

Oracle® Product Development Exchange

Setup Guide

Release 6.2

May 2001

Part No. A88862-01

ORACLE®

Oracle Product Development Exchange Setup Guide, Release 6.2

Part No. A88862-01

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

Primary Authors: Kimberly Whitehead, Joyce Fee

Contributing Authors: Suhail Maqsood, Andrew Long, Bastin Gerald, Jeff Barton, Marc Bennink, Sachin Patel

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

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

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

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

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

Oracle is a registered trademark, and *CASE*Exchange*, *Enabling the Information Age*, *Oracle7*, *Oracle8*, *Oracle8i*, *Oracle Application Object Library*, *Oracle Web Customers*, *Oracle Workflow*, *PL/SQL*, *SQL*Net*, *SQL*Report* are trademarks or registered trademarks of Oracle Corporation. Other names may be trademarks of their respective owners.

Contents

Send Us Your Comments	v
Preface	vii
Intended Audience	vii
Prerequisites	vii
Related Documents.....	viii
Structure.....	viii
1 Overview	
Item Information Management	1-1
Project Collaboration.....	1-4
Document Management	1-6
People Management.....	1-8
Change Management	1-11
Issue Management.....	1-11
Product Development Intelligence (OPDI).....	1-12
2 Getting Started	
Prerequisites	2-2
OPDX Usage Options.....	2-3
Change/Issue Management Customization Setup Steps	2-6
Document Management Customization Setup Steps (optional)	2-8
Projects Customization Setup Steps (optional)	2-10
Roles Setup Steps (optional)	2-11

Workflow Management Customization Steps (optional) 2-12

**3 Defect Management
System Integration**

Prerequisites 3-2
Defect Management System Integration Steps (optional) 3-2

A OPDX Workflows

Change Management Workflow A-2
Project/Task Date Change Notification to Dependents Workflow A-12

Index

Send Us Your Comments

Oracle Product Development Exchange Setup Guide, Release 6.2

Part No. A88862-01

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

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

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

- FAX: 650-506-7809 Attn: Oracle OPDX Documentation
- Postal service:
Oracle Corporation
Oracle Product Development Exchange Documentation
500 Oracle Parkway, 3op9
Redwood Shores, CA 94065
USA

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

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

Preface

This document describes how to define optional settings in Oracle Product Development Exchange (OPDX). You may begin using OPDX immediately after the installation is complete. Alternately, you might wish to define some of the options documented in this guide before releasing OPDX to your users. These steps can also be performed as the need arises during collaboration.

The setup of other Exchange applications is documented in separate Setup Guides.

See Also: "Related Documents"

Intended Audience

This manual is intended for the following audiences:

- The Exchange Operator, who establishes the Exchange and is in charge of the day-to-day operation of the Exchange site.
- The Exchange Company Administrator, who registers its company and users on the Exchange, and procurement professionals in the company who perform buying or selling activities on the Exchange.
- Any functional (non-technical) person who helps either of the above parties in setting up Product Development Exchange.

Prerequisites

Before reading this document, you should already have installed the Exchange and Product Development Exchange software as described in the *Oracle Exchange Installation Guide*.

During installation of Product Development Exchange, Oracle Internet File System will be installed. Through the Oracle Internet File System, Oracle Product Development Exchange offers document management capabilities such as check-in and check-out; document categories, folders, and revisions; and automatic text indexing to facilitate document searches.

Related Documents

Following are documents related to OPDX and other Exchanges:

- Oracle Exchange Installation Guide for instructions on installing the Exchange.
- *Oracle Exchange Integration Guide* for information on how to integrate the Exchange with other applications.
- *Oracle Product Development Exchange Technical Reference Manual*
- *Marketplace Exchange Setup Guide*
- *Transportation Exchange Setup Guide*
- *Supply Chain Exchange Setup Guide*

Structure

This book is contains the following:

Chapter 1

This chapter gives a brief overview of OPDX functionality.

Chapter 2

This chapter outlines the basic steps for OPDX setup.

Chapter 3

This chapter describes OPDX defect management system integration.

Appendix A

This appendix contains the OPDX workflow diagrams.

Overview

This chapter provides a brief overview of Product Development Exchange (OPDX) to help you understand the types of functionality that OPDX offers. Further details about this functionality are available in the "Product Development" section of the Exchange online Help, which is available to you after you register.

Product Development Exchange consists of the following functional areas:

- Item Information Management
- Product Structure Management
- Document Management
- People Management
- Change Management
- Issue Management
- Product Development Intelligence (OPDI)

Item Information Management

As major enterprises increasingly rely on a global network of suppliers for product development execution, item information has become geographically dispersed, making information sharing a greater challenge. OPDX provides global access to item information using the capabilities described in this section.

Item Catalog

OPDX includes the item catalog also used by the Exchange. You can include items in the catalog early in the product development life cycle and secure them so that only authorized parties will find these items when they perform a catalog search.

Item Catalog Import Using standards based upload capability, you can import item catalog information from XML and popular spreadsheet formats.

Text Searches Oracle's item catalog includes sophisticated search technology so you can easily find an item.

Item Cross References

You can have cross references to other item identifiers of the same form, fit, and function, as well as item identifiers of other items (again, of the same form, fit, and function).

Alternate Item Identifiers You can specify *alternate item identifiers*, which may be specific to a given party or could be universal cross references. You can specify the alternate item identifiers for items in a spreadsheet and upload them onto the Exchange.

Related Items A cross reference may be used to relate item numbers that identify different items (of the same form, fit, and function). Relationship types can be universal.

Item/Project Association

You can associate items with projects or tasks, allowing you to directly navigate to and view relevant project information.

Unlimited Item Documents

OPDX enables you to attach an unlimited number of documents to the item in the catalog.

Integrated CAD and Document Viewers OPDX does not include any specific viewer, but instead allows customers to select the viewer of their choice. OPDX uses native web browser capabilities to automatically invoke the appropriate viewer when a user selects an item document or CAD file to view.

