Search Results Summary** page, transparent punchout errors typically display a "Search results cannot be retrieved" error message. You must then click the error message link to view the details of the error.

Automated Alerts

You can set up Oracle Applications to alert you when there is a problem with a punchout. For example, if a connection cannot be established while accessing the punchout or if the supplier returns a shopping cart item that does not have a unit of measure, then an error occurs. The system administrator can set up Oracle

Applications to be alerted of these errors at the same time that requesters encounter them.

Set Up Alerts

To set up alerts for these messages, do the following:

- 1. In Oracle Applications, access the Application Developer responsibility.
- Access the Messages window using the following navigation: Application > Messages.
- **3.** Query the messages in Table 4–2, by Message Name.
- **4.** Set the Alert Category and Alert Severity for each message that you want to be an alert.

See the Oracle Applications Developer's Guide for more information.

Monitor Alerts

To monitor the alerts, do the following:

- 1. In Oracle Applications, access the System Administration responsibility.
- 2. In the Oracle Applications Manager, access System Alerts.

For more information, see the online Help for the Oracle Applications Manager or the *Oracle Applications System Administrator's Guide*.

Punchout and Transparent Punchout Alerts

The punchout and transparent punchout error message that can be set up as alerts are listed in Table 4–2. Except where noted in Table 4–2, the messages are not the same errors that display on the **Error** pages in Table 4–1. In the alert, the full text of each error message includes the name of the punchout catalog that has the problem so that the administrator can quickly identify the catalog that is in error.

Message Name	Punchout or Transparent Punchout	Explanation of Message	
ICX_CAT_PNCH_SUPPL_ SITE_DOWN	Punchout	Connection to the supplier Web site cannot be established.	
		This alert appears when error code 200, 201, 203, or 204 occurs. Access the Error page for details about the error.	
ICX_CAT_PNCH_SUPPL_	Punchout	Supplier Web site is not responding.	
SITE_NO_RES		This alert appears when error code 202 occurs. Access the Error page for details about the error.	
SYNC_ERROR catalo		Supplier information (that is, the punchout catalog definition) cannot be downloaded from Oracle Exchange.	
ICX_CAT_PNCH_CART_	Punchout	Shopping cart cannot be returned.	
CANT_RETURN		This alert appears when error code 401 occurs. For example, if a required element in the XML or cXML shopping cart is not included, or the XML or cXML is malformed, then the shopping cart will fail to be returned. Access the Error page for details about the error.	
ICX_POR_NO_EXT_ CATEGORY	Punchout	Item cannot be added to the cart because the supplier did not provide a category code.	
ICX_POR_INVALID_EXT_ CATEGORY	Punchout	Item cannot be added to the cart because the category is not configured for purchasing. (That is, the category has not been mapped, or is mapped to an invalid category.)	
		Item cannot be added to the cart because the supplier did not provide an item description.	
ICX_POR_PUNCHOUT_ NO_CURRENCY	Punchout	Item cannot be added to the cart because the supplier did not provide a currency code.	
ICX_POR_NO_ PUNCHOUT_MAP_KEY	Punchout	Item cannot be added to the cart because the supplier did not provide a Key 1 value.	
ICX_POR_NO_EXT_UOM	Punchout	Item cannot be added to the cart because the supplier did not provide a unit of measure.	

 Table 4–2
 Messages That Can Be Set As Alerts

Message Name	Punchout or Transparent Punchout	Explanation of Message	
ICX_POR_INVALID_EXT_ Punchout UOM		Item cannot be added to the cart because the item's unit of measure is not configured for purchasing. (That is, the UOM has not been mapped, or is mapped to an invalid UOM.)	
ICX_CAT_DIST_SEARCH_ 1_ADMIN	Transparent punchout	Connection to the supplier Web site cannot be established.	
		This alert appears when error code 200, 201, 203, or 204 occurs. Access the Error page for details about the error.	

Table 4–2 Messages That Can Be Set As Alerts

Timeouts

Setup in Oracle iProcurement includes establishing an idle time—a period of inactivity after which Oracle iProcurement logs out the user. (This setup is performed using the ICX:Session Timeout profile option.) While the requester is shopping on Oracle Exchange or the external site, Oracle iProcurement is considered idle. If the requester's session times out before finishing shopping at the external site, when the requester returns to Oracle iProcurement, iProcurement prompts the requester to log in again, resumes the session, and retains the requester's shopping cart items. The requester can continue adding items to the cart or checking out the items.

If you are punching out from Oracle iProcurement directly to Oracle Exchange, you can set an option to extend the session so that the logout does not occur. See Table 2–8 in Define Oracle Exchange Punchout in Oracle iProcurement on page 2-25. The same option exists when punching out from Oracle iProcurement directly to the supplier (see Table 2–9 in Define Supplier Punchout in Oracle iProcurement on page 2-34); however, the supplier must set up its site to make use of this option. (Oracle Exchange makes use of it automatically when you choose it.)

If Oracle Exchange times out in a punchout from Oracle iProcurement, Oracle Exchange returns the requester to Oracle iProcurement, and the shopping cart is preserved.

Note: In addition to ICX:Session Timeout, there is also a Java server (Jserv) timeout associated with Oracle iProcurement. This timeout is typically longer than the ICX:Session Timeout and is designed for long periods of inactivity (for example, when you log on to Oracle iProcurement, then leave your desk). If the Jserv timeout occurs, the shopping cart is not preserved as described above.

If Oracle Exchange times out in a punchout from Oracle Exchange to a supplier, the shopping cart is not preserved. The Oracle Exchange timeout is a Jserv timeout. The timeout can be changed by the Oracle Exchange installation team, but it is typically 30 minutes.

Location of Log Files

The first place to look for information on errors is the detailed **Error** page; however, if you need further details, you can obtain error and debug information as follows.

In Oracle iProcurement, the administrator can use the Diagnostics icon at the top of the page, if the FND Diagnostics profile option is turned on.



In Oracle Exchange, the Exchange Operator can use the following log file to help resolve punchout or transparent problems: \$APACHE_TOP/logs/exchange_jserv.log.

Location of XML Files

If you have problems with the punchout or transparent punchout that you can't solve by using the **Error** pages, it may be helpful to review the XML files.

All punchout and transparent punchout XML files are stored in a directory when debugging is turned on using the FND Debug profile options:

- In Oracle Exchange, the XML and cXML files are stored in the punchout subdirectory, in the catalogUploadDir directory, if the oexDebugMode is set to Y in the Jserv properties file. The files are named using the following format: DOCNAME- [FROM/TO] PARTYID-TIMESTAMP.xml. The PARTYID is the Trading Partner ID for the registered company on Oracle Exchange. (In the Welcome tab on Oracle Exchange, click "Trading Partner Directory" in the task bar directly below the tab. Search for the company to find the Trading Partner ID.) The catalogUploadDir directory is the Catalog Directory specified on the Software Setup page when you log in as the System Operator.
- In Oracle iProcurement, the XML and cXML files are stored in the punchout subdirectory, in the directory specified in the profile option POR: Catalog Bulk Load Directory. The files are named using the following format: DOCNAME- [FROM/TO] - PARTYID-TIMESTAMP.xml. The PARTYID is the item source ID assigned to the punchout setup.

A

Detailed Punchout and Transparent Punchout Process

This appendix expands on Chapter 1 by describing the punchout process in more detail for each model:

- Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML) on page A-1
- Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML) on page A-5
- Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML) on page A-8
- Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML) on page A-10
- Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML) on page A-13
- Models 1 and 2: Transparent Punchout to Oracle Exchange or Supplier (XML) on page A-17

Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)

The following diagram shows the flow for Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML).

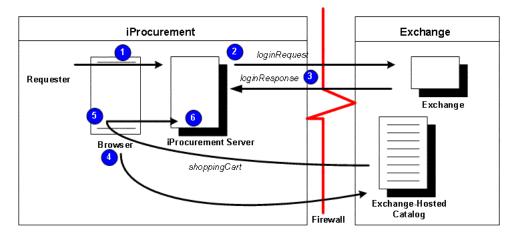


Figure A–1 Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)

The following sections describe the steps in Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML) in detail.

1 Requester logs on to Oracle iProcurement

The requester logs on to Oracle iProcurement.

2 Requester clicks punchout link to Oracle Exchange

From Oracle iProcurement, the requester clicks a punchout link to Oracle Exchange. When the requester clicks the link, the browser connects to the Oracle iProcurement server.

The Oracle iProcurement server first calls Oracle secure socket layer (SSL) application programmable interfaces (APIs) to establish a secure connection with Oracle Exchange, if Oracle Exchange is secure. (Exchange.Oracle.com is a secure site.) The APIs request the Certification Authority (CA) digital certificate from Oracle Exchange. This digital certificate is compared to certificate authorities stored in the ca-bundle.crt file in Oracle iProcurement. (See Appendix C for more information on how secure connections work.)

After the secure connection is established, the Oracle iProcurement server generates the *loginRequest* XML document, which includes a base set of user details and the return URL for the Oracle iProcurement instance. Oracle iProcurement passes this XML document to the Oracle Exchange site in an HTTP request using the POST format.

3 Oracle Exchange authenticates requester and returns response

Oracle Exchange receives the loginRequest and authenticates the Oracle iProcurement requester. (When the buyer sets up punchout access as described in this guide, this logon is invisible to the requester; the requester does not physically log on again to Oracle Exchange.) The user name and password used to authenticate the requester are the same as the proxy user name and password that the Oracle iProcurement administrator created when registering the proxy user on Oracle Exchange.

Once the requester is authenticated, Oracle Exchange generates the *loginResponse* XML document and sends it to Oracle iProcurement in an HTTP response.

Oracle Exchange is *session-aware*. Although individual requesters access Oracle Exchange with the same proxy user account, Oracle Exchange treats each logon as its own session and allows multiple punchout requesters from a single buying company to punch out to Oracle Exchange at the same time. The session key is provided in the <loginURL> tag of the loginResponse document.

4 Oracle iProcurement redirects browser to Oracle Exchange for shopping

Now that a secure and trusted connection is established and the requester has been assigned a session, Oracle iProcurement redirects the requester's browser to the shopping page on Oracle Exchange. There, the requester is allowed to search for and add items to the shopping cart on Oracle Exchange. The Oracle Exchange functionality available to the requester is based on the job functions that the Oracle iProcurement administrator assigned to the proxy user when registering the proxy user on Oracle Exchange.

Oracle Exchange detects that the shopper is from Oracle iProcurement and provides a Done Shopping button when the requester is finished adding items to the shopping cart. (If the buyer has set up data mapping on Oracle Exchange, Exchange performs the data mapping when the buyer clicks Done Shopping.)

5 Requester finishes shopping; Oracle Exchange returns cart to Oracle iProcurement

When the requester finishes adding items to the cart on Oracle Exchange and clicks Done Shopping, the Oracle Exchange session is dropped and the requester is logged out of Oracle Exchange. Oracle Exchange also returns the shopping cart to the Oracle iProcurement server via the requester's browser. The return to the requester's browser is invisible to the requester. Specifically, the browser uses the HTML FORM POST action to pass the items in the shopping cart to

Oracle iProcurement using the parameter oracleCart. (The oracleCart parameter contains the entire shopping cart contents.) The cart is contained in a hidden form field. To post the shopping cart items, the FORM POST uses the return URL that Oracle iProcurement sent in the loginRequest document.

Oracle Exchange URL-encodes and returns the shopping cart information to Oracle iProcurement in the *shoppingCart* XML document.

Note: Requesters cannot add To Be Determined priced items to their carts when punching out to Oracle Exchange. Oracle Exchange allows suppliers to specify To Be Determined (TBD) prices for items; however, items without prices are not permitted in Oracle iProcurement. Oracle Exchange automatically disallows adding TBD items to Oracle iProcurement requesters' shopping carts.

6 Requester completes checkout; Oracle iProcurement processes order

Oracle iProcurement adds the items to the requisition. It also references Oracle e-Commerce Gateway to see if code conversion (mapping) is set up; if it is, Oracle e-Commerce Gateway performs the required conversions between the external code values coming from the supplier and the internal code values set up in Oracle Applications. If the Oracle iProcurement administrator, in the eContent Manager, set the option to prevent modifications to items for that punchout definition, then the requester cannot make changes to the items returned from the punchout.

Oracle iProcurement converts the currency in which the items are priced to the functional currency used by Oracle iProcurement.

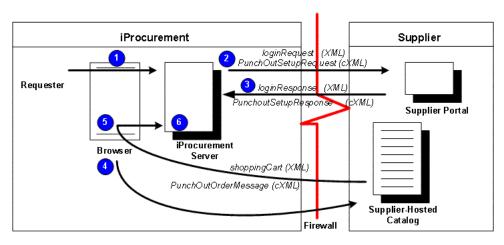
If the category of the item has an information template associated with it, a link displays next to the item in the cart just before checkout. If the information template has required fields, the requester must click the link to access the template before being allowed to check out.

The requisition then goes through the normal workflow, approval, and purchase order processes configured in Oracle iProcurement and Oracle Purchasing.

Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML)

The following diagram shows the flow for Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML).

Figure A–2 Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML)



The following sections describe the steps in Models 2a and 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML or cXML) in detail.

1 Requester logs on to Oracle iProcurement

The requester logs on to Oracle iProcurement.

2 Requester clicks punchout link to supplier site

From Oracle iProcurement, the requester clicks a punchout link to the supplier site. When the requester clicks the link, the browser connects to the Oracle iProcurement server.

If punching out to a secure supplier site, the Oracle iProcurement server first calls Oracle secure socket layer (SSL) application programmable interfaces (APIs) to establish a secure connection with the site. The APIs request the Certification Authority (CA) digital certificate from the secure supplier site. This digital certificate is compared to certificate authorities stored in the ca-bundle.crt file in Oracle iProcurement.

After the connection is established, Oracle iProcurement generates the *loginRequest* XML document, which includes a base set of user details and the return URL for the Oracle iProcurement instance. (This XML document can contain additional user details if the option in the eContent manager punchout setup pages in Oracle iProcurement was selected to send additional details.) If the supplier uses cXML, Oracle iProcurement sends the *PunchOutSetupRequest* cXML document to the supplier site. Oracle iProcurement passes the request document to the supplier site in an HTTP request using the POST format.

3 Supplier authenticates requester and returns response

The supplier receives the loginRequest document (or PunchOutSetupRequest cXML document) and authenticates the Oracle iProcurement requester. (When the supplier sets up access to its site as described in this guide, this logon is invisible to the requester; the requester does not physically log on again to the supplier site.) Next, the supplier must generate the *loginResponse* XML document accepting the requester's logon. If the supplier uses cXML, the supplier generates a response in the form of a *PunchOutSetupResponse* cXML document. The response must be sent in an HTTP response.

It is recommended that the supplier site be *session-aware* or have some other method for distinguishing logons to its site. The Oracle iProcurement setup for the buyer typically creates one logon user account—a single proxy user name that is used by all requesters in the company to access the supplier site. In this case, the supplier should use a session key to assign to each login made by that account, using the URL in the response document, or develop some other method to allow multiple users with the same login account to access its site at one time. For example, the supplier can use some other unique identifier sent with the user's information, in addition to the single login account, to identify the user.

4 Oracle iProcurement redirects browser to supplier site for shopping

Now that a secure and trusted connection is established, Oracle iProcurement redirects the requester's browser to the supplier site—to the login URL provided by the supplier. Now the requester is allowed to search for and add items to the shopping cart on the supplier site.

5 Requester finishes shopping; supplier site returns cart to Oracle iProcurement

When the requester finishes adding items to the cart on the supplier site, the supplier site returns the shopping cart to the Oracle iProcurement server via the requester's browser. The return to the requester's browser is invisible to the requester. Specifically, the browser uses the HTML FORM POST action to pass the items in the shopping cart to Oracle iProcurement. The cart must be contained in a hidden form field. To post the shopping cart items, the FORM POST must use the return URL that Oracle iProcurement sent in the loginRequest document. The parameter for the post should be oracleCart. (The oracleCart parameter contains the entire shopping cart contents.)

The supplier site must return the shopping cart information in a url-encoded *shoppingCart* XML document. If using cXML, the supplier site returns the shopping cart information to Oracle iProcurement in the *PunchOutOrderMessage* cXML document. See the *cXML User's Guide* at http://www.cxml.org for more information on cXML requirements.

6 Requester completes checkout; Oracle iProcurement processes order

Oracle iProcurement adds the items to the requisition. It also references Oracle e-Commerce Gateway to see if code conversion (mapping) is set up; if it is, Oracle e-Commerce Gateway performs the required conversions between the external code values coming from the supplier and the internal code values set up in Oracle Applications. If the Oracle iProcurement administrator, in the eContent Manager, set the option to prevent modifications to items for that punchout definition, then the requester cannot make changes to the items returned from the punchout.

Oracle iProcurement converts the currency in which the items are priced to the functional currency used by Oracle iProcurement.

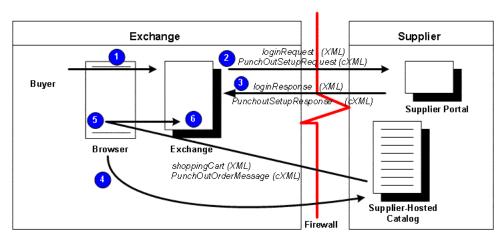
If the category of the item has an information template associated with it, a link displays next to the item in the cart just before checkout. If the information template has required fields, the requester must click the link to access the template before being allowed to check out.

The requisition then goes through the normal workflow, approval, and purchase order processes configured in Oracle iProcurement and Oracle Purchasing.

Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML)

The following diagram shows the flow for Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML).

Figure A–3 Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML)



The following sections describe the steps in Models 3a and 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML or cXML) in detail.

1 Buyer logs on to Oracle Exchange

The buyer logs on to Oracle Exchange.

2 Buyer clicks punchout link to supplier site

On Oracle Exchange, the buyer clicks a punchout link directly to the supplier site from the **Shopping** home page or **Search Results** page. When the buyer clicks the link, the browser connects to the Oracle Exchange server, which establishes a connection to the supplier site.

If the supplier site is a secure site, Oracle Exchange first calls Oracle secure socket layer (SSL) application programmable interfaces (APIs) to establish a secure connection with the site. The APIs request the Certification Authority

(CA) digital certificate from the site. This digital certificate is compared to certificate authorities stored in the pomdigcrt.txt file in Oracle Exchange.

After the connection is established, Oracle Exchange generates the *loginRequest* XML document, which includes a base set of user details and the return URL for Oracle Exchange. Oracle Exchange passes this XML document to the supplier site. If the supplier uses cXML, Oracle Exchange passes the *PunchOutSetupRequest* cXML document to the supplier site.