Change Notifications/Subscriptions

People with change notification privileges for a particular item can subscribe to email-based change notifications that are sent whenever item information is changed. Change notification emails include links that navigate directly to the changed information.

Item People and Roles

Role-Based Item Security In OPDX, users can use data security to control the visibility of their items. Data security controls access and operations to unique data. For example, you may be granted the ability to view “Item A” but not “Item B” because you have a role on “Item A” with the privilege “View Item Information.”

Bulk Load Capability You can specify the people and roles associated with an item in a spreadsheet and upload them onto the Exchange.

Public Access on Items You can grant global access to items using the "All Users" group, a group consisting of all Exchange users.

Item Revisions

You can specify the revisions of an item that is in the catalog. Design documentation, product structures and their components, and other relationships between items may also exist between revisions of those items.

Item Revision Import

You can specify the revisions for an item in a spreadsheet and upload them onto the Exchange.

Product Structure Management

OPDX Product Structure Management enables you to create or import product structures. OPDX allows you to manage these product structures using Change Management, revision control, and date and revision effectivity. OPDX also provides an advanced graphical product structure navigator tool.

Date and Revision Effectivity OPDX provides for components of a product structure to be effective for either a date or a revision of the structure.

Multiple Product Structures With OPDX, you can record the product structures for a given assembly throughout its prototype, development, and manufacturing stages.

Product Structure Import OPDX provides standards-based upload capability for product structures from both XML and popular spreadsheet formats.

Product Structure Types OPDX provides the capability to support multiple types of product structures used throughout an organization. Examples of product structure

types include Manufacturing Bills of Material, Engineering Bills of Material and Marketing Bills of Material.

Product Structure Navigator Product Structure Navigator provides a web-based graphical information navigator to enable expert users to rapidly navigate through complex product structures and related information.

Project Collaboration

Managing collaborative product development projects is more challenging than ever as project teams become more geographically dispersed and include team members from many companies. Getting up-to-date project status information and communicating schedules to team members and management is more difficult than ever.

OPDX streamlines product development project management by providing the following capabilities described in the following sections.

Project Definition

Project Information Web Pages OPDX provides simple, intuitive web pages for obtaining project information. Examples of OPDX project web pages include:

- Project Search
- Project Summary and Tasks
- Project Attachments (Documents)
- Project Team
- Project/Item Association

Integration with Project Planning Tools OPDX provides a gateway to popular project planning tools that enable you to maintain project information in your favorite project planning tool and then upload this information directly into OPDX, to be shared with team members and partners. Microsoft Project, a project planning application, is integrated with OPDX.

Unlimited WBS Hierarchy You can define product development projects with unlimited work breakdown structures.

Project Reporting Classifications The Project Reporting Classification is a project attribute that can be used for project cycle time reporting purposes. OPDX enables you to define Project Reporting Classifications.

Task Dependencies You can declare the tasks that must be completed and issues that must be resolved before a dependent task can be completed.

With today's project management tools, a project manager is faced with two equally unpleasant choices: they can record the tasks, activities, and dependencies between those activities both in the project management system and the work management system of record; or, they can have a high level plan where movements in the actual work management system are not tracked. This makes the project plans become out-of-date very quickly, and project managers have to reconcile activity happening at very different levels. OPDX enables project managers to create dependencies, not only between tasks, as would be found in most project management systems, but also in the work management systems themselves, such as Change Order systems or Issue Management systems.

Project Documents

Project URL Links You can store documents in the Oracle Internet File System document management system or you can reference documents from other document repositories using an URL.

Unlimited Project Documents You can associate any number of documents with a project or task. You can attach the same document to both an item and to a task. As a result, the attachment is visible when viewing both project and item information.

Project People and Roles

Project Team You can specify people and the role they assume for a project or for a task.

Role-Based Security Role-based security involves assigning privileges to users or groups to grant different access levels to projects and tasks. For example, a user with the "Task Manager" role for a task can edit the Task Details and Progress, associate documents and items to the task, view the project team, create issues/change requests/change orders for the task, and add/edit task dependencies.

Project/Item Association

You can specify a list of items associated with a project or task. This association allows you to conveniently navigate between item and project information.

Revision Level Association You can specify the association between item and projects at the item revisions level and the item level.

Notifications

Project Status Change Notifications Project team members can subscribe to notifications when the status of a project or task changes, providing they have the necessary privileges to the task or project.

Project/Task Workflows

Date Change Notifications Managers of dependent project/tasks can be notified of date and status changes to a project/task upon which they are dependent.

Document Management

Document Management with OPDX provides the capabilities described in the following sections.

Unlimited Document Attachments

You can attach an unlimited number of documents to objects (in OPDX, objects are items, item revisions, product structures, product structure components, projects, tasks, change requests, change orders, and issues).

Role-Based Security

You can have role-based security for any document. Role-based security involves assigning privileges to users or groups to grant different access levels to documents. For example, a user with “Document Author” role for a document can view, edit, and delete the document.

Uniform Security through Access Control Lists (ACLs)

OPDX enables you to define your own ACLs. You can also search for ACLs, or show all ACLs that you have defined. An ACL is a list of people or groups that you define to give access to certain documents or folders. ACLs provide you the ability

to implement tight security around your documents and folders. Document owners can change the ACLs for their own documents.

Publicly Available Documents

You can grant global access to documents using the "All Users" group, which is a group consisting of all Exchange users.

Where Used (Referenced)

You can find all objects (such as projects, items and change requests) to which a document is attached. You can also find all documents attached to objects.

Check-in/Check-out

Product Development Exchange leverages the power of Oracle Internet File System to provide check-in and check-out document management functions. You can collaborate with others on the same files without the risk of someone overwriting the file you are working on.

Document Categories

OPDX offers the capability to organize your documents in many ways. Documents are defined as a member of a document category, but can be stored and accessed from many folders. For example, a document may have the document category of Press Releases and be stored in the document folder Collateral.

Document Folders

The Oracle Internet File System enables you to organize your documents in folders. For example, a Specification Sheet in an Engineer to Order environment may be a technical document that is in a:

- Folder for the item
- Folder for a purchase order
- Folder for a project

Document Revisions

The Oracle Internet File System repository captures and tracks all modifications made to a versioned document. To do so, Oracle Internet File System provides an easy-to-use, secure "check-in" and "check-out" procedure. Documents are first

checked out of the document repository, modified if necessary, and checked back into the repository.

Document Status and Change Workflows

OPDX includes workflow-driven change control for many types of product information. Changes are routed to designated approvers before new revisions of the document can be checked into the Oracle Internet File System (which is the Document Management system).

Integrated Document Management and Exchange Security

Users are registered for both Oracle Internet File System document management and Exchange systems. Privileges granted on a document from within the Exchange environment are respected in the document management environment. Similarly, privileges granted within the document management environment are respected in the Exchange environment.

Advanced Text Indexing

With the Oracle Internet File System, text context can be automatically indexed, facilitating document searches on document content.

Intermedia Parsing and Indexing Engines

The Oracle Internet File System includes a facility to parse documents when they are checked in. Examples of this facility might be to parse a work breakdown structure (WBS) out of a project file, or a Bill of Material out from a CAD drawing. The parsed information is stored in OPDX project and product structure tables.

Oracle *8i* Storage

The Oracle Internet File System manages the storage of a wide range of documents, including CAD files, web pages, e-mail, and a variety of other file types.

People Management

OPDX facilitates collaboration and provides global access to project and product information throughout the product lifecycle. OPDX includes People Management capabilities based on a security model of application, or function, security and data security.

Security

Function Security Function Security is used by Exchange Operators and Company Administrators to grant users access to appropriate application functionality. This is accomplished through *job functions*. A job function is a collection of Exchange Tasks. OPDX comes with predefined job functions, and also offers you the ability to customize your own job functions.

Function Security controls application/page access. Each OPDX page is associated with an Exchange Task. When users try to access an OPDX page, they should have the Exchange Task associated with the page through one of their job functions. Otherwise, users cannot access that page. For example, if your job function includes an Exchange Task called "Create Project," you will be able to create projects. Similarly, if your job function includes "Create Items," you can create items.

Data Security OPDX provides a security mechanism called role-based data security, which enables users to secure individual data elements. Every object in product development is secured using data security. A user's ability to view/edit an object is controlled by the user's role on that object. Roles are granted to users by the owner of the object or by people who have the privilege to add people. A list of people with object-specific roles is maintained for each of the following objects:

- Project
- Task
- Item
- Issue
- Change Request
- Change Order
- All documents attached to each of these objects

A *privilege* defines a unit of access to an object type such as item, project, task, or change order. For example, discovering an item, viewing an item and editing an item are all privileges on an item.

A *role* is a collection of privileges. Roles offer a convenient way of grouping privileges into one bundle, which can later on be assigned to users. Roles are object type-specific. For example, the role "Item Reviewer" includes such privileges as "Discover Item," and "View Basic Information." You can give this role to various people on individual item instances.

In a collaborative environment, there are users from different departments and companies using the same application; the best people to determine the level of security for their information are the users themselves. The following examples are provided to help you understand the importance of role-based data security:

Example 1 Manufacturer Topco Inc., manufactures and sells the products A and B, among others. They have Comco Inc. as their supplier, who supplies components for product A. On the other hand, Comco has a competing product for Topco's product B. In this scenario, Topco would want to share information about Product A with Comco, but would want to protect all information about Product B from Comco.

Example 2 Construct-it Inc. is a construction company that manages many construction projects simultaneously. Alan is responsible for Project X and he manages this project. Alan also reviews some other projects, but he cannot update any information in those projects. In this scenario, Construct-it would want Alan to have full access to Project X and restricted access on the projects that he reviews.

Groups

You can define groups or communities of people in order to collaborate. You can represent all your teams as groups in OPDX and give your groups access to product development objects. You can send an email to everyone in a group with a click of a button. When you define a group you can include your other groups as members.

User-Defined Roles

OPDX provides the capability to define roles to represent various groupings of privileges. Roles and privileges are object-specific. You can define custom roles for object types such as:

- Change Order
- Change Request
- Document
- Issue
- Item
- Project
- Task

Change Management

Change Management in Product Development provides a formal process by which you can manage changes to:

- Items
- Product Structures
- Documents
- Projects
- Tasks

Change Approval Workflows

OPDX uses Oracle's workflow management tool, Oracle Workflow, to direct the activities needed to implement change requests and change orders. Workflows are associated to change request and change order types with full escalation capability.

People and Roles

OPDX enables you to identify the change request and change order owner and affected parties.

Severity and Status Codes

Oracle Workflow directs work according to the change request and change order severity and status.

Documents and Dependencies

OPDX enables you to collect and store change-specific information in documents. You can maintain dependencies between other changes, projects, tasks, and issues.

Issue Management

Issue Management in OPDX provides a formal process by which you can manage issues to:

- Items
- Product Structures
- Documents
- Projects

-
- Tasks

Issue Resolution Workflows

OPDX uses Oracle's workflow management tool, Oracle Workflow, to direct the activities needed to resolve issues. Workflows are associated to issue types with full escalation capability.

People and Roles

OPDX enables you to identify an issue owner, assignee, and affected parties.

Severity and Status Codes

Oracle Workflow directs work according to the issue severity and status.

Documents and Dependencies

OPDX enables you to collect and store issue-specific information in documents. You can maintain dependencies between other issues, projects, tasks, change requests, and change orders.

Product Development Intelligence (OPDI)

Oracle Product Development Intelligence provides comprehensive, pre-built, web based reports that contain both numerical and graphical data.