3 Supplier authenticates buyer

The supplier receives the loginRequest XML document (or PunchOutSetupRequest cXML document) and authenticates the buyer. (When the supplier sets up access to its site as described in this guide, this logon is invisible to the buyer; the buyer does not physically log on again to the supplier site.) Next, the supplier must generate the *loginResponse* XML document and send the document back to Oracle Exchange to accept the buyer's logon. If the supplier uses cXML, the supplier generates a response in the form of a *PunchOutSetupResponse* cXML document. The response must be sent in an HTTP response.

4 Oracle Exchange redirects buyer's browser to supplier site for shopping

Now that a secure and trusted connection is established, Oracle Exchange redirects the requester's browser to the supplier site—to the login URL provided by the supplier. Now the requester is allowed to search for and add items to the shopping cart on the supplier site.

5 Buyer finishes shopping; supplier site returns cart to Oracle Exchange

When the buyer finishes adding items to the cart on the supplier's site, the supplier site returns the shopping cart to the Oracle Exchange server via the buyer's browser. The return to the buyer's browser is invisible to the buyer. Specifically, the browser uses the HTML FORM POST action to pass the items in the shopping cart to the Oracle Exchange server. The cart must be contained in a hidden form field. To post the shopping cart items, the FORM POST must use the return URL that Oracle Exchange sent in the loginRequest document. The parameter for the post should be oracleCart. (The oracleCart parameter contains the entire shopping cart contents.)

The supplier site must return the shopping cart information in a url-encoded *shoppingCart* XML document. If using cXML, the supplier site returns the

shopping cart information to Oracle Exchange in the *PunchOutOrderMessage* cXML document. See the *cXML User's Guide* at http://www.cxml.org for more information on cXML requirements.

6 Buyer completes checkout process; Oracle Exchange processes order

Oracle Exchange adds the items to the order. If the buyer and supplier companies have set up data mapping on Oracle Exchange, Exchange performs data mapping at this step, when the cart is returned to the Oracle Exchange server for processing.

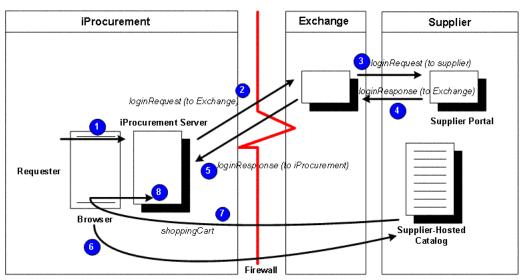
If the items are priced in different currencies, Oracle Exchange creates one order for each currency.

The buyer cannot make changes to the punchout items on the order.

Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)

The following diagram shows the flow for Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML).





The following sections describe the steps in Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML) in detail.

1 Requester logs on to Oracle iProcurement

The requester logs on to Oracle iProcurement.

2 Requester clicks punchout link to supplier site

From Oracle iProcurement, the requester clicks a punchout link to the supplier site. The link goes through Oracle Exchange. When the requester clicks the link, the browser connects to the Oracle iProcurement server, which establishes a secure connection to Oracle Exchange (if the Exchange is secure) and requests the digital certificate from Oracle Exchange. (Exchange.Oracle.com is a secure site.)

The Oracle iProcurement server first calls Oracle secure socket layer (SSL) application programmable interfaces (APIs) to establish a secure connection with Oracle Exchange. The APIs request the Certification Authority (CA) digital certificate from Oracle Exchange. This digital certificate is compared to certificate authorities stored in the ca-bundle.crt file in Oracle iProcurement.

After the secure connection is established, Oracle iProcurement generates the *loginRequest* XML document, which includes a base set of user details and the return URL for the Oracle iProcurement instance. Oracle iProcurement passes this XML document to the Oracle Exchange site in an HTTP request using the POST format. When the punchout is set up as described in this guide, this logon is invisible to the requester; the requester does not physically log on again to Oracle Exchange.

3 Oracle Exchange authenticates requester

Oracle Exchange receives the loginRequest and authenticates the Oracle iProcurement user. The user name and password used to authenticate the requester are the same as the proxy user name and password that the Oracle iProcurement administrator created when registering the proxy user on Oracle Exchange.

Oracle Exchange then uses Oracle SSL APIs to establish a secure connection to the supplier site (if the site requires), opens a connection between itself and the supplier site, and generates the *loginRequest* XML document in an HTTP request using the POST format. The document includes the site-level password that the supplier requires to access its Web catalog, the Oracle iProcurement return URL,

and the Oracle iProcurement user and company details that were in the initial loginRequest from Oracle iProcurement to Oracle Exchange.

Note: The supplier creates the site-level password on Oracle Exchange. The Oracle iProcurement administrator does not need to store or maintain this information.

It is recommended that the supplier site be *session-aware* or have some other method for distinguishing logons to its site. The Oracle iProcurement setup for the buyer typically creates one logon user account—a single proxy user name that is used by all requesters in the company to access the supplier site. In this case, the supplier should use a session key to assign to each login made by that account, using the <loginURL> tag of the loginResponse document, or develop some other method to allow multiple users with the same login account to access its site at one time. For example, the supplier can use some other unique identifier sent with the user's information, in addition to the single login account, to identify the user.

4 Supplier site responds to Oracle Exchange

The supplier site generates a response in the form of a *loginResponse* XML document that contains the login URL with session information for the supplier's site.

The supplier site returns the loginResponse document to Oracle Exchange.

5 Oracle Exchange forwards supplier site response to Oracle iProcurement

Oracle Exchange then sends a *loginResponse* document to Oracle iProcurement. The LoginResponse XML document contains the URL that the Oracle iProcurement requester will use to connect to the supplier site.

6 Oracle iProcurement redirects browser to supplier site for shopping

Using the login URL provided in the loginResponse XML document, Oracle iProcurement redirects the Oracle iProcurement requester's browser to the supplier site using the supplier's login URL. The requester is allowed to search for and add items to the shopping cart on the supplier site.

7 Requester finishes shopping; supplier site returns cart to Oracle iProcurement

When the requester finishes adding items to the cart on the supplier site, the supplier site returns the shopping cart to the Oracle iProcurement server via the requester's browser. The return to the requester's browser is invisible to the requester. Specifically, the browser uses the HTML FORM POST action to pass the items in the shopping cart to Oracle iProcurement. The cart must be contained in a hidden form field. To post the shopping cart items, the FORM POST must use the return URL that Oracle iProcurement sent in the loginRequest document. The parameter for the post should be oracleCart. (The oracleCart parameter contains the entire shopping cart contents.)

The supplier site returns the shopping cart information to Oracle iProcurement in the *shoppingCart* XML document. This document must be url-encoded.

8 Requester completes checkout; Oracle iProcurement processes order

Oracle iProcurement adds the items to the requisition. It also references Oracle e-Commerce Gateway to see if code conversion (mapping) is set up; if it is, Oracle e-Commerce Gateway performs the required conversions between the external code values coming from the supplier and the internal code values set up in Oracle Applications. (This model does not use Oracle Exchange data mapping.) If the Oracle iProcurement administrator, in the eContent Manager, set the option to prevent modifications to items for that punchout definition, then the requester cannot make changes to the items returned from the punchout.

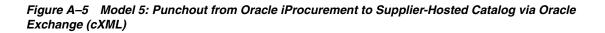
Oracle iProcurement converts the currency in which the items are priced to the functional currency used by Oracle iProcurement.

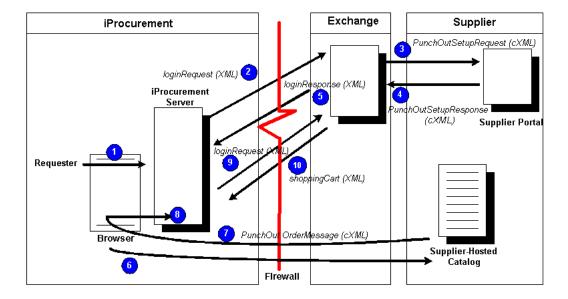
If the category of the item has an information template associated with it, a link displays next to the item in the cart just before checkout. If the information template has required fields, the requester must click the link to access the template before being allowed to check out.

The requisition then goes through the normal workflow, approval, and purchase order processes configured in Oracle iProcurement and Oracle Purchasing.

Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)

The following diagram shows the flow for Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML).





The following sections describe the steps in Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML) in detail.

1 Requester logs on to Oracle iProcurement

The requester logs on to Oracle iProcurement.

2 Requester clicks punchout link to supplier site

From Oracle iProcurement, the requester clicks a punchout link to the supplier site. The punchout goes through Oracle Exchange. When the requester clicks the link, the browser connects to the Oracle iProcurement server, which establishes a secure connection to Oracle Exchange (if the Exchange is secure) and requests the digital certificate from Oracle Exchange. (Exchange.Oracle.com is a secure site.)

The Oracle iProcurement server first calls Oracle secure socket layer (SSL) application programmable interfaces (APIs) to establish a secure connection with Oracle Exchange. The APIs request the Certification Authority (CA) digital

certificate from Oracle Exchange. This digital certificate is compared to certificate authorities stored in the ca-bundle.crt file in Oracle iProcurement.

After the secure connection is established, Oracle iProcurement generates the *loginRequest* XML document, which includes a base set of user details and the return URL for the Oracle iProcurement instance. Oracle iProcurement passes this XML document to the Oracle Exchange site in an HTTP request using the POST format. When the punchout is set up as described in this guide, this logon is invisible to the requester; the requester does not physically log on again to Oracle Exchange.

3 Oracle Exchange authenticates requester

Oracle Exchange receives the loginRequest and authenticates the Oracle iProcurement requester. The user name and password used to authenticate the requester are the same as the proxy user name and password that the Oracle iProcurement administrator created when registering the proxy user on Oracle Exchange.

Oracle Exchange then uses Oracle SSL APIs to establish a secure connection to the supplier site (if the site requires), opens a connection between itself and the supplier site, and generates the *PunchOutSetupRequest* cXML document. The document includes the site-level password that the supplier requires to access its Web catalog, the Oracle iProcurement return URL, and the Oracle iProcurement user and company details that were in the initial loginRequest from Oracle iProcurement to Oracle Exchange.

Note: The supplier creates the site-level password on Oracle Exchange. The Oracle iProcurement administrator does not need to store or maintain this information.

It is recommended that the supplier site be *session-aware* or have some other method for distinguishing logons to its site. The Oracle iProcurement setup for the buyer typically creates one logon user account—a single proxy user name that is used by all requesters in the company to access the supplier site. In this case, the supplier should use a session key to assign to each login made by that account, using the URL in the punchout response document, or develop some other method to allow multiple users with the same login account to access its site at one time. For example, the supplier can use some other unique identifier sent with the user's information, in addition to the single login account, to identify the user.

4 Supplier site responds to Oracle Exchange

The supplier site then generates a response in the form of a *PunchOutSetupResponse* cXML document, which contains the login URL with session information for the supplier's site. The supplier site returns the PunchOutSetupResponse document to Oracle Exchange.

5 Oracle Exchange forwards supplier site response to Oracle iProcurement

Oracle Exchange then uses the PunchOutSetupResponse to generate the *loginResponse* XML document, and sends the loginResponse document to Oracle iProcurement. The loginResponse XML document contains the URL that the Oracle iProcurement requester will use to connect to the supplier site.

6 Oracle iProcurement redirects requester's browser to supplier site for shopping

Using the login URL provided in the loginResponse XML document, Oracle iProcurement redirects the Oracle iProcurement requester's browser to the supplier site using the supplier's login URL. The requester is allowed to search for and add items to the shopping cart on the supplier site.

7 Requester finishes shopping; supplier site returns cart to Oracle iProcurement

When the requester finishes adding items to the cart on the supplier site, the supplier site returns the shopping cart to the Oracle iProcurement server via the requester's browser. The return to the requester's browser is invisible to the requester. Specifically, the browser uses the HTML FORM POST action to pass the items in the shopping cart to Oracle iProcurement, using the return URL that Oracle iProcurement sent during the initial punchout. The cart must be contained in a hidden form field. The parameter for the post should be cxml-urlencoded. (The cxml-urlencoded parameter contains the entire shopping cart contents.)

The supplier site returns the shopping cart information to Oracle iProcurement in the *PunchOutOrderMessage* cXML document. See the *cXML User's Guide* at http://www.cxml.org for more information on cXML requirements.

8 Shopping cart goes to Oracle iProcurement

The cxml-urlencoded parameter used to post the shopping cart lets Oracle iProcurement know this is a cXML shopping cart.

9 Oracle iProcurement redirects cart to Oracle Exchange for conversion

To convert the PunchOutOrderMessage cXML document to XML, Oracle iProcurement receives and redirects the shopping cart to Oracle Exchange. Oracle iProcurement establishes a secure and trusted connection with Oracle Exchange, then forwards the cXML shopping cart to Oracle Exchange via the *loginRequest* document.

10 Oracle Exchange converts the cart to XML and returns it to Oracle iProcurement

Oracle Exchange then converts the shopping cart from cXML to XML and does the code conversions (UOM, currency, and trading partner data mapping), if any, defined on Oracle Exchange.

Oracle Exchange then returns the shopping cart in the form of the *shoppingCart* XML document to Oracle iProcurement for processing, approval routing, and purchase order creation.

If the Oracle iProcurement administrator has set up data mapping in Oracle e-Commerce Gateway, e-Commerce Gateway performs data mapping at this step, when the cart is returned to the Oracle iProcurement server for processing.

If the category of the item has an information template associated with it, a link displays next to the item in the cart just before checkout. If the information template has required fields, the requester must click the link to access the template before being allowed to check out.

Oracle iProcurement converts the currency in which the items are priced to the functional currency used by Oracle iProcurement.

The requisition then goes through the normal workflow, approval, and purchase order processes configured in Oracle iProcurement and Oracle Purchasing.

Models 1 and 2: Transparent Punchout to Oracle Exchange or Supplier (XML)

The following diagram shows the flow for Models 1 and 2: Transparent Punchout to Oracle Exchange or Supplier (XML).

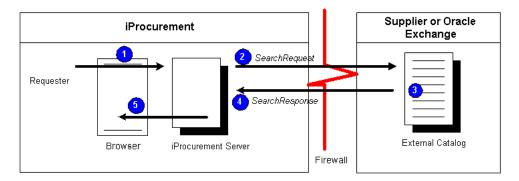


Figure A–6 Models 1 and 2: Transparent Punchout to Oracle Exchange or Supplier (XML)

The following sections describe the steps in Models 1 and 2: Transparent Punchout to Oracle Exchange or Supplier (XML) in detail.

1 Requester conducts search in Oracle iProcurement

If you have configured stores in the eContent Manager, the requester selects a store before searching. Otherwise, the requester enters a search term into the default or favorite store.



2 Oracle iProcurement sends search request XML document to site

If the store includes a transparent punchout catalog, Oracle iProcurement sends a search request XML document to the external site.

First, the browser connects to the Oracle iProcurement server. The Oracle iProcurement server then calls Oracle secure socket layer (SSL) application programmable interfaces (APIs) to establish a secure connection with the site, if the site is secure. (Exchange.Oracle.com is a secure site.) The APIs request the Certification Authority (CA) digital certificate from the site. This digital certificate is compared to certificate authorities stored in the ca-bundle.crt file in Oracle iProcurement. (See Appendix C for more information on how secure connections work.)

After the secure connection is established, the Oracle iProcurement server generates the *ItemSearchRequest* XML document, which includes a base set of user details for the Oracle iProcurement instance. Oracle iProcurement passes this XML document to the site via an HTTP request using the POST format.

3 Site processes request and generates search results

The external site receives the ItemSearchRequest document, authenticates the Oracle iProcurement requester, and generates search results.

The supplier can optionally return an authenticated key in the ItemSearchResponse document using the <AuthenticatedKey> field. When Oracle iProcurement receives this key, it includes the key in every subsequent search request to this supplier. The supplier site can validate the key against the key it previously sent and therefore does not need to authenticate the user again. Use of the authenticated key improves the performance of the transparent punchout.

Suppliers with Web stores typically also have a search engine for that store. The supplier site should construct a query from the search criteria in the ItemSearchRequest document and use the search engine to execute the search request. Alternatively, the site can execute the search request on the catalog directly (as long as the search results are returned in the ItemSearchResponse document).

4 Site returns search results XML document to Oracle iProcurement

The site returns the search results XML document to the Oracle iProcurement server in the HTTP response. The supplier site must return the search results

information in the *ItemSearchResponse* XML document. See Appendix B for a detailed description of the ItemSearchResponse XML document.

Note: To optimize search performance, transparent punchout does not display the Functional Currency or Functional Currency Price descriptors on the **Search Results** page even if you set them up this way using schema editing.

In a transparent punchout to Oracle Exchange, Oracle iProcurement does not honor price breaks the supplier may have created on Oracle Exchange.

5 Oracle iProcurement displays search results

Oracle iProcurement uses the search results XML document from the external site to display search results in Oracle iProcurement.

ORACL	🗧 iProcurement	S	hopping Cart Home Logout Preferences Help				
			Shop Requis	itions Receiving Contractors			
Stores Categories Shopping Lists Non-Catalog Request Contractor Request							
Search Office Su	pplies	Go Advanced Search		Shop Other Stores			
				Shopping Cart			
Search Res	uits Summary from	Regular Office Supplie		Your cart is empty.			
		2	/iew all results from Regular Office Supp	olies			
(Hide Images)				Compare Items			
	Standard Classification Folde	<u>rrs, Legal, Blue</u>		No items selected.			
	Ideal for case histories, tax re						
	durable Pressboard bonded v inner partitions.	vith long-lasting Tyvek® gussets. 2"	" metal fasteners are on the 2, 17 pt. kr	aft Catalog Language			
				Your current catalog language:			
	Category: File Folders	Supplier: Acme Supplies	Supplier Item: FDR-0008	American English Change Catalog Language			
	Manufacturer: National Supplies	Manufacturer Item:	Contract Number:				
	Price: 4.95 USD	Unit: Each					
	Quantity 1 (Add to C	lart	(Add to Favorites) (Add to Compa	are)			
	Hanging Partition Fastener F	olders, Ruby Red					
	Durable 25-point pressboard	covers in 4 bright colors. 6 separate	filing sections for documents and				
	printouts. Sturdy kraft divider:						
	expansion. Adjustable tab for	easy identification.					
	Category: File Folders	Supplier: Acme Supplies	Supplier Item: FDR-0007				
	Manufacturer: National Supplies	Manufacturer Item:	Contract Number:				
	Price: 5.99 USD	Unit: Each					
	Quantity 1 Add to C	Cart)	(Add to Favorites) (Add to Compa	ure)			

Oracle iProcurement displays a set number of search results per page. This number, also known as the Shopping Search Results Per Page, can be set by individual requesters in their preferences. (By default, the Shopping Search Results Per Page is 7.) Transparent punchout returns two pages of results at a time. For example, if the Shopping Search Results Per Page is 7, transparent punchout returns two pages of search results, each page with seven items.