Quality-Based Measures/Reports

Product Complexity Reports Product Complexity Reports give a user insight into the:

- Level of complexity existing in their product structures
- Level of component reuse exhibited by their product structures

Change Order Reports Change Order Reports give a user insight into the:

- Number of Change Orders in the system (both open and closed)
- Time to complete a Change Order (Change Order Cycle Time)
- Number and status of Late Changes that were introduced during the development process

Issue Reports Issue Reports give a user insight into the:

-
- Number of Issues in the system (both open and closed)
 - Time to close an Issue (Issue Cycle Time)
 - Number and status of Late Issues that were introduced during the development process

Getting Started

This chapter outlines the basic steps for getting started for OPDX. It includes the following topics:

- Prerequisites
- OPDX Usage Options
- Change/Issue Management Customization Setup Steps
- Document Management Customization Setup Steps (optional)
- Projects Customization Setup Steps (optional)
- Roles Setup Steps (optional)
- Workflow Management Customization Steps (optional)

Table 2-1, "Getting Started Steps" outlines the steps to perform to get started using OPDX.

Table 2-1 Getting Started Steps

Step	Description	Required?	Performed by Company?
Change/Issue Management Customization Setup Steps			
1	Create Change/Issue Management Header Types	Required if using Change/Issue Management	No
2	Create Change/Issue Management Line Types	Required if using Change/Issue Management	No
3	Define New Values for Change/Issue Management Lookup Types	Optional	No
Document Management Customization Setup Steps			
4	Create Document Categories	Optional	No
Projects Customization Setup Steps			
5	Create Project Reporting Classifications	Optional	No
Role Setup Steps			
6	Create Roles	Optional	Yes
Workflow Management Customization Steps			
7	Download Workflow File	Optional	Yes
8	Customize Workflow	Optional	Yes
9	Upload Custom Workflow File	Optional	Yes

Prerequisites

- Setup of Exchange as detailed in the *Marketplace Exchange Setup Guide*
- Company Registration
- User Registration
- Oracle Workflow Builder 2.5 to customize workflows for Product Development Exchange

OPDX Usage Options

Table 2-1, "OPDX General Setup Options" and Table 2-2, "OPDX Advanced Setup Options" outline the general and advanced usage options for OPDX.

Figure 2-1 OPDX General Setup Options

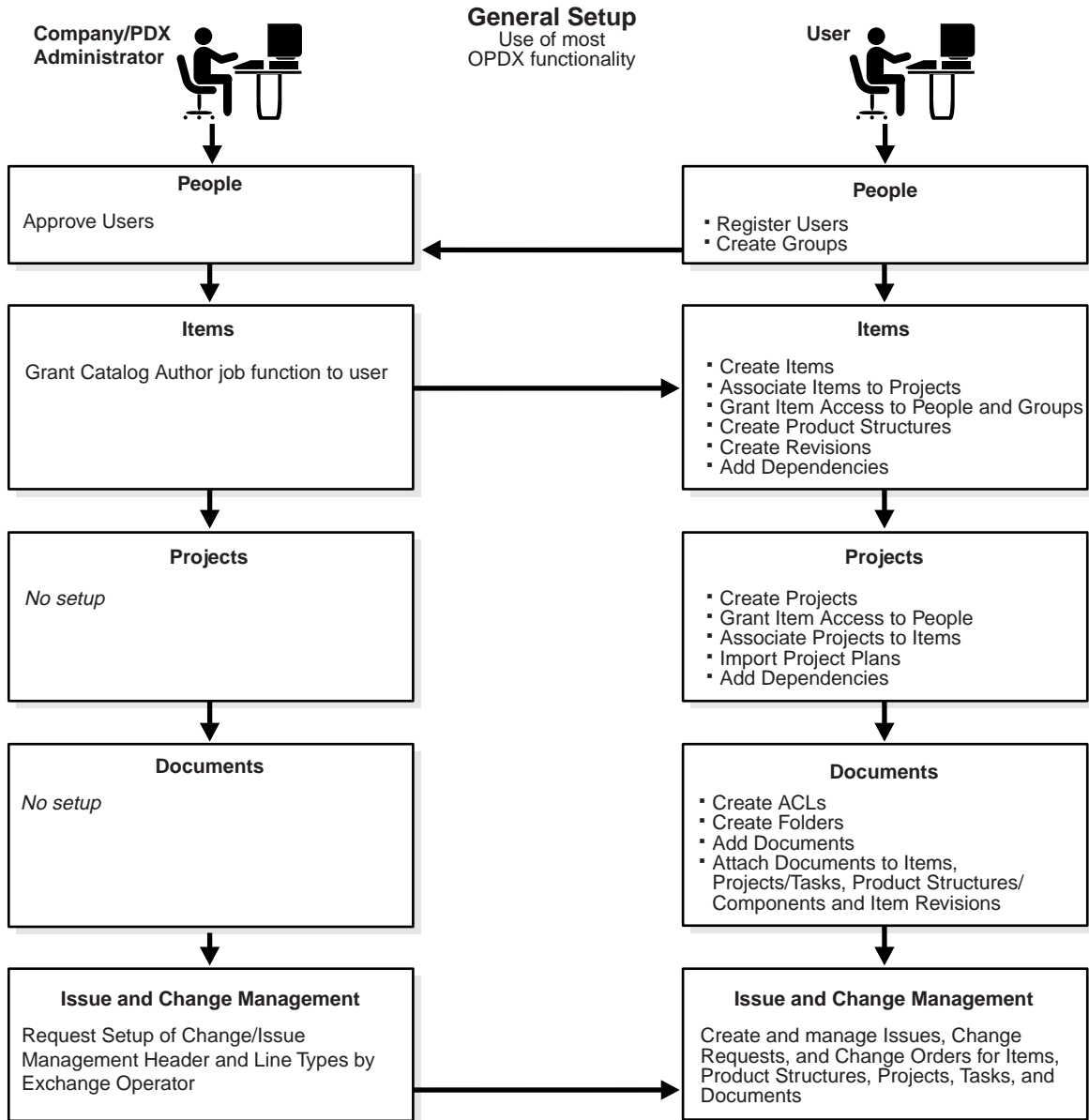
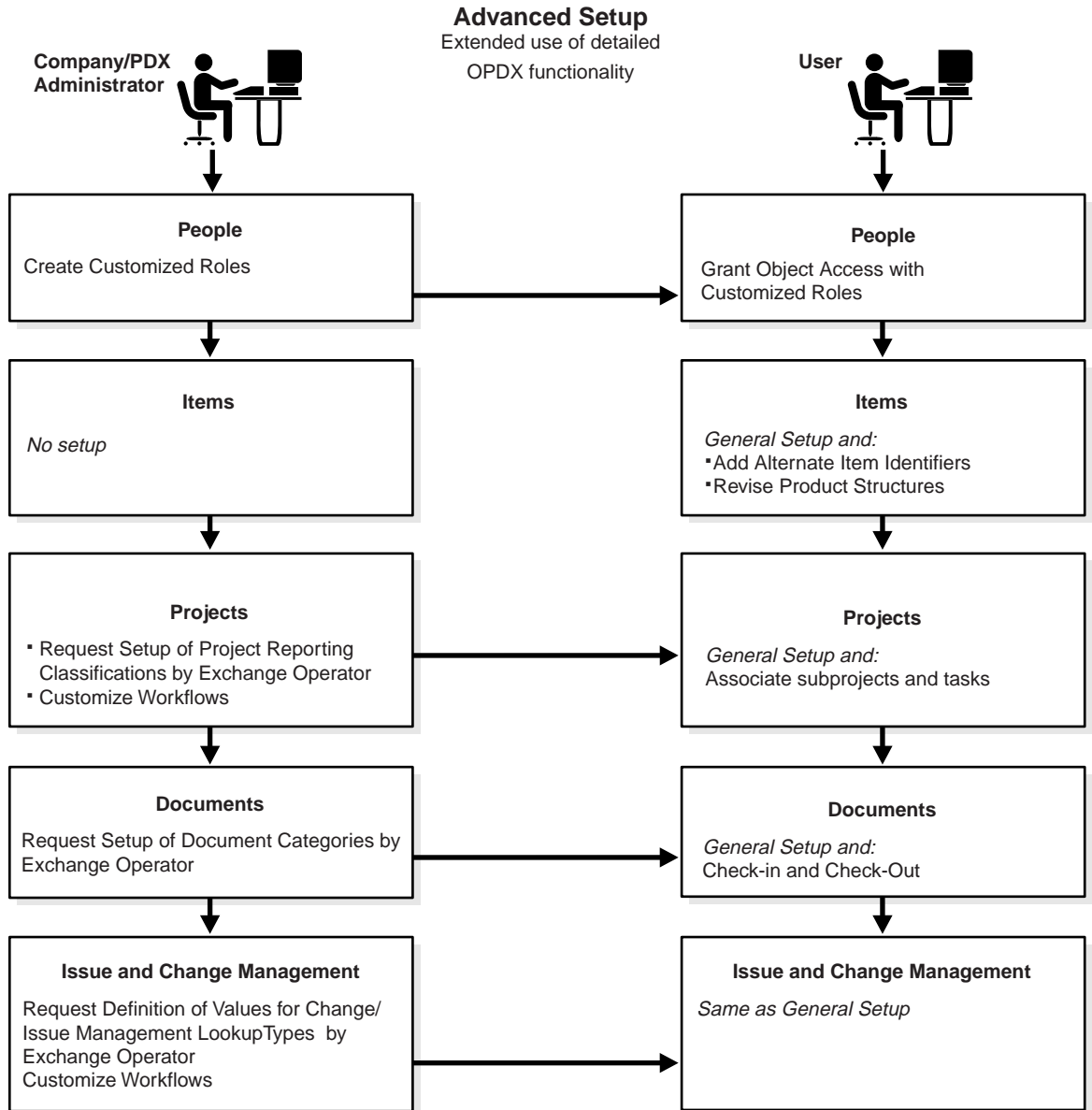


Figure 2-2 OPDX Advanced Setup Options



Change/Issue Management Customization Setup Steps

OPDX enables you to define Change/Issue Management Header and Line Types to suit your business needs.

OPDX comes with the following predefined Change/Issue Management Lookup Types:

Reason

- Cost Reduction
- Quality Improvement
- Customer Requested
- Miscellaneous

Priority

- Low
- Medium
- High

Scope

- Small
- Medium
- Large

Status

- Open
- Submitted for Approval
- Approved
- Rejected
- Cancelled
- Implemented
- Completed

Phase

- Business Requirements

-
- High Level Design
 - Detail Design
 - Unit Testing
 - System Testing
 - Production

You can define additional values for these lookup types.

Prerequisites

- You must log on to the Exchange Operator site as the Exchange Operator, or submit your request to set up Change/Issue Management customizations to the Exchange Operator.
- Decide which header types you need to set up. For example, you may want to set up a header type for:
 - *New Product Release* - Introduction of a new product
 - *New Revision on Existing Product* - Revision of an existing product
 - *Mass Component Change* - A component that is replaced across many assemblies
 - *Project Schedule Change* - Change of a project schedule
- Decide which line types you need to set up. For example, you may want to set up a line type for:
 - *Changed Item* - The item that is being changed
 - *Changed Document* - The document that is being changed
 - *Changed Project* - The project that is being changed
 - *Related Item* - An item that is related to the change requisition or order
 - *Related Document* - A document that is related to the change requisition or order
 - *Related Project* - A project that is related to the change requisition or order
- Decide which additional values you need to add to the predefined lookup types (optional).

Step 1: Create Change/Issue Management Header Type

For information about how to create Change/Issue Management Header Types, see the online Help.

Using the Online Help In OPDX, click the “Help” button. Then click on the “Exchange Configuration” section. In the "Exchange Configuration" section, click on "Using Change Management Types." This takes you to “How do I create a Change Management header type?”

Step 2: Create Change/Issue Management Line Type

For more information about creating Change/Issue Management Lookup Types, see the online Help.

Using Online Help In OPDX, click the “Help” button. Then click on the “Exchange Configuration” section. In the "Exchange Configuration" section, click on "Using Change Management Types." This takes you to “How do I create a Change Management line type?”