When the requester clicks the "Next" link on the second page (and every second page thereafter), the system sends a new ItemSearchRequest document to fetch the rest of the results, two pages at a time. This ItemSearchRequest document is identical to the first except the <startResult> value changes. For details, see ItemSearchRequest on page B-43.

Likewise, if the requester sorts the transparent punchout results (you can sort transparent punchout results by Price only), a new ItemSearchRequest document is sent. This ItemSearchRequest document is identical to the first except that it

specifies a <sortBy> value. If the supplier can fulfill the sort request, sorted search results are displayed. Otherwise, the supplier can use an ItemSearchResponse error code in the <Status> field to indicate that it was unable to sort the results.

Note: Oracle iProcurement cannot enforce how the supplier interprets the search. For example, Oracle iProcurement cannot verify if the results are sorted correctly.

After viewing the transparent punchout results, the requester clicks Add to Cart for the desired items, and Oracle iProcurement adds the items to the requisition. Oracle iProcurement also references Oracle e-Commerce Gateway to see if code conversion (mapping) is set up; if it is, Oracle e-Commerce Gateway performs the required conversions between the external code values coming from the supplier and the internal code values set up in Oracle Applications.

Note: Although a transparent punchout to Oracle Exchange returns To Be Determined (TBD) priced items to Oracle iProcurement, requesters cannot add TBD items to their shopping cart. (Oracle Exchange allows suppliers to specify TBD prices for items; however, items without prices are not permitted in Oracle iProcurement.) When the requester attempts to add a TBD-priced item to the shopping cart in Oracle iProcurement, an error message informs the requester that TBD items cannot be added to the cart. The buyer should be aware that although TBD items present no problems for transparent punchout, the TBD items will be rejected by the shopping cart in Oracle iProcurement. Buyers and suppliers should resolve this together, if required. The supplier could remove items with TBD prices, or the buyer could use the pricing approval feature on Oracle Exchange to reject these prices.

Oracle iProcurement converts the currency in which the items are priced to the functional currency used by Oracle iProcurement.

The requester then completes the checkout process for the items in the shopping cart, and Oracle iProcurement processes the order. The requisition goes through the normal workflow, approval, and purchase order processes configured in Oracle iProcurement and Oracle Purchasing.

DTDs, Documents, and Descriptions

This chapter covers the following topics:

- DTDs and Documents by Model on page B-1
- DTDs, Documents, and Descriptions on page B-4
- Mapping Between XML and Oracle iProcurement Fields on page B-64
- Mapping Between XML and cXML on page B-65

DTDs and Documents by Model

All the document type definition (DTD) documents used by XML punchout and transparent punchout are displayed in this appendix. For cXML punchout documents, the DTD can be downloaded from the following URL: http://www.cxml.org.

The following tables list the punchout documents and DTDs used for each model.

For a graphical description of the punchout and transparent punchout documents by model, see the illustrations in Appendix A.

Table B–1 Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML) Documents

Reference	DTD
loginRequest on page B-9	OraclePunchout.dtd
loginResponse on page B-22	OraclePunchout.dtd
shoppingCart on page B-23	OraclePunchout.dtd

 Table B–2
 Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML)

 Documents

Reference	DTD	
loginRequest on page B-9	OraclePunchout.dtd	
loginResponse on page B-22	OraclePunchout.dtd	
shoppingCart on page B-23	OraclePunchout.dtd	

 Table B–3
 Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML)

 Documents

Reference	DTD
PunchOutSetupRequest on page B-32	cXML.dtd
PunchOutSetupResponse on page B-39	cXML.dtd
PunchOutOrderMessage on page B-40	cXML.dtd

Table B–4 Model 3a: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML) Documents

Reference	DTD
loginRequest on page B-9	OraclePunchout.dtd
loginResponse on page B-22	OraclePunchout.dtd
shoppingCart on page B-23	OraclePunchout.dtd

Table B–5 Model 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (cXML) Documents

Reference	DTD
PunchOutSetupRequest on page B-32	cXML.dtd
PunchOutSetupResponse on page B-39	cXML.dtd
PunchOutOrderMessage on page B-40	cXML.dtd

Table B–6Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via OracleExchange (XML) Documents

Reference	DTD
loginRequest on page B-9	OraclePunchout.dtd
loginResponse on page B-22	OraclePunchout.dtd
shoppingCart on page B-23	OraclePunchout.dtd
supplierSync on page B-31	OraclePunchout.dtd

 Table B–7
 Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle

 Exchange (cXML) Documents

Reference	DTD
loginRequest on page B-9	OraclePunchout.dtd
PunchOutSetupRequest on page B-32	cXML.dtd
PunchOutSetupResponse on page B-39	cXML.dtd
loginResponse on page B-22	OraclePunchout.dtd
PunchOutOrderMessage on page B-40	cXML.dtd
shoppingCart on page B-23	OraclePunchout.dtd
supplierSync on page B-31	OraclePunchout.dtd

Table B–8 Models 1 and 2: Transparent Punchout to Oracle Exchange or Supplier (XML)

Reference	DTD
ItemSearchRequest on page B-43	ItemSearchRequest.dtd
ItemSearchResponse on page B-50	ItemSearchResponse.dtd

DTDs, Documents, and Descriptions

The following sections provide the DTDs, examples, and descriptions of each punchout and transparent punchout document.

The Required or Optional indicators below refer to whether a value in the field is required.

Note: Also note the DTD structure. For example, a bar (|) between values indicates that you should provide only one of the values.

OraclePunchout.dtd

The OraclePunchout.dtd covers all XML punchout documents used by all XML punchout models:

- loginRequest
- loginResponse
- shoppingCart
- supplierSync

The OraclePunchout.dtd is as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Version 1.0 of Oracle Punchout DTD
     User by Oracle Exchange 6.2.4 and Oracle iProcurement Release FPI
-->
<!-- root elements -->
<!ELEMENT request (header, body) >
<!ELEMENT response (header, body) >
<!-- different possible bodies -->
<!-- loginRequest (request) -->
<!-- loginResponse (response) -->
<!-- shoppingCart (response) -->
<!-- supplierSync (response) -->
<!ELEMENT body (
(loginInfo,searchKeywords?,icxSessionCallBackURL?,partySiteId?,cxmlCart?) |
loginURL
OrderLinesDataElements
supplier*
```

```
) >
<!-- START header elements -->
<!ELEMENT header
(requestID?, login?, (action return), cookies?, language?, searchLanguage?, userArea?)
>
  <!-- version to identify the DTD used, current version is 1.0 -->
  <!ATTLIST header version CDATA #REQUIRED>
  <!-- identifier in an asynchronous request/response communication, for future
use -->
  <!ELEMENT requestID (#PCDATA)>
  <!-- login information. session is for future use -->
  <!ELEMENT login ((username, password) | session) >
    <!ELEMENT username (#PCDATA) >
    <!ELEMENT password (#PCDATA) >
    <!ELEMENT session (sessionID) >
    <!ELEMENT sessionID (#PCDATA)>
  <!-- for request only, to indicate the type of the request -->
  <!ELEMENT action (#PCDATA)>
  <!-- for response only -->
  <!ELEMENT return (returnMessage?)>
    <!-- return code for the request. S = Success, E = Error, U = Unexpected,
        W = Warning and A = Authentication Failure. Exchange and IP only
        uses S, E, and A
    -->
    <!ATTLIST return returnCode (S|E|U|W|A) #REQUIRED>
    <!ELEMENT returnMessage (#PCDATA)>
  <!-- cookies to identify the session, for future use -->
  <!ELEMENT cookies (cookie*)>
    <!ELEMENT cookie (#PCDATA)>
    <!ATTLIST cookie name CDATA #REQUIRED>
  <!-- user's preferred session language only -->
  <!ELEMENT language (#PCDATA) >
  <!-- user's preferred search language only -->
  <!ELEMENT searchLanguage (#PCDATA)>
  <!-- any additional customizable info -->
  <!ELEMENT userArea ANY>
<!-- END header elements -->
<!-- START additional elements in userArea which may be populated by IP,
included for DTD validation -->
<! ELEMENT operatingUnit (#PCDATA) >
<!ELEMENT shipTo (#PCDATA) >
<!ELEMENT deliverTo (#PCDATA)>
<!ELEMENT fullName (#PCDATA)>
```

```
<!ELEMENT workPhone (#PCDATA) >
<!ELEMENT title (#PCDATA) >
<!ELEMENT manager (#PCDATA)>
<!ELEMENT managerEmail (#PCDATA)>
<!ELEMENT managerPhone (#PCDATA) >
<!ELEMENT location (#PCDATA)>
<!ELEMENT dateFormat (#PCDATA) >
<!-- END additional elements in userArea -->
<!-- START login request elements -->
<!ELEMENT loginInfo (exchangeInfo?, userInfo, returnURL) >
 <!-- exchange name if the request is from exchange -->
 <!ELEMENT exchangeInfo (exchangeName) >
    <!ELEMENT exchangeName (#PCDATA) >
 <!ELEMENT userInfo (userName,appUserName,userContactInfo?,userCompany?)>
   <!-- full name of user -->
   <!ELEMENT userName (#PCDATA) >
   <!-- username of user in the application -->
   <!ELEMENT appUserName (#PCDATA)>
   <!ELEMENT userContactInfo (userPhone?,userEmail?)>
      <!ELEMENT userPhone (#PCDATA)>
      <!ELEMENT userEmail (#PCDATA)>
   <!ELEMENT userCompany (companyName, companyDUNS, contactName?, contactPhone?)>
      <!-- name of the user's company -->
      <! ELEMENT companyName (#PCDATA) >
      <!-- DUNS of the user's company -->
      <! ELEMENT companyDUNS (#PCDATA) >
      <!ELEMENT contactName (#PCDATA) >
      <!ELEMENT contactPhone (#PCDATA) >
 <!-- URL the shopping cart will be returned to -->
 <!ELEMENT returnURL (#PCDATA)>
<!-- search text entered by the users -->
<!ELEMENT searchKeywords (#PCDATA)>
<!-- URL which can be pinged constantly to keep IP session alive -->
<!ELEMENT icxSessionCallBackURL (#PCDATA) >
<!-- party id of the supplier to punchout to via OEX -->
<!ELEMENT partySiteId (#PCDATA)>
<!-- CXML shopping cart sent from IP to OEX for mapping -->
<!ELEMENT cxmlCart ANY>
<!-- END login request elements -->
<!-- START login response elements -->
<!ELEMENT loginURL (#PCDATA) >
<!-- END login response elements -->
```

```
<!-- START shopping cart elements -->
<!ELEMENT OrderLinesDataElements (catalogTradingPartner?, orderLine*)>
 <!ELEMENT catalogTradingPartner (#PCDATA)>
 <!ELEMENT orderLine (contract?, item, category, price, supplier,
additionalAttributes?) >
<!-- DTD for element CONTRACT -->
<! ELEMENT contract
((supplierContract|buyerContract), buyerContractLineNumber?, catalogType?)>
 <!ATTLIST contract contractNumberIdentifier (KNOWN|UNKNOWN|INFORMATIONAL|NONE)
#TMPLTED>
 <!ELEMENT supplierContract (contractNumber) >
 <!ELEMENT buyerContract (contractNumber) >
 <!ELEMENT contractNumber (#PCDATA)>
 <!ELEMENT buyerContractLineNumber (#PCDATA) >
 <!ELEMENT catalogType (#PCDATA)>
<!-- DTD for element ITEM -->
<!ELEMENT item (itemNumber, itemDescription, unitOfMeasure, hazardClass?)>
 <!ATTLIST item lineType (GOODS | SERVICES AMOUNT | SERVICES QUANTITY) #IMPLIED>
 <!ATTLIST item quantity CDATA "1">
 <!ELEMENT itemNumber ((supplierItemNumber|buyerItemNumber),
manufacturerItemNumber?) >
 <!ELEMENT supplierItemNumber (itemID, supplierReferenceNumber?)>
 <!ELEMENT itemID (#PCDATA)>
 <!ELEMENT supplierReferenceNumber (#PCDATA)>
 <!ELEMENT manufacturerItemNumber (itemID, manufacturerName)>
  <!ELEMENT manufacturerName (#PCDATA) >
 <!ELEMENT buyerItemNumber (itemID, buyerItemRevision?)>
 <!ELEMENT buyerItemRevision (#PCDATA)>
 <!ELEMENT itemDescription (#PCDATA)>
 <!ELEMENT unitOfMeasure (buyerUnitOfMeasure|supplierUnitOfMeasure)>
 <!ELEMENT buyerUnitOfMeasure (#PCDATA)>
 <!ELEMENT supplierUnitOfMeasure (supplierUOMType, supplierUOMQuantity?)>
 <!ELEMENT supplierUOMType (#PCDATA)>
 <!ELEMENT supplierUOMQuantity (#PCDATA)>
 <!ELEMENT hazardClass (#PCDATA)>
<!-- DTD for element CATEGORY -->
<!ELEMENT category (categoryCode)>
 <!ELEMENT categoryCode (#PCDATA) >
 <!ATTLIST categoryCode categoryCodeIdentifier(SPSC|SUPPLIER|BUYER) #IMPLIED>
<!-- DTD for element PRICE -->
<!ELEMENT price (currency, unitPrice)>
```

```
<!ELEMENT currency (#PCDATA) >
 <!ELEMENT unitPrice (#PCDATA)>
<!-- DTD for element SUPPLIER -->
<!-- used in shopping cart -->
<!-- used in supplier sync response -->
<!ELEMENT supplier (
((supplierDUNS|supplierTradingPartnerCode), supplierName, supplierSite?,
contactName?, contactPhone?)
(supplierPartyId, supplierImageUrl, supplierLanguageSpecificInfo*)
) >
<!ELEMENT supplierDUNS (#PCDATA) >
<!ELEMENT supplierTradingPartnerCode (#PCDATA) >
<!ELEMENT supplierName (#PCDATA) >
<!ELEMENT supplierSite (#PCDATA)>
<!-- DTD for element ADDITIONAL ATTRIBUTES -->
<!ELEMENT additionalAttributes (attribute1?, attribute2?, attribute3?,
attribute4?, attribute5?, attribute6?, attribute7?, attribute8?, attribute9?,
attribute10?, attribute11?, attribute12?, attribute13?, attribute14?,
attribute15?)>
 <!ELEMENT attribute1 (#PCDATA) >
 <!ELEMENT attribute2 (#PCDATA) >
 <!ELEMENT attribute3 (#PCDATA) >
 <!ELEMENT attribute4 (#PCDATA) >
 <!ELEMENT attribute5 (#PCDATA) >
 <!ELEMENT attribute6 (#PCDATA) >
 <!ELEMENT attribute7 (#PCDATA) >
 <!ELEMENT attribute8 (#PCDATA) >
 <!ELEMENT attribute9 (#PCDATA) >
 <!ELEMENT attribute10 (#PCDATA)>
 <!ELEMENT attribute11 (#PCDATA)>
 <!ELEMENT attribute12 (#PCDATA)>
 <!ELEMENT attribute13 (#PCDATA)>
 <!ELEMENT attribute14 (#PCDATA)>
 <!ELEMENT attribute15 (#PCDATA)>
<!-- END shopping cart elements -->
<!-- START supplier sync elements -->
<!ELEMENT supplierLanguageSpecificInfo
(language, supplierName, supplierDescription, supplierKeywords) >
<!ELEMENT supplierDescription (#PCDATA)>
<!ELEMENT supplierKeywords (#PCDATA)>
<!ELEMENT supplierPartyId (#PCDATA)>
```

```
<!ELEMENT supplierImageUrl (#PCDATA)><!-- END supplier sync elements -->
```

loginRequest

Oracle iProcurement generates a loginRequest after establishing a connection with Oracle Exchange in the following models:

- Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML).
- Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML).
- Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML).

The loginRequest document is also used as the *supplier sync request* when downloading punchouts from Oracle Exchange.

Oracle iProcurement or Oracle Exchange sends a loginRequest to the supplier in the following models:

- Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML).
- Model 3a: Punchout from Oracle Exchange to Supplier-Hosted Catalog (XML)
- Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)

Example loginRequest to Oracle Exchange

The following is an example loginRequest document used by Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML):

```
<! [CDATA[shopping]] >
   </action>
   <language>
      <! [CDATA[US]] >
   </language>
   <searchLanguage/>
   <userArea>
      <operatingUnit>
         <![CDATA[204]]>
      </operatingUnit>
      <shipTo/>
      <deliverTo/>
   </userArea>
</header>
<body>
   <loginInfo>
      <exchangeInfo>
         <exchangeName>
            <! [CDATA[Oracle iProcurement]] >
         </exchangeName>
      </exchangeInfo>
      <userInfo>
         <userName>
            <! [CDATA[Stock, Pat]] >
         </userName>
         <userContactInfo>
            <userPhone/>
            <userEmail>
               <! [CDATA [pat.stock@vision.com]] >
            </userEmail>
         </userContactInfo>
         <appUserName>
            <! [CDATA [OPERATIONS]] >
         </appUserName>
         <userCompany>
            <companyName>
               <![CDATA[Buyer Corp.]]>
            </companyName>
            <companyDUNS/>
            <contactName/>
            <contactPhone/>
         </userCompany>
      </userInfo>
      <returnURL>
         <! [CDATA[http://qapache.us.oracle.com:15671/OA_
```

Example loginRequest to Supplier

Below are example loginRequest XML documents sent to the supplier.

Without Optional Extended Data The following is an example loginRequest XML document that does not include optional extended user and company information; this example is used by Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML):

```
<?xml version = '1.0' encoding = 'UTF-8'?>
<request>
   <header version="1.0">
      <login>
         <username/>
         <password>welcome</password>
      </login>
      <action>shopping</action>
      <language>EN</language>
      <searchLanguage/>
      <userArea>
         <operatingUnit>204</operatingUnit>
         <shipTo>V1 - New York City</shipTo>
         <deliverTo>V1 - New York City</deliverTo>
      </userArea>
   </header>
   <body>
      <loqinInfo>
         <exchangeInfo>
            <exchangeName>Oracle iProcurement</exchangeName>
         </exchangeInfo>
         <userInfo>
            <userName>Stock, Pat</userName>
            <userContactInfo>
               <userPhone/>
               <userEmail>pat.stock@vision.com</userEmail>
```

```
</userContactInfo>
            <appUserName>OPERATIONS</appUserName>
            <userCompany>
               <companyName>Buyer Corp.</companyName>
               <companyDUNS>144709193</companyDUNS>
               <contactName/>
               <contactPhone/>
            </userCompany>
         </userInfo>
         <returnURL>http://qapache.us.oracle.com:15671/OA
HTML/OA.jsp?OAFunc=ICX CAT PUNCHOUT CALLBACK&OAHP=ICX POR HOMEPAGE
MENU&OASF=ICX CAT PUNCHOUT CALLBACK&transactionid=1577779317</returnURL>
      </loginInfo>
      <partySiteId/>
      <searchKeywords/>
      <icxSessionCallBackURL/>
   </body>
</request>
```

With Optional Extended Data The following is an example SupplierLoginRequest XML document that includes optional extended user and company information; this example is used by Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML):

```
<?xml version = '1.0' encoding = 'UTF-8'?>
<request>
  <header version="1.0">
     <login>
         <username/>
         <password>welcome</password>
      </login>
      <action>shopping</action>
      <language>EN</language>
      <searchLanguage/>
      <userArea>
         <operatingUnit>204</operatingUnit>
         <shipTo>V1- New York City</shipTo>
         <deliverTo>V1- New York City</deliverTo>
         <fullName>Stock, Ms. Pat</fullName>
         <title>MS.</title>
         <manager>Brown, Ms. Casey</manager>
         <managerEmail>cbrown@vision.com</managerEmail>
         <location>V1- New York City</location>
         <language>US</language>
         <currency>USD</currency>
```

```
<dateFormat>DD-MON-RRRR</dateFormat>
      </userArea>
   </header>
   <body>
      <loqinInfo>
         <exchangeInfo>
            <exchangeName>Oracle iProcurement</exchangeName>
         </exchangeInfo>
         <userInfo>
            <userName>Stock, Pat</userName>
            <userContactInfo>
               <userPhone/>
               <userEmail>pat.stock@vision.com</userEmail>
            </userContactInfo>
            <appUserName>OPERATIONS</appUserName>
            <userCompany>
               <companyName>Buyer Corp.</companyName>
               <companyDUNS>144709193</companyDUNS>
               <contactName/>
               <contactPhone/>
            </userCompany>
         </userInfo>
         <returnURL>http://qapache.us.oracle.com:15671/OA
HTML/OA.jsp?OAFunc=ICX CAT PUNCHOUT CALLBACK&OAHP=ICX POR HOMEPAGE
MENU&OASF=ICX CAT PUNCHOUT CALLBACK&transactionid=1577779317</returnURL>
</loginInfo>
      <partySiteId/>
      <searchKeywords/>
      <icxSessionCallBackURL/>
   </body>
</request>
```

Sent by Oracle Exchange The following is an example loginRequest XML document sent by Oracle Exchange to the supplier:

```
<userArea>
         <operatingUnit/>
         <shipTo/>
         <deliverTo/>
      </userArea>
   </header>
   <bodv>
      <loginInfo>
         <exchangeInfo>
            <exchangeName>Oracle Exchange</exchangeName>
         </exchangeInfo>
         <userInfo>
            <userName>Elvis Impersonator</userName>
            <userContactInfo>
               <userPhone>650 633-8239</userPhone>
               <userEmail>elvis@oracle.com</userEmail>
            </userContactInfo>
            <appUserName>ELVIS</appUserName>
            <userCompany>
               <companyName>Elvis Corporation</companyName>
               <companyDUNS>144709193</companyDUNS>
               <contactName>ELVIS</contactName>
               <contactPhone>650 633-8239</contactPhone>
            </userCompany>
         </userInfo>
<returnURL>https://exchange.oracle.com/orders/PunchoutCallback.jsp</returnURL>
      </loginInfo>
      <partySiteId/>
      <searchKeywords/>
      <icxSessionCallBackURL/>
   </body>
</request>
```

Field Descriptions

The fields in the loginRequest document are described below.

<username> Required in loginRequest to Oracle Exchange

Oracle Exchange proxy user name assigned to the Oracle iProcurement requester. This field is used only in a loginRequest sent to Oracle Exchange. **Note:** The username is not used (its value is omitted) in a direct punchout to the supplier. In a direct punchout to the supplier, only the password is used to log in.

<password> Required

In a loginRequest to Oracle Exchange, this is the Oracle Exchange proxy user password assigned to the Oracle iProcurement requester.

In a loginRequest to the supplier, this is the password validated by the supplier site and used by all buyers in the accessing application. The supplier provided this password to the Oracle iProcurement administrator, who set up access to the punchout, or entered this password when defining the punchout on Oracle Exchange.

Note: The password is not encrypted in the XML document. It is up to the transport protocol to encrypt the message to ensure security.

<action> Required

The value is *shopping*, except when downloading a punchout from Oracle Exchange. When downloading a punchout from Oracle Exchange, the action is *suppSync*.

For Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML), the value is *shopping* for the initial login request and *mapping* for the conversion of the cXML cart to XML. (When Oracle iProcurement sends the cart back to Oracle Exchange for conversion, it does so via the loginRequest.)

<language> Required

In a loginRequest to Oracle Exchange, this is the requester's session language in Oracle iProcurement, using the Oracle Applications language code.

In a loginRequest to the supplier, this is the requester's session language in Oracle iProcurement or Oracle Exchange (wherever the punchout is initiated), using the International Standards Organization (ISO) language code.

The session language is the language in which the application is displayed. (In Oracle iProcurement, the session language can be changed by clicking "Preferences" at the top of any page, then selecting a Language. From Oracle Exchange, the

session language can be changed by selecting a language on the **Home** page or the **Edit Personal Information** page in My Profile.)

<searchLanguage> Optional

In a loginRequest to Oracle Exchange, this is the requester's search language in Oracle iProcurement, using the Oracle Applications language code.

In a loginRequest to the supplier, this is the requester's search language in Oracle iProcurement or Oracle Exchange (wherever the punchout is initiated), using the ISO language code.

The search language can be chosen by clicking the "Change Catalog Language" link on the **Shop** home page. (For example, if the session language is English, but catalog items exist only in German, the requester can choose German as the search language. This language link exists only if POR: Change Catalog Language is set to Yes.) This field is present only if the requester or buyer performed a search before accessing the punchout.

<operatingUnit> Optional

Unique identifier for the Oracle iProcurement requester's operating unit. This information is passed on to the supplier in Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML) only.

<shipTo> Optional

Ship-to location name for the Oracle iProcurement requester. This information is passed on to the supplier in Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML) only.

<deliverTo> Optional

Deliver-to location name for the Oracle iProcurement requester. This information is passed on to the supplier in Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML) only.

<fullName> Optional extended data *

Full name of the Oracle iProcurement requester as given in Oracle Applications.

<title> Optional extended data *

Title of the Oracle iProcurement requester as given in Oracle Applications.

<manager> Optional extended data *

Name of the requester's manager as given in Oracle Applications.

<managerEmail> Optional extended data *

Requester's manager's e-mail address as given in Oracle Applications.

<location> Optional extended data *

Deliver-to location name for the Oracle iProcurement requester.

<language> Optional extended data *

Oracle Applications language code.

<currency> Optional extended data *

Requester's company's functional currency.

<dateFormat> Optional extended data *

Requester's date format from the requester's preferences.

<exchangeName> Required

In a punchout from Oracle iProcurement, this is always the value Oracle iProcurement. In a punchout from Oracle Exchange, this is the name of the Exchange.

<userName> Required

For a punchout initiated from Oracle iProcurement, this is the full name of the requester (for example, Green, Mr. Terry). For a punchout initiated from Oracle Exchange, this is the full name of the Exchange buyer.

<userPhone> Optional

Oracle iProcurement requester's phone number. This field is present only if a phone number is available. For a punchout initiated from Oracle Exchange, this is the Exchange buyer's phone number.

<userEmail> Optional

Oracle iProcurement requester's e-mail address. For a punchout initiated from Oracle Exchange, this is the Exchange buyer's e-mail address.

<appUserName> Required

Oracle Applications user login name for the Oracle iProcurement requester (for example, TGREEN). For a punchout initiated from Oracle Exchange, this is the Exchange buyer's user name.

<companyName> Optional

In a punchout from Oracle iProcurement, this is the company name that is trying to log in to the supplier site and that was entered in the Company Name field while defining the punchout. In a punchout from Oracle Exchange, this is the company name on the Exchange.

<companyDUNS> Optional

The buying company's identifier entered in the Company ID field when defining the punchout in Oracle iProcurement. In a punchout initiated from Oracle Exchange, this field contains the DUNS number entered during registration, if any.

<contactName> Optional

In a loginRequest to Oracle Exchange, this field is not used.

In a loginRequest from Oracle Exchange to a supplier, this is the Exchange Company Administrator's name.

This field is not used for Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML).

<contactPhone> Optional

In a loginRequest to Oracle Exchange, this field is not used.

In a loginRequest from Oracle Exchange to a supplier, this is the Exchange Company Administrator's phone number.

This field is not used for Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML).

<returnURL> Required

In a loginRequest to Oracle Exchange, this is the URL in Oracle iProcurement to which Oracle Exchange will ask the browser to post the shopping cart.

In a loginRequest to the supplier, this is the URL in Oracle iProcurement or Oracle Exchange to which the supplier site will ask the browser to post the shopping cart.

In a return to Oracle iProcurement, the returnURL is constructed as follows, where APPS_FRAME_WORK_AGENT is the value in the *Application Framework Agent* profile option:

APPS_FRAME_WORK_AGENT + OA_HTML_DIRECTORY + OA.jsp?OAFunc=ICX_CAT_PUNCHOUT_ CALLBACK&OAHP=<home page menu>&OASF=ICX_CAT_PUNCHOUT_ CALLBACK&transactionid=<current OADBTransaction ID>

For example:

http://qapache.us.oracle.com:15671/OA_HTML/OA.jsp?OAFunc=ICX_CAT_PUNCHOUT_ CALLBACK&OAHP=ICX_POR_HOMEPAGE_MENU&OASF=ICX_CAT_PUNCHOUT_ CALLBACK&transactionid=1577779317

In a return to Oracle Exchange, the return URL is constructed as follows, where the first part of the URL (https://exchange.oracle.com) is the URL of the specific Exchange:

https://exchange.oracle.com/orders/PunchoutCallback.jsp

<partySiteId> Optional

Exchange Trading Partner ID of the supplier being punched out to, used only for a punchout via Oracle Exchange.

<searchKeywords> Optional

If the Oracle iProcurement requester or Oracle Exchange buyer searched for a particular set of key words prior to the punchout, these keywords are included here. This field is present only if the requester performed a search before accessing the punchout.

In a loginRequest to Oracle Exchange, if the requester already conducted a search with keywords in Oracle iProcurement and clicked the punchout link on the **Search Results** page, Oracle Exchange re-executes the search with those keywords and presents its **Search Results** page.

<cxmlCart> Optional

cXML shopping cart contents, used in Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML) only. (When Oracle iProcurement sends the cart back to Oracle Exchange for conversion, it does so via the loginRequest.)

<icxSessionCallBackURL> Optional

URL of the servlet that accesses the Oracle iProcurement session to keep the session alive (not idle) while the requester is shopping on the external site.

If the option *Extend user's idle session timeout during punchout* was selected during the punchout setup, then Oracle iProcurement populates this field as follows, where APPS_FRAME_WORK_AGENT is the value in the *Application Framework Agent* profile option:

```
APPS_FRAME_WORK_AGENT + OA_HTML_DIRECTORY + OA.jsp?OAFunc=ICX_CAT_PUNCHOUT_
CALLBACK&OAHP=<home page menu>&OASF=ICX_CAT_PUNCHOUT_
HEARTBEAT&transactionid=<current OADBTransaction ID>
```

For example:

```
http://qapache.us.oracle.com:15671/OA_HTML/OA.jsp?OAFunc=ICX_CAT_PUNCHOUT_
CALLBACK&OAHP=ICX_POR_HOMEPAGE_MENU&OASF=ICX_CAT_PUNCHOUT_
HEARTBEAT&transactionid=1577779317
```

In Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML), Oracle Exchange makes use of this field to extend the idle session. In Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML), the supplier must make use of this field to extend the idle session. Other models do not use this field.

* Optional extended data sent to the supplier if this option was chosen while defining the punchout in Oracle iProcurement. This field is used by Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML).

Changing vs. Unchanging Fields

The supplier uses the loginRequest to authenticate the user. As part of the authentication, the supplier often needs to know which fields in the loginRequest vary and which do not. For example, the password never changes for the same punchout. Therefore, the supplier knows that it will always authenticate the same password value for anyone who uses that punchout.

The following table summarizes the fields that can vary by user and the fields that never vary in a single punchout.

Field Name	Varies by User	Typically Used for Authentication, if Desired
username	No	Yes
password	No	Yes
action	No	No
language	Yes	No
searchLanguage	Yes	No
operatingUnit	Yes, but stays the same within an operating unit	No
shipTo	Yes	No
deliverTo	Yes	No
fullName	Yes	No
title	Yes	No
manager	Yes	No
managerEmail	Yes	No
location	Yes	No
language	Yes	No
currency	Yes	No
dateFormat	Yes	No
exchangeName	No	No
userName	Yes	Yes
userPhone	Yes	No
userEmail	Yes	No
appUserName	Yes	Yes
companyName	No	Yes
companyDUNS	No	Yes
contactName	No	No
contactPhone	No	No
returnURL	No	No

 Table B–9
 Changing vs. Unchanging Fields in loginRequest

Field Name	Varies by User	Typically Used for Authentication, if Desired
partySiteId	No	No
searchKeywords	Yes	No
cxmlCart	Yes	No
icxSessionCallBackURL	No	No

Table B–9 Changing vs. Unchanging Fields in loginRequest

loginResponse

Oracle Exchange or the supplier sends the loginResponse document in response to the punchout request in all models.

Example loginResponse

Below are example loginResponse documents.

Successful Connection The following example loginResponse document shows a successful connection:

Unsuccessful Connection The following example loginResponse document shows that an error, such as an invalid password, occurred during the connection:

Field Descriptions

The fields in the loginResponse document are described below.

```
<returnMessage> Optional
```

Failure message, such as "Password Incorrect."

```
<return returnCode=""> Required
```

Valid values include S for *success*, A for *authentication* error (such as invalid password), E for *error*, U for *unexpected*, and W for *warning*.

loginURL> Required if the connection was successful

URL to which the buyer is directed for shopping. As part of the validation process, a session should have been created that will be used to identify the buyer, and this session should be incorporated into this URL as shown in the successful example above.

shoppingCart

The shoppingCart XML document returns the shopping cart information to Oracle iProcurement or Oracle Exchange in all models.

Example shoppingCart

The following are example shoppingCart documents.

shoppingCart from Oracle Exchange to Oracle iProcurement The following is an example shoppingCart document that is sent to Oracle iProcurement from Oracle Exchange:

```
</header>
   <body>
      <OrderLinesDataElements>
         <catalogTradingPartner>
            <! [CDATA[OracleExchange]] >
         </catalogTradingPartner>
         <orderLine>
            <contract>
               <buyerContract>
                  <contractNumber>
                     <![CDATA[2345]]>
                  </contractNumber>
               </buyerContract>
               <catalogType>
                  <! [CDATA [CONTRACTED]] >
               </catalogType>
            </contract>
            <item lineType="GOODS" quantity="3.0">
               <itemNumber>
                  <supplierItemNumber>
                     <itemID>
                        <![CDATA[P456]]>
                     </itemID>
                  </supplierItemNumber>
               </itemNumber>
               <itemDescription>
                  <![CDATA[Red Pencil]]>
               </itemDescription>
               <unitOfMeasure>
                  <supplierUnitOfMeasure>
                     <supplierUOMType>
                        <! [CDATA [DZ]] >
                      </supplierUOMType>
                     <supplierUOMQuantity>
                        <![CDATA[]]>
                     </supplierUOMQuantity>
                  </supplierUnitOfMeasure>
               </unitOfMeasure>
            </item>
            <category>
               <categoryCode categoryCodeIdentifier="SUPPLIER">
                  <! [CDATA[BC Personal Digital Assistants (PDA's) or Pen-Based
Computers]]>
               </categoryCode>
            </category>
```

```
<price>
               <currency>
                   <! [CDATA [USD]] >
               </currency>
               <unitPrice>
                   <![CDATA[9.99]]>
               </unitPrice>
            </price>
            <supplier>
               <supplierTradingPartnerCode>
                   <! [CDATA[105676]] >
               </supplierTradingPartnerCode>
               <supplierName>
                   <![CDATA[Supplier Corp.]]>
               </supplierName>
            </supplier>
         </orderLine>
      </OrderLinesDataElements>
   </body>
</response>
```

shoppingCart from Supplier to Oracle iProcurement, with Configuration Number The following is an example shoppingCart document that is sent to Oracle iProcurement from the supplier, with a configuration number in the <supplierReferenceNumber> field:

```
<?xml version = '1.0' encoding = 'UTF-8'?>
<response>
  <header version="1.0">
     <return returnCode="S"/>
   </header>
   <body>
      <OrderLinesDataElements>
         <catalogTradingPartner>Supplier A</catalogTradingPartner>
         <orderLine>
           <item lineType="GOODS" quantity="3.0">
               <itemNumber>
                  <supplierItemNumber>
                     <itemID>P456</itemID>
                    <supplierReferenceNumber>123123013021
               </supplierReferenceNumber>
                  </supplierItemNumber>
               </itemNumber>
               <itemDescription>Red Pencil</itemDescription>
               <unitOfMeasure>
```