Step 3: Define New Values for Change/Issue Management Lookup Types (optional)

For more information about defining new values for Change/Issue Management Lookup Types, see the online Help.

Using Online Help In OPDX, click the “Help” button. Then click on the “Exchange Configuration” section. In the "Exchange Configuration" section, click on "Using Change Management Types." This takes you to “How do I create a Change Management lookup type?”

Document Management Customization Setup Steps (optional)

OPDX comes with predefined document categories, including:

- Marketing
- Schedule
- Technical
- Contract
- Requirements Definition
- Functional Design

-
- Technical Design
 - Drawing
 - Setup Instructions
 - Assembly Instructions
 - Test Specification
 - Installation Instructions
 - User Guides
 - Press Releases
 - Brochure
 - Survey
 - Flyer
 - Request for Quote
 - Proposal Packet
 - Change Request
 - Specification
 - Meeting Minutes
 - Email Threads
 - Project Plans
 - Project Specifications
 - Status Reports

You can define additional document categories.

Prerequisites

- You must log on to the Exchange Operator site as the Exchange Operator, or submit your request to set up document categories to the Exchange Operator.
- Decide which document categories you need to set up.

Step 4: Create Document Categories

For information about creating Document Categories, see the online Help.

Using Online Help In OPDX, click the “Help” button. Then click on the “Exchange Configuration” section. In the "Exchange Configuration" section, click on "Managing Document Categories." This takes you to “How do I create document categories?”

Projects Customization Setup Steps (optional)

OPDX enables you to define your own project reporting classifications. Following are examples of project reporting classifications you may want to define:

- Minor Product Revision
- Major Product Revision
- Minor Product Introduction
- Major Product Introduction
- New Platform Introduction
- New Product Line
- Product Line Revision
- Platform Revision
- Technology Integration

Prerequisites

- You must log on to the Exchange Operator site as the Exchange Operator, or submit your request to set up Project Reporting Classifications to the Exchange Operator.
- Decide which additional Project Reporting Classifications you need to set up.

Step 5: Create Project Reporting Classifications

For information about how to create Project Reporting Classifications, see the online Help.

Using Online Help In OPDX, click the “Help” button. Then click on the “Exchange Configuration” section. This takes you to "Managing Project Reporting Classifications." In the "Managing Project Reporting Classifications" section, click on “How do I create a project reporting classification?”

Roles Setup Steps (optional)

In OPDX, data security can be used by users to control the visibility of their objects (such as items, or projects). Data security controls access and operations to unique data. For example, you could be granted the ability to view “Item A” but not “Item B” because you have a role on “Item A” with the privilege “View Item Information.”

OPDX provides the capability to define roles to represent various groupings of privileges. Roles and privileges are object-specific. You can define custom roles for object types such as:

- Change Order
- Change Request
- Document
- Issue
- Item
- Project
- Task

Prerequisites

- Your companies and users must be registered on the Exchange.
- You must have the Role Creation and Role Management Exchange tasks to define roles. The following predefined job functions include the Role Creation and Role Management Exchange tasks:
 - PDX Development Executive
 - PDX Administrator
 - Projects Super User
 - Projects User
- Decide which roles you need to create. This includes determining role names and the privileges available in each role. Make sure your role names are as descriptive as possible.

Step 6: Create Roles (optional)

For information about how to create roles, see the online Help.

Using Online Help In OPDX, click the “Help” button. Then click on the “Product Development” section. From "Product Development" click on the "Security Model" section. This takes you to “How do I create a role?”

Workflow Management Customization Steps (optional)

OPDX comes with predefined workflows, including:

- Change Management Workflow
- Project/Task Date Change Notification to Dependents Workflow
- You can customize and upload OPDX Workflows to create custom extensions for entities such as Processes, Notifications, or Messages. After uploading the custom Workflow file to OPDX, it will be available in the corresponding functional area.

See Also: "OPDX Workflows" for more information

Prerequisites

- These steps may be performed by the Exchange Operator or the Company Administrator. Log on to the Exchange Operator site as the Exchange Operator, or to the Exchange application as the Company Administrator.
- You must define your custom workflows with Oracle Workflow Builder 2.5.

See Also: "OPDX Workflows" for more information

Step 7: Download Workflow File

For information about how to download a workflow file, see the online Help.

Using Online Help In OPDX, click the “Help” button. Then click on the “Exchange Configuration” section, which takes you to the "Managing Product Development Workflows" section. Click on “How do I customize seeded workflows?”

Step 8: Customize Workflow

Customize the Workflow with Oracle Workflow Builder 2.5. Extensions should be named with a standard prefix of **_C<CompanyID>_** to avoid conflict between custom extensions across companies.

See Also: "OPDX Workflows" for more information

Step 9: Upload Custom Workflow File

For information about how to upload a custom workflow file, see the online Help.

Using Online Help In OPDX, click the “Help” button. Then click on the “Exchange Configuration” section, which takes you to the "Managing Product Development Workflows" section. Click on “How do I customize seeded workflows?”

Note: Only single Item Type (in the Workflow file) uploads are supported at this time.

Defect Management System Integration

This chapter describes how to set up defect management system integration and includes the following topics:

- Prerequisites
- Defect Management System Integration Steps (optional)

Table 3–1, "Setup Steps for Defect Management System Integration" describes the setup steps for defect management system integration.

Table 3–1 Setup Steps for Defect Management System Integration

Step	Description	Required?	Can the Company Perform this Step?
1	Create Database Link.	Required if integrating with DMS	No
2	Modify View (IPD_PRODUCT_DEFECTS_V).	Required if integrating with DMS	No

Prerequisites

- You must have SQL*Plus access to connect to the OPDX database. You need full access, not just read only.
- You must have the appropriate DMS table information available.
- The defect/bug database must be accessible from the OPDX environment through Net8.

Defect Management System Integration Steps (optional)

OPDX-DMS integration enables you to add a dependency of a defect/bug created in DMS on the following OPDX objects:

- Project
- Task
- Change Request
- Change Order
- Issue
- Change Line

You can view the detailed information of a defect/bug from OPDX. Security for the DMS is determined by how you perform this integration.

Prerequisites

- You must have SQL*Plus access to connect to the OPDX database. You need full access, not just read only.
- You must have the appropriate DMS table information available.
- The defect/bug database must be accessible from the OPDX environment through Net8.

OPDX provides the view IPD_PRODUCT_DEFECTS_V, which has the following definition:

```
CREATE OR REPLACE FORCE VIEW IPD_PRODUCT_DEFECTS_V
(DEFECT_ID
,DEFECT_NUMBER
,SEVERITY_CODE
,SEVERITY_DESC
,PRIORITY_CODE
,PRIORITY_DESC
,STATUS_CODE
,STATUS_DESC
,ASSIGNED_TO_ID
,ASSIGNED_TO_PERSON
,CUSTOMER_ID
,CUSTOMER_NAME
,PRODUCT_ID
,PRODUCT_NAME
,PRODUCT_REVISION_ID
,PRODUCT_REVISION_NAME
,PRODUCT_COMPONENT_ID
,PRODUCT_COMPONENT_NAME
,SHORT_DESCRIPTION
,URL
,LAST_UPDATE_DATE
,LAST_UPDATED_BY
,LAST_UPDATED_BY_PERSON
,CREATION_DATE
,CREATED_BY
,CREATED_BY_PERSON)
AS SELECT defect_id,
defect_number,
severity_code,
severity_desc,
priority_code,
priority_desc,
status_code,
status_desc,
assigned_to_id,
null,
```

```
customer_id,  
null,  
product_id,  
null,  
product_revision_id,  
null,  
product_component_id,  
null,  
short_description,  
null,  
last_update_date,  
last_updated_by,  
null,  
creation_date,  
created_by,  
null  
from ipd_product_defects  
/
```

You should customize this view to point to the table in the DMS that stores defect information (instead of selecting from `IPD_PRODUCT_DEFECTS` table). The following steps describe how to customize this view.

Step 1: Create a Database Link

Create a database link in your OPDX schema that points to the defects schema in the DMS database. The following steps describes how to create a link called `ipddefect` to Oracle's bug database system.

1. Enter the following statement:

```
create database link ipddefect connect to userid identified by password  
using 'bug'
```

2. The `userid` and `password` are the database's `userid` and `password` for the DMS (for example, `apps/apps`)
3. The database name is `Bug`.

Step 2: Modify the View (`IPD_PRODUCT_DEFECTS_V`)

Modify the view so that it is based on the table in the DMS database. Following is an example of how this is done with Oracle's bug database.

```
create or replace view ipd_product_defects_v (  
DEFECT_ID,  
DEFECT_NUMBER,  
SEVERITY_CODE,  
SEVERITY_DESC,
```

```

PRIORITY_CODE,
PRIORITY_DESC,
STATUS_CODE,
STATUS_DESC,
ASSIGNED_TO_ID,
ASSIGNED_TO_PERSON,
CUSTOMER_ID,
CUSTOMER_NAME,
PRODUCT_ID,
PRODUCT_NAME,
PRODUCT_REVISION_ID,
PRODUCT_REVISION_NAME,
PRODUCT_COMPONENT_ID,
PRODUCT_COMPONENT_NAME,
SHORT_DESCRIPTION,
URL,
LAST_UPDATE_DATE,
LAST_UPDATED_BY,
LAST_UPDATED_BY_PERSON,
CREATION_DATE,
CREATED_BY,
CREATED_BY_PERSON
) as select
rptno,
rptno,
to_char(cs_priority),
null,
to_char(cs_priority),
null,
to_char(status),
null,
null,
programmer,
null,
customer,
bug.product_id,
null,
null,
utility_version,
null,
category,
subject,
'http://bug.us.oracle.com/bug-bug-dad/plsql/webbug_print.show?c_rptno='||rptno,
null,
null,
null,
null,
null,
rptd_by

```

```
from rpthead@ipddefect bug
where bug.product_id = 1006
```

This view now can be used to get all the bugs logged against product 'IPD' in Oracle's bug database system.

Note: The URL column of the view is used in OPDX to enable the user to view the detailed information about a defect or bug. If the user cannot navigate to the defect or bug detail page in the DMS, then the URL column is not set correctly.

OPDX Workflows

Some of the processes that occur in Product Development Exchange are controlled by workflows. A *workflow* is an underlying technology that automates activities. Workflow comes with a graphical user interface that enables you to view and modify workflow processes to suit your business needs.

Product Development Exchange comes with the following Workflows:

- **Change Management Workflow** for automating the approval process of change orders, change requests, issues, and lines.
- **Project/Task Date Change Notification to Dependents Workflow** for notifying people depending on a task or project of date changes for that task or project.

Change Management Workflow

Every change order, change request, and issue requires a Workflow process. A Workflow process is optional at the line level. Each object (Change Order, Change Request, Issue, and Line) has a seeded default workflow process. Updating the status of a change or issue is done by Workflow. The statuses cannot be updated through the Change Management pages.

Change Management Workflow Design

Workflow Flat File The Change Management Workflow definitions are in the file `ipdchmgt.wft`.

Workflow Item Types Following are the Change Management Workflow item types:

- IPDCHORD
- IPDCHREQ
- IPDISSUE
- IPDCHLIN
- IPDCHSTD

The first four item types correspond to the following Change Management work item types:

- Change Order
- Change Request
- Issue
- Line

The activities, attributes, notifications, and processes that are specific to a work item type are defined within that work item type's Workflow item type. The `IPDCHSTD` item type includes activities and lookup types that are common to more than one work item type.

Table A-1 *Change Management Workflow Item Types*

Workflow Item Type	Description
IPDCHORD	Change Order
IPDCHREQ	Change Request

Table A-1 Change Management Workflow Item Types

IPDISSUE	Issue
IPDCHLIN	Line
IPDCHSTD	Change Management Standard

Seeded Processes

There are four seeded processes corresponding to each of the work item types. The four processes are similar in function: they automate the approval process of their associated work items.