```
<supplierUnitOfMeasure>
                     <supplierUOMType>DZ</supplierUOMType>
                     <supplierUOMQuantity/>
                  </supplierUnitOfMeasure>
               </unitOfMeasure>
            </item>
            <category>
               <categoryCode categoryCodeIdentifier="SUPPLIER">
BC Personal Digital Assistants (PDA's) or Pen-Based Computers</categoryCode>
            </category>
            <price>
               <currency>USD</currency>
               <unitPrice>9.99</unitPrice>
            </price>
            <supplier>
               <supplierTradingPartnerCode>105676
</supplierTradingPartnerCode>
               <supplierName>Supplier Corp.</supplierName>
            </supplier>
         </orderLine>
      </OrderLinesDataElements>
   </body>
</response>
```

Field Descriptions

The fields in the shoppingCart document are described below.

<return returnCode=""> Required

Valid values include S for *success*, A for *authentication* error (such as invalid password), E for *error*, U for *unexpected*, and W for *warning*.

<catalogTradingPartner> Required in a punchout from Oracle iProcurement, if <supplierName> is not populated

The <catalogTradingPartner> field is used by the following models, only if the buyer did not edit the Key 1 field after downloading the punchout definitions from Oracle Exchange; by default, the Key 1 field is left blank in these models:

- Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)
- Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)

If the buyer did not edit the Key 1 field after the download, then the value in the <catalogTradingPartner> field is matched to the Key 1 field in Oracle e-Commerce Gateway to perform category and UOM mapping. If the buyer did edit the Key 1 field after the download, then the value in that Key 1 field is matched to the Key 1 field in Oracle e-Commerce Gateway to perform the mapping, and the value in <catalogTradingPartner> is ignored.

This field is also used in Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML), for buyers who upgrade to this release. For upgrade customers, Oracle iProcurement uses the value in <catalogTradingPartner> to update the new, required Key 1 field on the punchout setup page.

<contract> Optional

Beginning of the contract section, which contains the <contractNumber>, <buyerContractLineNumber>, and <catalogType> fields. The <contract> field can contain an optional attribute, contractNumberIdentifier, with any of the following values: KNOWN, UNKNOWN, INFORMATIONAL, or NONE.

<contractNumber> Optional

Supplier or buyer contract number, depending on the parent field. This field is contained in the <contract> section. If this contract number matches an approved, effective contract purchase agreement number in Oracle Purchasing, the purchase order that ultimately gets created for the item will get created against that contract. To map the contract number to a contract purchase agreement in Oracle Purchasing, the parent field must be <buyerContract>. For a full description of the flow, buyers should see the Contract Numbers overview provided in the buyer version of this guide.

This field is not used in Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML).

<buyerContractLineNumber> Optional

Not used.

<catalogType> Optional

Indicator of whether the item comes from a contract catalog or non-contract catalog. If a buyer contractNumber is included, this field should be CONTRACTED or omitted. (If this field is not CONTRACTED or omitted, the contractNumber is ignored.) Oracle Exchange always sends a value of CONTRACTED in this field.

<item lineType="GOODS" quantity = "1.0"> Required

Beginning of the item section. The <item> field contains the following attributes:

- lineType. Possible values are GOODS, SERVICES_AMOUNT, or SERVICES_ QUANTITY. GOODS is the default when nothing is specified.
- quantity. Number of items ordered. The default is 1. Decimals are allowed.

<itemID> Required

Supplier, buyer, or manufacturer item number, depending on the parent field.

<supplierReferenceNumber> Optional

If the supplier specifies a <supplierReferenceNumber>, then that value is used as the configuration number for the item.

If the supplier provides a configuration number in this field, then this number travels with the requisition in Oracle iProcurement and with the purchase order in Oracle Purchasing. For more information, see Configurations and Re-Punchout on page 1-20.

<manufacturerName> Optional

Name of the manufacturer for this item. This name populates the Manufacturer Name in Oracle iProcurement.

<buyerItemRevision> Optional

Item revision number, contained in the <buyerItemNumber> field.

<itemDescription> Required

Supplier's description of this product. This description populates the Item Description in the Oracle iProcurement shopping cart and requisition.

Buyer's unit of measure code.

<supplierUOMType> Required

Supplier's unit of measure code. This code is used by the UOM mapping set up in Oracle e-Commerce Gateway.

<supplierUOMQuantity> Optional

Supplier's quantity in the specified unit of measure. For example, a Box of 12 would indicate Box for the <supplierUOMType> and 12 for the <supplierUOMQuantity>. The <supplierUOMQuantity>, if provided, is used by the UOM mapping that is set up in Oracle e-Commerce Gateway.

<hazardClass> Optional

Hazard class name for the item, if provided by the supplier.

<category categoryCodeldentifier="SPSC"> Required

Category used to classify the item. Valid attribute code values are SPSC, SUPPLIER, or BUYER. If a code is not specified, SPSC is assumed.

<categoryCode> Required

Category code value. This code is used by the ITEM_CATEGORY (category) mapping that is set up in Oracle e-Commerce Gateway.

<currency> Required

Currency in which the price is specified.

<unitPrice> Required

The price per unit of the item.

<supplierDUNS> Conditionally Required

Supplier's DUNS number, used to retrieve the supplier name and supplier site information in Oracle iProcurement, only if the buyer did not specify a Supplier and Supplier Site during the punchout setup. Either a <supplierDUNS> or <supplierTradingPartnerCode> must be provided.

<supplierTradingPartnerCode> Conditionally Required

Either a <supplierDUNS> or <supplierTradingPartnerCode> must be provided. The <supplierTradingPartnerCode> is used if the supplier does not have a DUNS number. This field should be populated with a unique alphanumeric code that the buyer uses to identify the internal supplier code in Oracle Applications, for mapping, only if the buyer did not specify a Supplier and Supplier Site during the punchout setup.

<supplierName> Required

Supplier's company name. This field is used by Oracle iProcurement only if the buyer did not select a Supplier on the punchout setup page. If the buyer did select a Supplier, then this field is ignored.

The supplier name in this field is used by Oracle iProcurement for mapping to the VENDOR_NAME value in Oracle e-Commerce Gateway only if both of the following conditions are met:

- The buyer did not select a Supplier on the punchout setup page.
- The EDI Location field does not match the <supplierDUNS> or <supplierTradingPartnerCode>.

This field is also used in Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML), for buyers who upgrade to this release. For upgrade customers, Oracle iProcurement uses the value in <supplierName> to update the new, required Key 1 field on the punchout setup page, if a <catalogTradingPartner> is not provided.

<supplierSite> Optional

Supplier site name. This field is used by Oracle iProcurement only if the buyer did not select a Supplier and Supplier Site on the punchout setup page. If the buyer did select a Supplier and Supplier Site, then this field is ignored.

The supplier site name in this field is used by Oracle iProcurement for mapping to the VENDOR_SITE External 2 value in Oracle e-Commerce Gateway only if both of the following conditions are met:

- The buyer did not select a Supplier and Supplier Site on the punchout setup page.
- The EDI Location field does not match the <supplierDUNS> or <supplierTradingPartnerCode>.

<contactName> Optional

Contact name for the supplier.

<contactPhone> Optional

Supplier contact's phone number.

<attribute1>...<attribute15> Optional

Up to 15 additional attributes can be included with each item in the shopping cart. These attributes travel with the requisition.

supplierSync

Oracle Exchange sends the supplierSynch document to Oracle iProcurement when the buying company downloads punchout suppliers from Oracle Exchange for the following models:

- Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)
- Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)

Example supplierSync

The following is an example supplierSync document:

```
<?xml version = '1.0' encoding = 'UTF-8'?>
<response>
   <header version="1.0">
     <return returnCode="S"/>
   </header>
   <body>
      <supplier>
         <supplierPartyId>
            <![CDATA[9176]]>
         </supplierPartyId>
         <supplierImageUrl>
            <! [CDATA[http://www.mysite.com/logo.gif]]>
         </supplierImageUrl>
         <supplierLanguageSpecificInfo>
            <language>
               <! [CDATA[US]] >
            </language>
            <supplierName>
               <![CDATA[Staples]]>
            </supplierName>
            <supplierDescription>
               <![CDATA[]]>
            </supplierDescription>
            <supplierKeywords>
               <! [CDATA[]]>
```

```
</supplierKeywords>
</supplierLanguageSpecificInfo>
</supplier>
</body>
</response>
```

Field Descriptions

The fields in the SupplierSyncUpResponse document are described below.

<supplierPartyld> Required

Supplier's Trading Partner ID on Oracle Exchange.

<supplierImageUrl> Required

URL pointing to the supplier's logo (entered by the supplier on Oracle Exchange).

<language> Required

Language of the information being retrieved, using the Oracle Applications language code.

<supplierName> Required

Supplier's company name in the specified language (the Exchange registered name of the company).

<supplierDescription> Required

Supplier's punchout definition description in the specified language (entered by the supplier on Oracle Exchange).

<supplierKeywords> Required

Keywords provided by the supplier when defining the punchout on Oracle Exchange, in the specified <language>.

PunchOutSetupRequest

Oracle Exchange sends the PunchOutSetupRequest document to the supplier in the following models:

 Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML)

- Model 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (cXML)
- Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)

PunchOutSetupRequest.dtd

See the cXML DTD at http://www.cxml.org/.

Example PunchOutSetupRequest

The following are example PunchOutSetupRequest documents.

PunchOutSetupRequest from Oracle iProcurement to Supplier Directly The following is an example PunchOutSetupRequest document sent from Oracle iProcurement to the supplier directly:

```
<?xml version = '1.0' encoding = 'UTF-8'?>
<!DOCTYPE cXML SYSTEM "http://xml.cxml.org/schemas/cXML/1.1.007/cXML.dtd">
<cXML version="1.1.007" xml:lang="en-US"
payloadID="20040316032452.913060910.144270@ap6172rt.us.oracle.com"
timestamp="2004-03-16T03:24:52-08:00">
   <Header>
      <From>
         <Credential domain="DUNS">
            <Identity>123456789</Identity>
         </Credential>
      </From>
      < T O >
         <Credential domain="DUNS">
            <Identity>987654321</Identity>
         </Credential>
      </To>
      <Sender>
         <Credential domain="DUNS">
            <Identity>123456789</Identity>
            <SharedSecret>welcome</SharedSecret>
         </Credential>
         <UserAgent>Oracle iProcurement</UserAgent>
      </Sender>
   </Header>
   <Request>
      <PunchOutSetupRequest operation="create">
         <BuyerCookie>12345678</BuyerCookie>
         <Extrinsic name="User">OPERATIONS</Extrinsic>
```

PunchOutSetupRequest from Oracle Exchange to Supplier The following is an example PunchOutSetupRequest document sent from Oracle Exchange to the supplier directly:

```
<?xml version = '1.0' encoding = 'UTF-8'?>
<!DOCTYPE cXML SYSTEM "http://xml.cxml.org/schemas/cXML/1.1.007/cXML.dtd">
<cXML version="1.1.007" xml:lang="en-US"
payloadID="Tue Mar 16 23:24:19 PST 2004" timestamp="Tue Mar 16 23:24:19 PST
2004">
   <Header>
      <From>
         <Credential domain="DUNS">
            <Identity>123456789</Identity>
         </Credential>
      </From>
      <T0>
         <Credential domain="DUNS">
            <Identity>987654321</Identity>
         </Credential>
      </To>
      <Sender>
         <Credential domain="Oracle Exchange">
            <Identity>exchange.oracle.com</Identity>
            <SharedSecret>welcome</SharedSecret>
         </Credential>
         <UserAgent>Oracle Exchange</UserAgent>
      </Sender>
   </Header>
   <Request>
```

```
<PunchOutSetupRequest operation="create">
         <BuyerCookie>12345678</BuyerCookie>
         <Extrinsic name="User">LIWANG</Extrinsic>
         <BrowserFormPost>
<URL>https://testexchange.oracle.com/orders/PunchoutCallback.jsp</URL>
         </BrowserFormPost>
         <Contact>
            <Name xml:lang="en-US">LiWang</Name>
            <Email>liwang@oracle.com</Email>
         </Contact>
         <SupplierSetup>
            <URL>http://abc.com/Gateway/Company/Login.jsp</URL>
         </SupplierSetup>
      </PunchOutSetupRequest>
   </Request>
</cXML>
```

PunchOutSetupRequest in a Re-Punchout The following is an example PunchOutSetupRequest document sent during a re-punchout, in Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML):

```
<?xml version = '1.0' encoding = 'UTF-8'?>
<!DOCTYPE cXML SYSTEM "http://xml.cxml.org/schemas/cXML/1.1.007/cXML.dtd">
<cXML version="1.1.007" xml:lang="en-US"
payloadID="20040316032452.913060910.144270@ap6172rt.us.oracle.com"
timestamp="2004-03-16T03:24:52-08:00">
   <Header>
      <From>
         <Credential domain="DUNS">
            <Identity>123456789</Identity>
         </Credential>
      </From>
      <T0>
         <Credential domain="DUNS">
            <Identity>987654321</Identity>
         </Credential>
      </To>
      <Sender>
         <Credential domain="Oracle Exchange">
            <Identity>exchange.oracle.com</Identity>
            <SharedSecret>welcome</SharedSecret>
         </Credential>
         <UserAgent>Oracle Exchange</UserAgent>
      </Sender>
   </Header>
```

```
<Request>
      <PunchOutSetupRequest operation="inspect">
          <ItemOut guantity="2">
            <SupplierPartID>667</SupplierPartID>
            <SupplierPartAuxID>12345</SupplierPartAuxID>
         </ItemOut>
         <BuyerCookie>12345678</BuyerCookie>
         <Extrinsic name="User">LIWANG</Extrinsic>
         <BrowserFormPost>
<URL>http://qapache.us.oracle.com:15671/OA HTML/OA.jsp?OAFunc=ICX CAT PUNCHOUT
CALLBACK&OAHP=ICX POR HOMEPAGE MENU&OASF=ICX CAT PUNCHOUT
CALLBACK&transactionid=1577779317</URL>
         </BrowserFormPost>
         <Contact>
            <Name xml:lang="en-US">LiWang</Name>
            <Email>liwang@oracle.com</Email>
         </Contact>
         <SupplierSetup>
            <URL>http://abc.com/Gateway/Company/Login.jsp</URL>
         </SupplierSetup>
      </PunchOutSetupRequest>
   </Request>
</cxML>
```

Field Descriptions

The following describes some of the fields in the PunchOutSetupRequest document. For complete information, see the *cXML User's Guide* available at http://www.cxml.org/.

<From> <Credential> Required

Identifier for the buying organization. The domain attribute is the value that the buyer entered in the Domain field while defining the punchout. The identity element is the value that the buyer entered in the Identity field while defining the punchout.

In a punchout from Oracle Exchange, the domain attribute will be either of the following:

- DUNS. If the company has a DUNS number on Oracle Exchange, the identity element will have the DUNS number.
- NAME. If there is no DUNS number, the identity element will have the name of the company on Oracle Exchange.

For Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML), the FromCredential is always the Exchange name and URL as shown in the following example:

```
<From>
    </redential domain="exchange.oracle.com">
        </ldentity>Oracle Exchange</ldentity>
    <//Credential>
    <//From>
```

The Exchange URL is taken from the Exchange Operator **Software Setup** page, from the System URL field. The Exchange name is taken from the Exchange Operator **Identification** page, from the System Name field.

<To> <Credential> Required

Identifier for the supplier organization. The domain attribute will be either of the following:

- DUNS. In a cXML punchout from Oracle Exchange, the identity field will have the DUNS number if the company has a DUNS number on Oracle Exchange. In a cXML punchout to the supplier, DUNS is the Supplier ID on the punchout setup page, if entered.
- NAME. If there is no DUNS number, the identity field will have the name of the company on Oracle Exchange. In a cXML punchout to the supplier, the NAME is the Supplier Name on the punchout setup page.

<Sender> <Credential> Required

In a punchout from Oracle Exchange, the domain attribute identifies the Exchange name. The identity field gives the Exchange site URL, such as exchange.oracle.com. In a punchout from Oracle iProcurement, the <Sender><Credential> values are the same as the <From><Credential> values.

The shared secret field gives the password validated by the supplier site.

<Sender> <UserAgent> Required

Name of the Exchange, such as Oracle Exchange.

<PunchOutSetupRequest operation="create"> Required

Oracle iProcurement supports only "inspect" or "create" options in this attribute, not the "edit" option. In the initial punchout, this attribute is set to "create."

If the supplier specified "inspect" in the PunchOutOrderMessage document, then a re-punchout from Oracle iProcurement back to the supplier site is allowed. In the re-punchout, Oracle iProcurement sends the PunchOutSetupRequest with this attribute set to "inspect." If the supplier specified "create" in the PunchOutOrderMessage document, then a re-punchout is not allowed. The supplier could specify "edit"; however, Oracle iProcurement does not support editing configuration details during a re-punchout, only viewing them.

Re-punchout is used only by Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML).

For more information, see Re-punchout on page 1-26.

<Extrinsic name="User"> Required

User login name of the buyer on Oracle Exchange for Model 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (cXML); user login name of the Oracle iProcurement requester for Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML) and Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML).

<BrowserFormPost> <URL> Required

URL where the browser posts the shopping cart cXML document after the supplier sends the shopping cart to the browser.

<Contact> Optional

The buyer name and e-mail fields within the contact element are passed to the supplier.

Changing vs. Unchanging Fields

The supplier uses the PunchOutSetupRequest to authenticate the user. As part of the authentication, the supplier often needs to know which fields in the request vary and which do not. For example, the From Credential never changes for the same punchout. Therefore, the supplier knows that it will always authenticate the same From Credential value for anyone who uses that punchout.

The following table summarizes some of the fields that can vary by user and the fields that never vary in a single punchout.

Field Name	Varies by User	Typically Used for Authentication, if Desired
From Credential	No	Yes
To Credential	No	No
Sender Credential	No	Yes
Sender SharedSecret	No	Yes
Sender UserAgent	No	No
Extrinsic name="User"	Yes	Yes
URL	No	No
Contact	Yes	No

Table B–10 Changing vs. Unchanging Fields in PunchOutSetupRequest

PunchOutSetupResponse

The cXML supplier sends the PunchOutSetupResponse document to Oracle Exchange in the following models:

- Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML)
- Model 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (cXML)
- Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)

PunchOutSetupResponse.dtd

See the cXML DTD at http://www.cxml.org/.

Example PunchOutSetupResponse

Below are example PunchOutSetupResponse documents.

Successful Connection The following example document shows a successful connection:

```
<?xml version="1.0" encoding="UTF-8"?><!DOCTYPE cXML SYSTEM
"http://xml.cxml.org/schemas/cXML/1.1.010/cXML.dtd"><cXML version="1.1.007"
xml:lang="en-US" payloadID="200303450803006749@b2b.euro.com"
timestamp="2003-01-12T08:03:00">
<Response>
```

```
<Status code="200" text="OK"/>
<PunchOutSetupResponse>
<StartPage>
<URL>https://abc.com/Gateway/Company/Login.jsp?SessionID=69F49ED9-9BE9-43AE-AD6B
-4F9E54FF7996</URL>
</StartPage>
</Response>
</CXML>
```

Unsuccessful Connection The following example document shows that an error, such as an invalid password, occurred during the connection; the status code is a cXML status code:

Field Descriptions

For descriptions of the fields in the PunchOutSetupResponse document, see the *cXML User's Guide* available at http://www.cxml.org/.

PunchOutOrderMessage

The PunchOutOrderMessage document returns the shopping cart information to Oracle Exchange in cXML format in the following models:

- Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML)
- Model 3b: Punchout from Oracle Exchange to Supplier-Hosted Catalog (cXML)
- Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)

PunchOutOrderMessage.dtd

See the cXML DTD at http://www.cxml.org/.

Example PunchOutOrderMessage

The following is an example PunchOutOrderMessage document:

```
<?xml version="1.0" encoding="UTF-8"?>
<cXML payloadID="20030345080932789@euro.com" timestamp="2003-01-12%2008:09:32">
<Header>
     <From>
          <Credential domain="DUNS">
               <Identity>987654321</Identity>
          </Credential>
     </From>
     <T0>
          <Credential domain="DUNS">
               <Identity>123456789</Identity>
          </Credential>
     </To>
     <Sender>
          <Credential domain="DUNS">
               <Identity>987654321</Identity>
          </Credential>
<UserAgent/>
     </Sender>
</Header>
<Message>
<PunchOutOrderMessage>
     <BuyerCookie>12345678</BuyerCookie>
     <PunchOutOrderMessageHeader operationAllowed="create">
          <Total>
               <Money currency="GBP">924.00</Money>
          </Total>
     </PunchOutOrderMessageHeader>
     <!-- BASE ITEM -->
     <ItemIn quantity="1">
          <ItemID>
               <SupplierPartID>2041711,39630</SupplierPartID>
               <SupplierPartAuxiliaryID>12345</SupplierPartAuxiliaryID>
          </ItemID>
          <ItemDetail>
               <UnitPrice>
                    <Money currency="GBP">899.00</Money>
               </UnitPrice>
               <Description xml:lang="en-US">Jan 1 Promotion - Mainstream
Mobility (C640) 200-17009</Description>
               <UnitOfMeasure>EA</UnitOfMeasure>
               <Classification domain="SPSC">43000000</Classification>
```

```
<Classification domain="UNSPSC">43000000</Classification>
               <ManufacturerPartID>39630</ManufacturerPartID>
               <ManufacturerName>Manufacturer Corporation</ManufacturerName>
          </ItemDetail>
     </ItemIn>
     <!-- DELIVERY -->
     <ItemIn guantity="1">
          <ItemID>
               <SupplierPartID>2041711</SupplierPartID>
               <SupplierPartAuxiliaryID/>
          </ItemID>
          <ItemDetail>
               <UnitPrice>
                    <Money currency="GBP">25.00</Money>
               </UnitPrice>
               <Description xml:lang="en-US">Delivery</Description>
               <UnitOfMeasure>EA</UnitOfMeasure>
               <Classification domain="SPSC">43000000</Classification>
               <Classification domain="UNSPSC">43000000</Classification>
               <ManufacturerPartID/>
               <ManufacturerName/>
          </ItemDetail>
     </ItemIn>
</PunchOutOrderMessage>
</Message>
</cXML>
```

Field Descriptions

The following describes some of the fields in the PunchOutOrderMessage document,. For complete information, see the *cXML User's Guide* available at http://www.cxml.org/.

<PunchOutOrderMessageHeader operationAllowed="create"> Required

Oracle iProcurement supports only "inspect" or "create" options in this field attribute, not the "edit" option. If the supplier specifies "inspect," then a re-punchout from Oracle iProcurement back to the supplier site is allowed. If the supplier specifies "create," then a re-punchout is not allowed. The supplier can specify "edit"; however, Oracle iProcurement treats "edit" like the "inspect" option. Oracle iProcurement does not support editing configuration details during a re-punchout, only viewing them. Re-punchout is used only by Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML).

For more information, see Re-punchout on page 1-26.

<SupplierPartAuxiliaryID> Optional

If the supplier specifies a <SupplierPartAuxiliaryID>, then that value is used as the configuration number for the item.

If the supplier provides a configuration number in this field, then this number travels with the requisition in Oracle iProcurement and with the purchase order in Oracle Purchasing. For more information, see Configurations and Re-Punchout on page 1-20.

ItemSearchRequest

Oracle iProcurement uses the ItemSearchRequest document to conduct a transparent punchout on Oracle Exchange or a supplier site, depending on the transparent punchout model used:

- Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)
- Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)

ItemSearchRequest.dtd

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Version 1.0 of Oracle Transparent Punchout Item Search Request DTD
    User by Oracle Exchange 6.2.4 and Oracle iProcurement Release FPI
-->
<!-- Start Item Search Request DTD -->
<!ELEMENT DistributedSearchXML(Header,Request)>
    <!ATTLIST DistributedSearchXML payloadID CDATA #REQUIRED>
    <!ELEMENT Header(From,To,Login)>
    <!ATTLIST Header version CDATA #REQUIRED>
    <!ELEMENT From (Credential)>
    <!ELEMENT To (Credential)>
    <!ELEMENT Credential (Identity)>
    <!ATTLIST Credential domain CDATA #REQUIRED>
```

```
<!ELEMENT Identity(#PCDATA)>
   <!ELEMENT Login (UserName, Password, AuthenticatedKey?) >
      <!ELEMENT UserName (#PCDATA)>
      <!ELEMENT Password (#PCDATA)>
      <!ELEMENT AuthenticatedKey (#PCDATA) >
 <!ELEMENT Request (ItemSearchRequest)>
   <!ELEMENT ItemSearchRequest (UserInfo?,SearchInfo,UserArea?)>
   <!ATTLIST ItemSearchRequest operation CDATA #IMPLIED>
      <!ELEMENT UserInfo (UserName?, AppsUserName?, UserPhone?, UserEmail?) >
        <! ELEMENT AppsUserName (#PCDATA)
        <!ELEMENT UserPhone (#PCDATA) >
        <!ELEMENT UserEmail (#PCDATA)>
      <! ELEMENT SearchInfo
(SearchLanguage, SearchKeywords, SortBy?, ResultSize, StartResult) >
        <!ELEMENT SearchLanguage (#PCDATA) >
        <!ELEMENT SearchKeywords (#PCDATA) >
       <!ELEMENT SortBy (#PCDATA)>
        <!ATTLIST SortBy order (ASC|DESC) #REQUIRED>
        <!ELEMENT ResultSize (#PCDATA)>
        <!ELEMENT StartResult (#PCDATA)>
      <!ELEMENT UserArea (SupplementalInfo*)>
        <!ELEMENT SupplementalInfo (#PCDATA)>
        <!ATTLIST SupplementalInfo name CDATA #REQUIRED>
```

```
<! --- End Item Search Request DTD -->
```

Example ItemSearchRequest

The following is an example ItemSearchRequest document:

```
<?xml version="1.0" encoding="utf-8"?>
<DistributedSearchXML payloadID = "123465678">
   <Header version="1.0">
      <From>
         <Credential domain="DUNS">
            <Identity>123456789</Identity>
         </Credential>
      </From>
      <To>
         <Credential domain="Name">
            <Identity>Disneyland</Identity>
         </Credential>
      </To>
      <Login>
         <UserName>operations</UserName>
         <Password>welcome</Password>
```

```
<AuthenticatedKey>12345678</AuthenticatedKey>
      </Login>
  </Header>
  <Request>
      <ItemSearchRequest operation="SimpleSearch">
         <UserInfo>
            <UserName></UserName>
            <AppsUserName>ppan</AppsUserName>
            <UserPhone></UserPhone>
            <UserEmail></UserEmail>
         </UserInfo>
         <SearchInfo>
            <SearchLanguage>EN-US</SearchLanguage>
            <SearchKeywords>blue pen</SearchKeywords>
            <SortBy order="DESC">Price</SortBy>
            <ResultSize>15</ResultSize>
            <StartResult>1</StartResult>
         </SearchInfo>
         <UserArea>
            <SupplementalInfo name="Group">OU1</SupplementalInfo>
            <SupplementalInfo name="Division">NorthEast</SupplementalInfo>
         </UserArea>
      </ItemSearchRequest>
  </Request>
</DistributedSearchXML>
```

Field Descriptions

The fields in the ItemSearchRequest document are described below.

<From> <Credential> Required

Identifier for the buying organization. The domain attribute will be what was entered in the Domain field while defining the transparent punchout. The identity element is what was entered in the Identity field while defining the transparent punchout.

<To> <Credential> Required

Identifier for the supplier organization. If conducting a transparent punchout to a supplier:

• If only a Supplier Name (not a Supplier ID) was entered on the transparent punchout setup page, the domain attribute is NAME and the identity is the Supplier Name.

 If a Supplier ID was also entered on the transparent punchout setup page, the domain attribute is DUNS and the identity is the Supplier ID.

If conducting a transparent punchout to Oracle Exchange, the ToCredential is always Oracle Exchange as shown in the following example:

```
<To>
<Credential domain="">
<Identity>Oracle Exchange</Identity>
</Credential>
</To>
```

<Login> <UserName> Required

User name of the Oracle iProcurement requester used for authentication by the external site. For a transparent punchout to Oracle Exchange, this is the proxy user name assigned to the requester. For a transparent punchout to a supplier, the supplier needs to provide the user name to the buying organization. The user name comes from the buying organization's transparent punchout setup.

<Login> <Password> Required

Password of the Oracle iProcurement requester used for authentication by the external site. For a transparent punchout to Oracle Exchange, this is the proxy user password assigned to the requester. For a transparent punchout to a supplier, the supplier needs to provide the password to the buying organization. The password comes from the buying organization's transparent punchout setup.

Note: The password is not encrypted in the XML document. It is up to the transport protocol to encrypt the message to ensure security.

<Login> <AuthenticatedKey> Optional

Key that Oracle iProcurement received from the external site in previous responses. It is recommended that the supplier provide the key for faster performance, since it avoids repeat logins.

temSearchRequest> Required

The operation attribute in this field defines the type of search to perform. The currently supported value is SimpleSearch.

<UserInfo> <UserName> Optional extended data *

Full name of the Oracle iProcurement requester. This field is reserved for future use.

<UserInfo> <AppsUserName> Optional extended data *

Oracle Applications user login name for the Oracle iProcurement requester (for example, TGREEN).

<UserInfo> <userPhone> Optional extended data *

Oracle iProcurement requester's phone number. This field is reserved for future use.

<UserInfo> <userEmail> Optional extended data *

Oracle iProcurement requester's e-mail address. This field is reserved for future use.

<searchLanguage> Required

Requester's search language in Oracle iProcurement. The search language can be chosen by clicking the "Change Catalog Language" link on the **Shop** home page. (For example, if the session language is English, but catalog items exist only in German, the requester can choose German as the search language.)

The language uses the ISO 639 language and ISO 3166 territory code formats—for example, EN-US for United States English. The language code is EN, and the country code is US.

The supplier should honor the search language and return results in that language. Oracle Exchange returns results in the specified search language, if the supplier loaded item translations in that language to the Exchange catalog. (If no translations exist in that Exchange language, the search response informs the requester that no results were found.)

<searchKeywords> Required

Search string the requester entered. The search string may include an asterisk (*) if the requester performed a wildcard search. (If the requester used % instead of * to perform the wildcard search, Oracle iProcurement converts % to *.) Therefore, the supplier needs to interpret and support the * wildcard character. For example, the search string *ball** should return all items that start with *ball*. The supplier can interpret the rest of the search string however it wants. If there are multiple words in the search string, it is suggested that the supplier interpret the query matching condition as AND, to make the behavior consistent with Oracle iProcurement. For example, if the search string is *legal paper*, Oracle iProcurement returns all items that contain the words *legal* AND *paper* in their searchable item information.

When conducting a transparent punchout to Oracle Exchange, Oracle Exchange supports the following search operators: *, %, -, and "". If these are included in the search string, Oracle Exchange will use them to conduct the search and return the relevant results.

<SortBy> Optional

Sort-by method. The order attribute indicates whether the sort is ascending (ASC) or descending (DESC). The value indicates what to sort by. The currently supported sort-by value is Price. Step "5 Oracle iProcurement displays search results" on page A-20 provides more information on this process.

<ResultSize> Required

Number of search results requested. This number is based on the requester's user profile (accessed in the requester's preferences), in the Shopping Search Results Per Page field. This number is two times the Shopping Search Results Per Page. For example, if the requester's Shopping Search Results Per Page preference is 7, the <ResultSize> is 14. Step "5 Oracle iProcurement displays search results" on page A-20 provides more information on this process.

<StartResult> Required

Index number to be assigned to the first search result. This number will be used for indexing when fetching additional search results. In the following example, the requester's Shopping Search Results Per Page preference is 7. The first time the request is sent, the <StartResult> is 1 and the <ResultSize> is 15 (two times 7, plus 1). Thereafter, the <ResultSize> remains 14 (two times 7), and the <StartResult> starts at the beginning of the next result set.

Request	<startresult></startresult>	<resultsize></resultsize>
First request	1	15
Second request	16	14
Third request	30	14

Step "5 Oracle iProcurement displays search results" on page A-20 provides more information on this process.

<SupplementalInfo> Optional

Additional elements the buying organization can pass to the external site. The supplier can use this information to further identify the buyer and return search results specific to that buyer—for example, buyer-specific prices for a particular geographical region. Use the name attribute to identify the element, such as Division. Then provide the value in the field, such as NorthEast.

This field is not processed by Oracle Exchange.

* Optional user information sent to the supplier if this option was chosen while defining the transparent punchout in Oracle iProcurement. This field is used by Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML). (If optional user information was not chosen, the UserInfo section is not included.)

Changing vs. Unchanging Fields

The supplier uses the ItemSearchRequest to authenticate the user. As part of the authentication, the supplier often needs to know which fields in the request vary and which do not. For example, the From Credential never changes for the same transparent punchout. Therefore, the supplier knows that it will always authenticate the same From Credential value for anyone who uses that transparent punchout.

The following table summarizes some of the fields that can vary by user and the fields that never vary in a single transparent punchout.

Field Name	Varies by User	Typically Used for Authentication, if Desired
From Credential	No	Yes
To Credential	No	No
Login UserName	No	Yes
Login Password	No	Yes
Login AuthenticatedKey	No	Yes
ItemSearchRequest attribute	No	No
UserInfo UserName	Yes	No

 Table B–11
 Changing vs. Unchanging Fields in ItemSearchRequest

Field Name	Varies by User	Typically Used for Authentication, if Desired
UserInfo AppsUserName	Yes	Yes
UserInfo userPhone	(Not used)	(Not used)
UserInfo userEmail	(Not used)	(Not used)
searchLanguage	Yes	No
searchKeywords	Yes	No
SortBy	Yes	No
ResultSize	Yes	No
StartResult	Yes	No
SupplementalInfo	No	Yes

Table B–11 Changing vs. Unchanging Fields in ItemSearchRequest

ItemSearchResponse

Oracle iProcurement uses the ItemSearchResponse document to conduct a transparent punchout on Oracle Exchange or a supplier site, depending on the transparent punchout model used:

- Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)
- Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)

ItemSearchResponse.dtd

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- $Header: ItemSearchResponse_v1_0.dtd 115.1 2003/03/05 22:09:02 sthadaka
noship $ -->
<!-- Version 1.0 of Oracle Transparent Punchout Item Search Response DTD
        User by Oracle Exchange 6.2.4 and Oracle iProcurement Release FPI
    -->
<!-- Start Item Search Response DTD -->
<!ELEMENT DistributedSearchXML (Header,Response)>
    <!ELEMENT Header (From,To,AuthenticatedKey?)>
    <!ATTLIST Header version CDATA #REQUIRED>
    <!ELEMENT From (Credential)>
```

```
<!ELEMENT To (Credential) >
    <!ELEMENT AuthenticatedKey (#PCDATA) >
      <!ELEMENT Credential (Identity)>
      <!ATTLIST Credential domain CDATA #REQUIRED>
        <!ELEMENT Identity (#PCDATA)>
  <!ELEMENT Response (ItemSearchResponse) >
    <!ELEMENT ItemSearchResponse (SearchResultsInfo,Status,ItemInfo*)>
      <!ELEMENT SearchResultsInfo
(ResultsCount, TotalResultsCount?, SearchTime?, SortedBy?) >
        <!ELEMENT ResultsCount (#PCDATA)>
        <!ELEMENT TotalResultsCount (#PCDATA) >
        <!ELEMENT SearchTime (#PCDATA) >
        <!ELEMENT SortedBy (#PCDATA)>
        <!ATTLIST SortedBy order CDATA #REQUIRED>
      <! ELEMENT Status (#PCDATA) >
        <!ATTLIST Status code CDATA #REQUIRED>
      <!ELEMENT ItemInfo
(SupplierPartNum, SupplierInfo, Description, UnitPrice, UOMInfo,
ManufacturerPartNum?, ManufacturerName?, ThumbnailImage?, Image?,
CategoryInfo, CatalogType?, BuyerContract?, ItemAttribute*) >
        <!ATTLIST ItemInfo lineType #CDATA #REQUIRED>
        <!ELEMENT SupplierPartNum (#PCDATA)>
        <!ELEMENT SupplierInfo (SupplierCode, SupplierName) >
           <!ELEMENT SupplierCode (#PCDATA) >
           <!ELEMENT SupplierName (#PCDATA)>
        <!ELEMENT Description (ShortName, LongName?) >
          <!ELEMENT ShortName (#PCDATA) >
          <!ELEMENT LongName (#PCDATA) >
        <!ELEMENT UnitPrice (Money) >
          <!ELEMENT Money (#PCDATA) >
          <!ATTLIST Money currency CDATA #REQUIRED>
        <!ELEMENT UOMInfo (UOMCode, UOMName?)>
          <!ELEMENT UOMCode (#PCDATA) >
          <!ELEMENT UOMName (#PCDATA)>
        <!ELEMENT ManufacturerPartNum (#PCDATA)>
        <!ELEMENT ManufacturerName (#PCDATA)>
        <!ELEMENT ThumbnailImage (URL) >
        <!ELEMENT Image (URL) >
          <!ELEMENT URL (#PCDATA)>
        <!ELEMENT CategoryInfo (CategoryCode,CategoryName?)>
          <!ELEMENT CategoryCode (#PCDATA) >
          <! ELEMENT CategoryName (#PCDATA) >
        <!ELEMENT CatalogType (#PCDATA)>
        <!ELEMENT BuyerContract (#PCDATA) >
        <!ELEMENT ItemAttribute (#PCDATA)>
```

```
<!ATTLIST ItemAttribute
name CDATA #REQUIRED
type CDATA #REQUIRED>
<! --- End Item Search Response DTD -->
<! --- End Distributed Search Response DTD -->
```

Example ItemSearchResponse

Below are example ItemSearchResponse documents.

Successful Response The following example ItemSearchResponse document shows a successful connection:

```
<?xml version = "1.0" encoding = "UTF-8"?>
<DistributedSearchXML>
   <Header version="1.0">
      <From>
         <Credential domain="Name">
            <Identity>DisneyLand</Identity>
         </Credential>
      </From>
      <T0>
         <Credential domain="DUNS">
            <Identity>123456789</Identity>
         </Credential>
      </To>
      <AuthenticatedKey>12345678</AuthenticatedKey>
   </Header>
   <Response>
      <ItemSearchResponse>
         <SearchResultsInfo>
            <ResultsCount>10</ResultsCount>
            <TotalResultsCount>234</TotalResultsCount>
            <SearchTime>0.75</SearchTime>
            <SortedBy order="desc">Price</SortedBy>
         </SearchResultsInfo>
         <Status code="200">Success</Status>
         <ItemInfo lineType="Goods">
            <SupplierPartNum>CR008521</SupplierPartNum>
            <SupplierInfo>
               <SupplierCode>78789797</SupplierCode>
               <SupplierName>CE Office Supply</SupplierName>
            </SupplierInfo>
```

```
<Description>
               <ShortName>Blue pencil</ShortName>
               <LongName>Cross refills for Selectip Rollerball pens.</LongName>
            </Description>
            <UnitPrice>
               <Money currency="JPY">400</Money>
            </UnitPrice>
            <UOMInfo>
               <UOMCode>EA</UOMCode>
               <UOMName>EA</UOMName>
            </UOMInfo>
            <ManufacturerPartNum>CRO8521</ManufacturerPartNum>
            <ManufacturerName>BIC</ManufacturerName>
            <ThumbnailImage>
               <URL>http://www.image.com/thumbnailimage/5555.gif</URL>
            </ThumbnailImage>
            <Image>
               <URL>http://www.image.com/normalimage/5555.gif</URL>
            </Image>
            <CategoryInfo>
               <CategoryCode>44978878</CategoryCode>
               <CategoryName>Cartridge Pen Ink Refills</CategoryName>
            </CategoryInfo>
            <CatalogType>CONTRACTED</CatalogType>
            <BuyerContract>852</BuyerContract>
            <ItemAttribute name="Ink Color" type="Text">Blue</ItemAttribute>
            <ItemAttribute name="Model" type="Number">21</ItemAttribute>
            <ItemAttribute name="Point Style" type="Text">Fine</ItemAttribute>
         </ItemInfo>
      </ItemSearchResponse>
  </Response>
</DistributedSearchXML>
```

Unsuccessful Response The following example ItemSearchResponse document shows an unsuccessful connection:

No Results Found The following example ItemSearchResponse document occurs when no results are found that match the search criteria:

```
<?xml version = "1.0" encoding = "UTF-8"?>
<DistributedSearchXML>
   <Header version="1.0">
      <From>
         <Credential domain="Name">
            <Identity>DisneyLand</Identity>
         </Credential>
      </From>
      <T0>
         <Credential domain="DUNS">
            <Identity>123456789</Identity>
         </Credential>
      </To>
      <AuthenticatedKey>12345678</AuthenticatedKey>
   </Header>
   <Response>
      <ItemSearchResponse>
         <SearchResultsInfo>
            <ResultsCount>0</ResultsCount>
            <TotalResultsCount>0</TotalResultsCount>
            <SearchTime>0.75</SearchTime>
            <SortedBy order="desc"></SortedBy>
         </SearchResultsInfo>
         <Status code="200">Success</Status>
      </ItemSearchResponse>
   </Response>
```

</DistributedSearchXML>

Field Descriptions

The fields in the ItemSearchResponse document are described below.

<From> <Credential> Required

Identifier for the supplier organization. The recommendation is to use the same values the buying company sent in the <To><Credential> fields in the ItemSearchRequest document. Oracle Exchange use the same values the buying company sent in the <To><Credential> fields in the ItemSearchRequest document.

<To> <Credential> Required

Identifier for the buying organization. The recommendation is to use the same values the buying company sent in the <From><Credential> fields in the ItemSearchRequest document. Oracle Exchange use the same values the buying company sent in the <From><Credential> fields in the ItemSearchRequest document.

<AuthenticatedKey> Optional

Key that the external site generates that Oracle iProcurement can use for all future search requests. It is recommended that the supplier provide the key for faster performance, since it avoids repeat logins.

<ResultsCount> Optional

Number of search results returned in this response. For example, the <ResultSize> in the item search request may have requested 20 search results. The <ResultsCount> will therefore be 20 as requested, or it might be less than 20—for example, if only 17 search results remain.

<TotalResultsCount> Optional

Total number of results in the external catalog that matched the search request. Since it can take time for a server to calculate total results, this field is optional. The number can also be approximate, such as 100+. Although Oracle iProcurement does not display the total results count, the supplier may provide a number if desired.

<SearchTime> Optional

Time it took for the external server to conduct the search, in seconds.

<SortedBy> Optional

Actual method the external site used to sort the search results. The order attribute can be used to indicate whether the sort is ascending (ASC or asc) or descending (DESC or desc). The value indicates the sort-by method—for example, by Price. The attribute and value are not validated or used by Oracle iProcurement. The supplier could specify any.

<Status> Required

Indicator of whether the search request was successful. The code attribute contains the status code. The value for this field is the error message, if any. The following status codes are recognized by Oracle iProcurement; if the supplier specifies one of these codes, the corresponding error message is displayed to the requester:

Status Code	Description	Message Displayed to Requester
200	Success. Items should be returned in the response only if the error code is 200.	(No message; search results are displayed.)
400	Bad request. This should be returned if the request XML cannot be parsed or some mandatory fields are missing. The exact cause of the failure should be indicated in the error message.	The supplier website is not responding. Try again later. If the problem persists, contact your system administrator.
401	Authentication error. This should be returned if the authentication fails. The exact cause of the failure should be indicated in the error message.	The supplier website is not responding. Try again later. If the problem persists, contact your system administrator.
500	Unexpected error. This should be returned if there is any error on the server when handing the request (for example, the database is not available). The exact cause of the failure should be indicated in the error message.	The supplier website is not responding. Try again later. If the problem persists, contact your system administrator.
501	Sort by criteria is not available. This should be returned if the SortBy field in the search request is not supported by the server.	The supplier is unable to sort the results as you have specified.

Table B–12	ItemSearchRes	ponse Status C	odes

Status Code	Description	Message Displayed to Requester
502	Too many search results.	The search criteria you entered will return too many matching items. Narrow your search by entering more keywords.
503	Search language not valid. This should be returned if the SearchLanguage field in the search request is not supported by the server.	The catalog language you have specified is not available for this search. Select a different catalog language and try again.

Internally, these status codes map to one or more Oracle iProcurement error codes that the buying company sees.

<iteminfo> Required if search results are returned

The lineType attribute currently supports only the following value: goods.

<SupplierPartNum> Required

Supplier part number for the item.

<SupplierCode> Required

Identifier for the supplier. The identifier is not language specific (it does not vary by search language). This identifier is used for mapping the supplier to the value in the EDI Location field in the Supplier Sites window, in Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML) only.

<SupplierName> Required

Supplier name. This name is language specific (varies by search language). For example, in a transparent punchout to Oracle Exchange, the Exchange uses the <searchLanguage> in the ItemSearchRequest document to determine which language of the catalog to search and to return results from. The name is used for display purposes only.

<Description> <ShortName> Required

Short description for the item.

<Description> <LongName> Optional

Long description for the item.

<UnitPrice> <Money> Required

Price of the item. The currency attribute in the Money field specifies the currency for the price.

<UOMInfo> <UOMCode> Required

Unit of measure code for the item. The code is not language specific (it does not vary by search language). This code is used for mapping the unit of measure.

<UOMInfo> <UOMName> Optional

Unit of measure name for the item. This name is language specific (varies by search language). For example, in a transparent punchout to Oracle Exchange, the Exchange uses the <searchLanguage> in the ItemSearchRequest document to determine which language of the catalog to search and to return results from. The name is used for display purposes only.

<ManufacturerPartNum> Optional

Manufacturer part number for the item.

<ManufacturerName> Optional

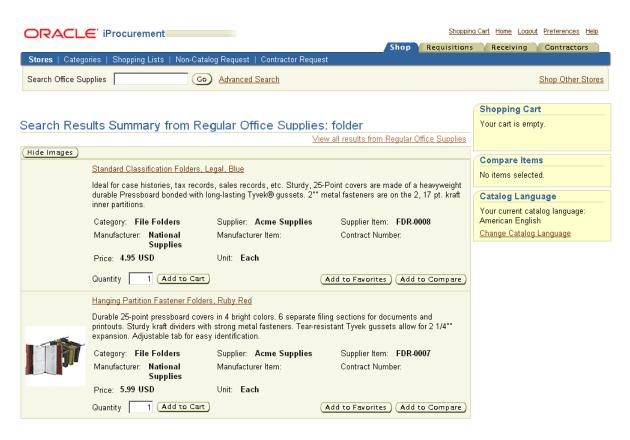
Item manufacturer's name.

<Thumbnaillmage> <URL> Optional

Web site address for a thumbnail image of the item. The following illustration shows how the thumbnail images for the items display in the search results.

ORACL	E' iProcurement		Shoppin	<u>q Cart Home Loqout Preferences Help</u>
			Shop Requisitions	Receiving Contractors
Stores Catego	ories Shopping Lists Non-Cata	og Request Contractor Reque	st	
Search Office Su	pplies Go	Advanced Search		Shop Other Stores
				Shopping Cart
Search Res	ults Summary from Re	aular Office Supplies	s: folder	Your cart is empty.
		-	ew all results from Regular Office Supplies	
(Hide Images)				O a mana tha ma
	Standard Classification Folders, L	egal, Blue		Compare Items
	Ideal for case histories, tax records, sales records, etc. Sturdy, 25-Point covers are made of a heavyweight			No items selected.
-	durable Pressboard bonded with l		metal fasteners are on the 2, 17 pt. kraft	Catalog Language
# 34	inner partitions.			Your current catalog language:
	Category: File Folders	Supplier: Acme Supplies	Supplier Item: FDR-0008	American English
5	Manufacturer: National Supplies	Manufacturer Item:	Contract Number:	Change Catalog Language
	Price: 4.95 USD	Unit: Each		
	Quantity 1 Add to Cart		Add to Favorites Add to Compare	
	Hanging Partition Fastener Folder	s, Ruby Red		
	Durable 25-point pressboard cover printouts. Sturdy kraft dividers wit expansion. Adjustable tab for eas	n strong metal fasteners. Tear-re	iling sections for documents and sistant Tyvek gussets allow for 2 1/4***	
TIN	Category: File Folders	Supplier: Acme Supplies	Supplier Item: FDR-0007	
	Manufacturer: National Supplies	Manufacturer Item:	Contract Number:	
	Price: 5.99 USD	Unit: Each		
	Quantity 1 (Add to Cart		Add to Favorites Add to Compare	

If you do not specify a thumbnail image, a blank space displays, as shown in the following illustration:



Individual requesters can use their preferences to disable thumbnail images. If so, the text description of the item fills the entire horizontal space, with no thumbnail image.

When search results are displayed in the requester's browser, the browser sends an HTTP request to the supplier's Web server for images. For increased security, each image URL can use the <authenticatedKey>; the supplier's Web server can use the key to perform additional authentication of the requester who is accessing the image if desired. (The supplier sends the <authenticatedKey> to Oracle iProcurement, so that the requester's browser can send the key back to the supplier's server to access the image.) If the authentication is successful, the image is retrieved and returned to the browser.

If you do not have thumbnail images but want to use them, specify the same image URL in both the <Thumbnail> and <Image> URL fields. The buyer can use the profile option POR: Thumbnail Width or POR: Thumbnail Height to create a resized

version of the image for thumbnail purposes. See the image management section of the *Oracle iProcurement Implementation Guide* for more information.

descriptional

URL for a full image of the item, displayed on the **Item Details** page. The following illustration shows how the image displays on the **Item Details** page:

		Shoppin	<u>q Cart Home Loqo</u> u	<u>it Preferences Help</u>
	Shop	Requisitions	Receiving	Contractors
Stores Categories Shopping Lists Non-Catalog Request Contractor Request				
Search Office Supplies Go Advanced Search				Shop Other Stores
em Details			Shopping Ca	rt
			Your cart is emp	oty.
Super Roller II Rollerball Pen				
Quantity: 1 Add to Cart				
Supplier CE Office Supply				
Supplier Site Supplier Item CR008521				
Internal Item Number				
Manufacturer Item CR08521				
Manufacturer BIC				
Unit EA				
Unit Price 400				
Currency JPY				
Contract Number 852				
Long Description Cross refills for Selectip Rollerball pens.				
Category Name Cartridge Pen Ink Refills				
Category Hame Cathage For Intertening				
Ink Color Blue				
Ink Color Blue Model 21				

If you do not specify a full image of the item, no image displays, as shown in the following illustration:

	Shop	Shopping Cart Home Logour Requisitions Receiving	t <u>Preferences</u> <u>Help</u> Contractors
Stores Categories Shopping Lists Non-Catalog Request Contracto	r Request		
Search Office Supplies Go Advanced Search			Shop Other Stores
Item Details		Shopping Car	t
		Your cart is emp	ty.
Super Roller II Rollerball Pen			
Quantity: 1 Add to Cart			
Supplier CE Office Supply			
Supplier Site			
Supplier Item CR008521			
Internal Item Number			
Manufacturer Item CR08521			
Manufacturer BIC			
UnitEA			
Unit Price 400			
Currency JPY			
Contract Number 852			
Long Description Cross refills for Selectip Rollerball pens.			
Category Name Cartridge Pen Ink Refills			
Ink Color Blue			
Model 21			
Point Style Fine			

Add to Favorites

When search results are displayed in the requester's browser, the browser sends an HTTP request to the supplier's Web server for images. For increased security, each image URL can use the <authenticatedKey>; the supplier's Web server can use the key to perform additional authentication of the requester who is accessing the image if desired. (The supplier sends the <authenticatedKey> to Oracle iProcurement, so that the requester's browser can send the key back to the supplier's server to access the image.) If the authentication is successful, the image is retrieved and returned to the browser.

<CategoryInfo> <CategoryCode> Required

Code for the category. The code is not language specific (it does not vary by search language). This code is used for mapping the category.

<CategoryInfo> <CategoryName> Optional

Name of the category. This name is language specific (varies by search language). For example, in a transparent punchout to Oracle Exchange, the Exchange uses the <searchLanguage> in the ItemSearchRequest document to determine which language of the catalog to search and to return results from. The name is used for display purposes only.

<CatalogType> Optional

Indicator of whether the item is from a contract. If the item is from a contract, enter the value CONTRACTED in this field. Otherwise, leave this field blank.

<BuyerContract> Optional

Contract number if the item is from a contract. If this contract number matches an approved, effective contract purchase agreement number in Oracle Purchasing, the purchase order that ultimately gets created for the item will get created against that contract. For a full description of the flow, buyers should see the Contract Numbers overview provided in the buyer version of this guide.

ItemAttribute> Optional

Use the ItemAttribute fields to specify additional attributes (also known as descriptors) for the item. The type attribute can be Text, Number, Date, or URL; however, Oracle iProcurement treats the attribute values as Text.

See the XML example ItemSearchResponse earlier in this section for example ItemAttribute fields. The illustrations of the **Item Details** page above show how the ItemAttribute fields in this XML example display to the requester. ItemAttribute fields display only on the **Item Details** page. They display at the end, after the other item information.

The ItemAttribute fields can be specific to the search language (the language sent in the <searchLanguage> field in the ItemSearchRequest document). For example, the requester's session language is English. If the supplier returns item information in German, the item information itself displays in German; however, the field names, such as item Description or Manufacturer, display in English. The ItemAttribute fields, however, display exactly how they are sent. If the supplier returns both an

ItemAttribute field and its value in German, both the field and its value display in German, regardless of the requester's session language.

When conducting a transparent punchout to Oracle Exchange, any attributes that the Exchange Operator defines, in addition to those such as Price or Manufacturer that Oracle Exchange already provides, are returned in the ItemAttribute fields.

Mapping Between XML and Oracle iProcurement Fields

The table below shows the mapping between XML fields and the fields that requesters see in the search results or item details in Oracle iProcurement.

ItemAttribute fields in an ItemSearchResponse document display in addition to the fields below. For example, Lead Time is a standard item field that Oracle iProcurement provides, but it is not a standard XML field in the ItemSearchResponse document. If the supplier specifies Lead Time in the ItemAttribute field in the ItemSearchResponse document, then that Lead Time displays in addition to the Lead Time field that Oracle iProcurement already provides.

Field in Oracle iProcurement	XML Field in shoppingCart	cXML Field in PunchoutOrderMessage	XML Field in ItemSearchResponse
Category	<categorycode></categorycode>	<classification></classification>	<categoryname></categoryname>
Description	<itemdescription></itemdescription>	<description></description>	<shortname></shortname>
Unit	<supplieruomtype></supplieruomtype>	<unitofmeasure></unitofmeasure>	<uomname></uomname>
Unit Price	<unitprice></unitprice>	<money></money>	<money currency=""></money>
Currency	<currency></currency>	<currency></currency>	<money currency=""></money>
Supplier	<suppliername></suppliername>	(Supplier name entered in punchout setup definition)	<suppliername></suppliername>
Supplier Item	<supplieritemnumber> <itemid></itemid></supplieritemnumber>	<supplierpartid></supplierpartid>	<supplierpartnum></supplierpartnum>
Manufacturer	<manufacturername></manufacturername>	<manufacturername></manufacturername>	<manufacturername></manufacturername>
Manufacturer Item	<manufactureritem Number><itemid></itemid></manufactureritem 	<manufacturerpartid></manufacturerpartid>	<manufacturerpartnum></manufacturerpartnum>
Image	(no XML field)	(no XML field)	<image/> <url></url>
Image URL	(no XML field)	(no XML field)	<image/> <url></url>

Table B–13 Mapping of XML and cXML Fields to Oracle iProcurement Fields

Field in Oracle iProcurement	XML Field in shoppingCart	cXML Field in PunchoutOrderMessage	XML Field in ItemSearchResponse
Thumbnail Image	(no XML field)	(no XML field)	<thumbnailimage> <url></url></thumbnailimage>
Long Description	(no XML field)	(no XML field)	<longname></longname>
UNSPSC Code	(Supplier can provide UNSPSC code in <categorycode>, but it does not display in UNSPSC field in iProcurement.)</categorycode>	(Supplier can provide UNSPSC code in <classification>, but it does not display in UNSPSC field in iProcurement.)</classification>	(Supplier can provide UNSPSC code in <categoryname>, but it does not display in UNSPSC field in iProcurement.)</categoryname>
Functional Currency Price	(Oracle iProcurement populates this field)	(Oracle iProcurement populates this field)	(Oracle iProcurement populates this field)
Item Type	<item linetype=""></item>	(no XML field)	<iteminfo linetype=""></iteminfo>
Supplier Site	<suppliersite></suppliersite>	(no XML field)	(no specific XML field)
Contract Number	 	(no XML field)	<buyercontract></buyercontract>
Supplier Config ID (hidden field)	<supplierreference Number></supplierreference 	<supplierpartauxiliaryid></supplierpartauxiliaryid>	(no specific XML field)

Table B–13 Mapping of XML and cXML Fields to Oracle iProcurement Fields

Note: Do not confuse the <SupplierPartAuxiliaryID> field in a cXML document with the Supplier Part Auxiliary ID *descriptor* in the local catalog in Oracle iProcurement. These fields are used for different purposes. The <SupplierPartAuxiliaryID> cXML field is used in the cXML document to specify a configuration number. The Supplier Part Auxiliary ID descriptor in the local catalog is used by the bulk loader to specify augmentative item information. For details, see the *Oracle iProcurement Implementation Guide* or the downloadable bulk load instructions in the eContent Manager.

Mapping Between XML and cXML

When Oracle Exchange converts a supplier's cXML shopping cart to XML in a punchout, it converts the fields as described in the table below. (These fields represent values that come from the cXML document itself; other values may come from Oracle Exchange, for example.)

cXML	XML	
quantity	<item quantity=""></item>	
SupplierPartID	<supplieritemnumber> <itemid></itemid></supplieritemnumber>	
SupplierPartAuxiliaryID	<supplierreferencenumber></supplierreferencenumber>	
Money	<unitprice></unitprice>	
currency	<currency></currency>	
Description	<itemdescription></itemdescription>	
UnitOfMeasure	<supplierunitofmeasure> <supplieruomtype></supplieruomtype></supplierunitofmeasure>	
Classification	<categorycode></categorycode>	
ManufacturerPartID	<manufactureritemnumber> <itemid></itemid></manufactureritemnumber>	
ManufacturerName	<manufacturername></manufacturername>	

Table B–14 cXML to XML Conversion of Shopping Cart in Punchout

C

Authentication, Security, and Encoding

This chapter covers the following topics:

- Authentication and Security on page C-1
- Encoding on page C-4

Authentication and Security

Oracle iProcurement and Oracle Exchange come with the capability to access secure sites. If the site the buying company accesses is secure (the site URL starts with a secure protocol such as https:// instead of http://), then the buying company should review the prerequisites described in the buyer setup.

Note: Oracle iProcurement and Oracle Exchange do not support client-side certificate authentication. That is, they authenticate the server they are accessing, but do not allow that server to authenticate them in return (known as client-side authentication). If the supplier's server attempts client-side authentication, the connection will fail.

The discussions below use a punchout from Oracle iProcurement to the secure Oracle Exchange site as an example, but the information applies to all models where the site being accessed is secure.

Secure Sockets Layer (SSL) Authentication

Oracle iProcurement uses the SSL protocol to establish a secure HTTP connection between the Oracle iProcurement server and the supplier site or Oracle Exchange. The SSL protocol is a set of rules governing authentication and

encrypted communication between servers and clients. Oracle iProcurement and Oracle Exchange call Oracle SSL application programmable interfaces (APIs) to establish a connection to the secure site.

For example, in a punchout from Oracle iProcurement to Oracle Exchange, the Oracle Exchange server responds to Oracle iProcurement, through the SSL connection, with a digital certificate. Oracle iProcurement then authenticates the digital certificate. A digital certificate is proof that a site (Oracle Exchange in this example) is who it says it is. Established and trusted companies or services known as *certification authorities* assign digital certificates to sites who apply for them. To authenticate the digital certificate sent from Oracle Exchange, Oracle iProcurement compares the digital certificate to certification authorities stored in the ca-bundle.crt file in Oracle iProcurement.

The steps involved in validating the digital certificate are as follows:

- Check the validity period. For example, in a punchout from Oracle iProcurement to Oracle Exchange, the Oracle iProcurement server checks the validity period on the certificate presented by the Oracle Exchange server. If the current date and time is outside the validity period's date range, the authentication process stops.
- Check the certification authority. In Oracle iProcurement, a list of trusted certification authorities is maintained on the server in a file called ca-bundle.crt, which is part of the standard Oracle Application Server installation. If the name of the certification authority on the certificate that the supplier site sends matches the name of a certification authority in the ca-bundle.crt file, the authentication proceeds. Oracle iProcurement and Oracle Exchange also support a certification chain. In a certification chain, the supplier site's certification authority may not match the certification authority in Oracle iProcurement or Oracle Exchange, but it references another certification authority that does match.
- Check that the certification authority validates the digital certificate. For example, in a punchout from Oracle iProcurement to Oracle Exchange, the Oracle iProcurement server uses the certification authority's public key (a code that decrypts certificates) to validate the digital signature on the digital certificate sent by the Oracle Exchange server. The public key is included in the ca-bundle.crt file. Oracle iProcurement and Oracle Exchange use standard techniques of encrypting and decrypting data using public and private keys.
- Check that the domain name on the digital certificate matches the domain name of the sending server itself. For example, in a punchout from Oracle

iProcurement to Oracle Exchange, the Oracle iProcurement server ensures that the Oracle Exchange server is on the same network as that stated in the certificate and is not one posing as the Oracle Exchange server.

Once the above checks are performed by the accessing application (Oracle iProcurement or Oracle Exchange), the server authentication of the site where the catalog resides is complete. Next, the connected servers use the certificate to generate a session key (to be used only for the duration of that connection between the catalog site and Oracle Exchange or Oracle iProcurement), and Oracle iProcurement or Oracle Exchange transmit this key, encrypted, back to the catalog site using the catalog site server's public key. All subsequent communication between Oracle Exchange or Oracle iProcurement and the catalog site is encrypted.

Oracle iProcurement and Oracle Exchange use SSL version 3.0.

Refer to the following documents for more details on SSL and the public encryption methodologies used in SSL:

- http://developer.netscape.com/docs/manuals/security/sslin/contents.htm
- http://home.netscape.com/security/techbriefs/ssl.html

Shopping Cart Transfer

When the shopping cart is passed to Oracle iProcurement or Oracle Exchange, the external site obtains the URL to which the shopping cart is posted from the <returnURL> field in the login Request document. The external site's server submits the shopping cart to the return URL in Oracle iProcurement via a POST through the requester's browser.

Oracle iProcurement and Oracle Exchange also support SSL connections in a proxy server configuration, if proxy servers are used for outbound connections from the server (for example, the Oracle iProcurement server) to the Internet.

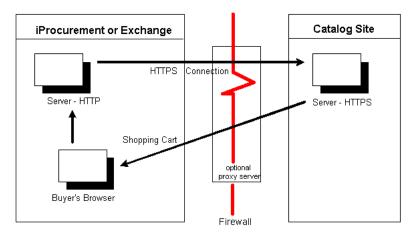


Figure C–1 Accessing the Site via the Firewall

The diagram above shows a non-secure buying site accessing a secure supplier site through the buying organization's firewall (and proxy servers, if any). The shopping cart is returned through the firewall to the browser, and from the browser to the buyer's site. In this diagram, the browser uses HTTP to talk to the buying server and HTTPS to talk to the catalog server.

If the implementation of the Oracle iProcurement server uses HTTPS, then the requester's browser uses HTTPS to connect and submit the shopping cart to the server. All the SSL authentication details discussed above are valid in this process as well.

Encoding

Encoding is specified in the XML prolog as follows:

```
<?xml version="1.0" encoding="UTF8"?>
```

Punchout and transparent punchout use this encoding (not the XML language tag <language>) to interpret the XML.

Oracle Exchange supports only UTF-8 character encoding, and Oracle iProcurement works best with punchouts directly to suppliers when UTF-8 encoding is used. Therefore, it is strongly recommended that suppliers always use UTF-8 encoding when sending punchout documents in any model to avoid problems sending and receiving multibyte characters. If the supplier, however, does use a different encoding, the buying company should specify this encoding on the punchout setup page.

When performing a punchout or transparent punchout to Oracle Exchange, Oracle iProcurement always uses UTF-8 encoding. When performing a punchout from Oracle Exchange, Oracle Exchange always uses UTF-8 encoding. Other encoding methods are not supported by Oracle Exchange.

In a transparent punchout, the XML document is always encoded in UTF-8 so that the supplier's catalog can be searched and results can be returned in any language. For a transparent punchout, the supplier *must* use UTF-8 encoding.

cXML punchouts to a supplier are expected to use UTF-8 encoding.

For XML punchouts, the supplier must URL encode the cart.

D

Maximum Field Lengths

This appendix contains the following sections:

- Punchout from Oracle Exchange on page D-1
- Punchout from Oracle iProcurement on page D-2
- Transparent Punchout from Oracle iProcurement on page D-4

Oracle Exchange and Oracle iProcurement have some data length limits for fields. When the supplier sends the shopping cart to Oracle Exchange or Oracle iProcurement, data greater than the column lengths given in this appendix is truncated at that length. For example, the manufacturer item number (itemID) allows 30 maximum characters. A manufacturer item number of *ABmanufacturer30plusCDEitem123456* sent by the supplier becomes *ABmanufacturer30plusCDEitem123* in Oracle iProcurement or Oracle Exchange.

Note: The lengths given below are *character* lengths. If the data is sent in a multibyte language, the number of *multibyte* characters allowed may be fewer than the character lengths given below.

Punchout from Oracle Exchange

Oracle Exchange has the following maximum character lengths for the shopping cart data when performing a punchout from Oracle Exchange.

Where multiple XML fields are given in the table below, the last field is the one in which the data is contained.

XML Field	Character Length	
<contract></contract>	20	
 buyerContractNumber>		
<contractnumber></contractnumber>		
<item linetype="Goods" quantity="12"></item>	(The quantity is a number.)	
<itemnumber></itemnumber>	740	
<supplieritemnumber></supplieritemnumber>		
<itemid></itemid>		
<manufactureritemnumber></manufactureritemnumber>	30	
<itemid></itemid>		
<manufacturername></manufacturername>	255	
<itemdescription></itemdescription>	240	
<supplieruomtype></supplieruomtype>	3	
<hazardclass></hazardclass>	40	
<categorycode></categorycode>	250	
<currency></currency>	4	
<unitprice></unitprice>	(This is a number.)	
<supplierduns></supplierduns>	(This is a number.)	
<suppliername></suppliername>	360	
<suppliertradingpartnercode></suppliertradingpartnercode>	(This is a number.)	

 Table D-1
 Oracle Exchange Maximum Character Lengths (Punchout)

Punchout from Oracle iProcurement

Oracle iProcurement has the following maximum character lengths for the shopping cart data.

Where multiple XML fields are given in the table below, the last field is the one in which the data is contained.

XML Field	Character Length	
<contract></contract>	20	
 buyerContractNumber>		
<contractnumber></contractnumber>		
<catalogtype></catalogtype>	30	
<item linetype="Goods" quantity="12"></item>	(The quantity is a number.)	
<supplierreferencenumber></supplierreferencenumber>	150	
<itemnumber></itemnumber>	25	
<supplieritemnumber></supplieritemnumber>		
<itemid></itemid>		
<manufactureritemnumber></manufactureritemnumber>	30	
<itemid></itemid>		
<manufacturername></manufacturername>	30	
<itemdescription></itemdescription>	240	
<supplieruomtype></supplieruomtype>	80	
<supplieruomquantity></supplieruomquantity>	80	
<hazardclass></hazardclass>	(This is a number.)	
<categorycode></categorycode>	80	
<currency></currency>	15	
<unitprice></unitprice>	(This is a number.)	
<supplierduns></supplierduns>	35	
<suppliername></suppliername>	240	
<suppliertradingpartnercode></suppliertradingpartnercode>	35	
<suppliersite></suppliersite>	240	
<attribute1> through <attribute15></attribute15></attribute1>	150	

 Table D-2
 Oracle iProcurement Maximum Character Lengths (Punchout)

Transparent Punchout from Oracle iProcurement

Oracle iProcurement has the following maximum character lengths for item information returned in the search response.

Where multiple XML fields are given in the table below, the last field is the one in which the data is contained.

, anono any		
XML Field	Character Length	
<supplierpartnum></supplierpartnum>	700	
<suppliercode></suppliercode>	700	
<suppliername></suppliername>	700	
<shortname></shortname>	700	
<longname></longname>	2000	
<money currency="</td"><td colspan="2">15</td></money>	15	
<money></money>	(This is a number.)	
<uomcode></uomcode>	3	
<uomname></uomname>	25	
<manufacturerpartnum></manufacturerpartnum>	700	
<manufacturername></manufacturername>	700	
<url></url>	700	
<categorycode></categorycode>	250	
<categoryname></categoryname>	250	
<catalogtype></catalogtype>	10	
<buyercontract></buyercontract>	20	

 Table D–3
 Oracle iProcurement Maximum Character Lengths (Transparent Punchout)

Alternative Supplier and Site Mapping

This chapter contains the following topics:

- Supplier and Site Mapping in Previous Releases on page E-1
- Supplier and Site Mapping in Oracle e-Commerce Gateway on page E-3

The Supplier and Supplier Site fields on the punchout or transparent punchout setup pages allow the buyer to easily control supplier and site mapping. These fields enable the buyer to select a Supplier and Supplier Site that are already defined in Oracle Applications. Oracle iProcurement then defaults that supplier and site onto all requisitions (and purchase orders) that are generated from that punchout or transparent punchout site.

These fields, however, are optional. The following sections describe how the supplier and site mapping occurs if you do not use the recommended Supplier and Supplier Site fields.

Supplier and Site Mapping in Previous Releases

Although it is recommended that the purchasing administrator use the Supplier and Supplier Site fields on the setup pages to perform supplier and site mapping, the following table summarizes how the mapping is performed for each model if these fields are left blank. Note that the mapping in these cases requires the supplier to enter the correct value in the XML shopping cart document, and the buyer has less control over the values that are mapped.

The supplier and site mapping described below was used in previous releases of Oracle iProcurement and is still supported today, if the buyer leaves the Supplier and Supplier Site fields blank on the setup pages. For information on the Supplier and Supplier Site fields, see Set Up Supplier and Site Mapping on page 2-61.

Model	Mapping Details	
Model 1: Punchout from Oracle iProcurement to Oracle Exchange (XML)	Maps the <supplierduns> or <suppliertradingpartnercode> value, whichever exists, to the EDI Location field. This value will be the supplier DUNS number, mapped trading partner ID, or Exchange-assigned trading partner ID—whichever you chose in To decide how to identify the supplier: on page 2-64.</suppliertradingpartnercode></supplierduns>	
	Note: This mapping is the same today as it was in previous releases. It does not use Supplier and Supplier Site fields, but uses the EDI Location field.	
Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML)	If a Supplier and Supplier Site are not provided on the setup page, then this model maps <supplierduns> or <suppliertradingpartnercode>, whichever exists in the XML shopping cart file, to the EDI Location field. If there's no match, it maps <suppliername> and <suppliersite> to the VENDOR_NAME and VENDOR_SITE mapping in eCommerce Gateway.</suppliersite></suppliername></suppliertradingpartnercode></supplierduns>	
Model 2b: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (cXML)	If a Supplier and Supplier Site are not provided on the setup page, then this model maps the Supplier ID field on the punchout setup to the EDI Location field.	
Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)	If a Supplier and Supplier Site are not provided on the edit punchout page, then this model maps <supplierduns> or <suppliertradingpartnercode>, whichever exists in the XML shopping cart file, to the EDI Location field. If there's no match, it maps <suppliername> and <suppliersite> to the VENDOR_ NAME and VENDOR_SITE mapping in eCommerce Gateway.</suppliersite></suppliername></suppliertradingpartnercode></supplierduns>	

 Table 4–3
 Supplier and Site Mapping Details if Supplier and Supplier Site Fields Are Not Used

Model	Mapping Details	
Model 5: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (cXML)	If a Supplier and Supplier Site are not provided on the edit punchout page, then this model maps the <supplierduns> or <suppliertradingpartnercode> value, whichever exists in the XML shopping cart file, to the EDI Location field. This value will be the supplier DUNS number, mapped trading partner ID, or Exchange-assigned trading partner ID—whichever you chose in To decide how to identify the supplier: on page 2-64.</suppliertradingpartnercode></supplierduns>	
Model 1: Transparent Punchout from Oracle iProcurement to Oracle Exchange (XML)	Maps <suppliercode> to the EDI Location field. The <suppliercode> will be the supplier DUNS number, mapped trading partner ID, or Exchange-assigned trading partner ID—whichever you chose in To decide how to identify the supplier: on page 2-64.</suppliercode></suppliercode>	
	Note: This mapping is the same today as it was in previous releases. It does not use Supplier and Supplier Site fields, but uses the EDI Location field.	
Model 2: Transparent Punchout from Oracle iProcurement to Supplier-Hosted Catalog (XML)	If a Supplier and Supplier Site are not provided on the setup page, then this model maps the Supplier ID field in the transparent punchout setup to the EDI Location field.	

Table 4–3 Supplier and Site Mapping Details if Supplier and Supplier Site Fields Are Not Used

Supplier and Site Mapping in Oracle e-Commerce Gateway

Supplier and site mapping can also be performed in Oracle e-Commerce Gateway as an alternative to the EDI Location field, in the following models:

- Model 2a: Punchout from Oracle iProcurement Directly to Supplier-Hosted Catalog (XML)
- Model 4: Punchout from Oracle iProcurement to Supplier-Hosted Catalog via Oracle Exchange (XML)

Although it is recommended to use the Supplier and Supplier Site fields on the setup pages for these models, you can alternatively use the EDI Location field as described above or use Oracle e-Commerce Gateway as described below.

The supplier and site mapping described below was used in previous releases of Oracle iProcurement and is still supported today, if the purchasing administrator leaves the Supplier and Supplier Site fields blank on the setup pages and does not use the EDI Location field. For information on the Supplier and Supplier Site fields, see Set Up Supplier and Site Mapping on page 2-61.

Category	Direction	Key1	Internal Value	External 1	External 2
VENDOR_ NAME	IN	Leave this field blank for VENDOR_NAME.	Internal supplier name defined in the Suppliers window in Oracle Applications, such as Supplier Inc.	External supplier name, used by the hub or supplier, such as Supplier Incorporated, contained in the <suppliername> punchout tag.</suppliername>	Not used.
VENDOR_ SITE	IN	Leave this field blank for VENDOR_SITE.	Internal supplier site name defined in the Supplier Sites window in Oracle Applications, such as HQ.	External supplier name used by the hub or supplier, such as Supplier HQ, contained in the <suppliername> punchout tag.</suppliername>	External supplier site name used by the supplier, contained in the <suppliersite> punchout tag.</suppliersite>

 Table 4–4
 Supplier and Supplier Site Mapping in Oracle e-Commerce Gateway

For instructions on using Oracle e-Commerce Gateway, see Set Up Data Mapping in Oracle e-Commerce Gateway on page 2-69.

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