Table A-2 Change Management Seeded Workflow Processes

Work Item Type	Workflow Item Type	Seeded Process
Change Order	IPDCHORD	Change Order Process
Change Request	IPDCHREQ	Change Request Process
Issue	IPDISSUE	Issue Process
Change Line	IPDCHLIN	Change Line Process

Figure A-1 Change Order Process Approval Workflow

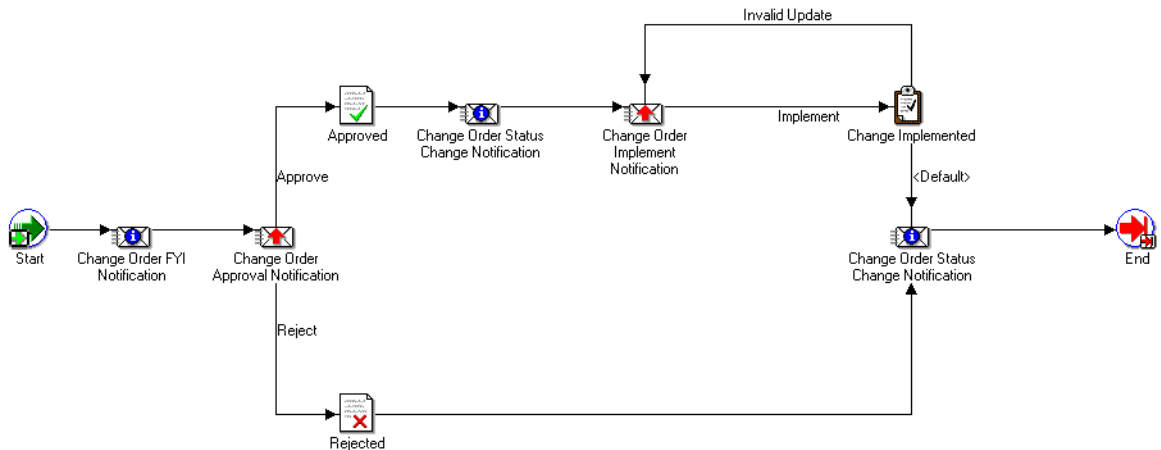


Figure A–2 Change Request Process Workflow

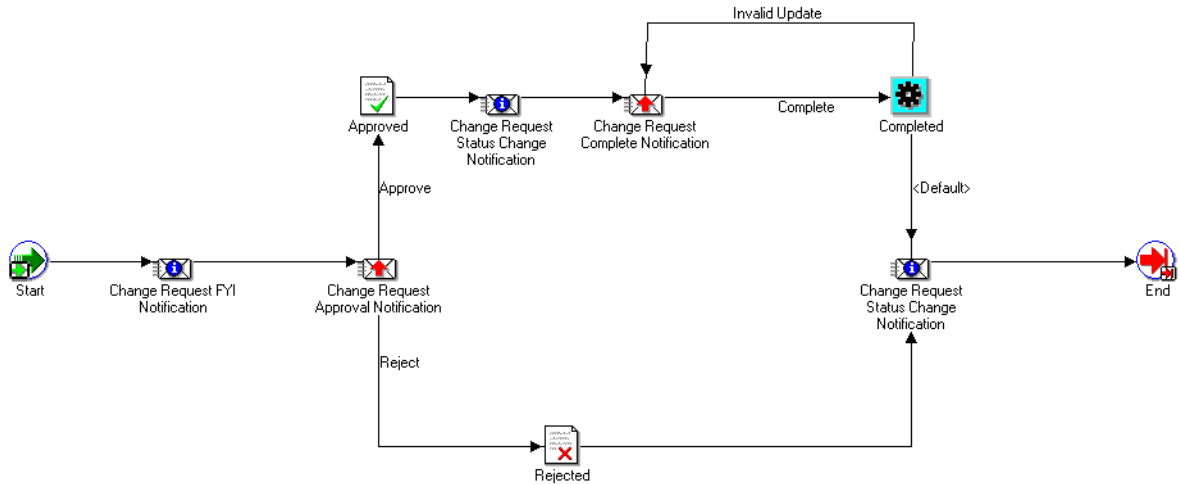


Figure A–3 Issue Process Workflow

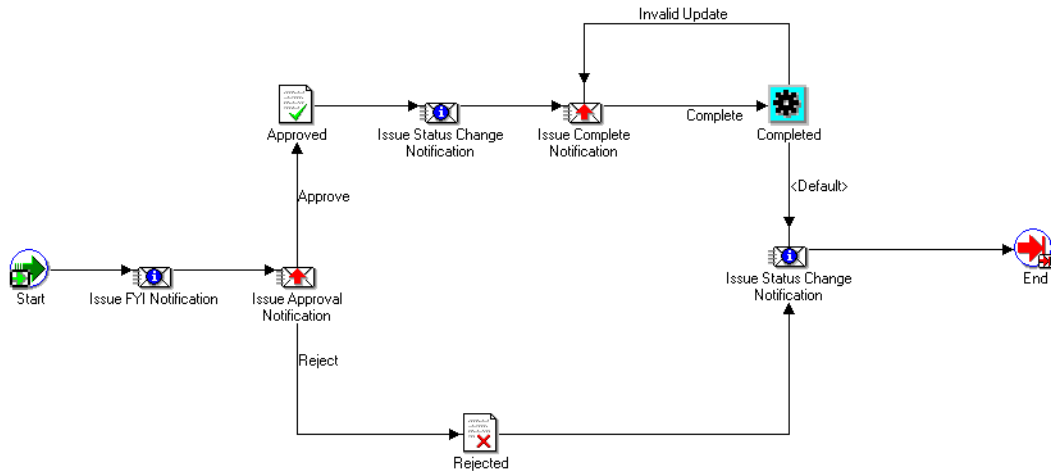
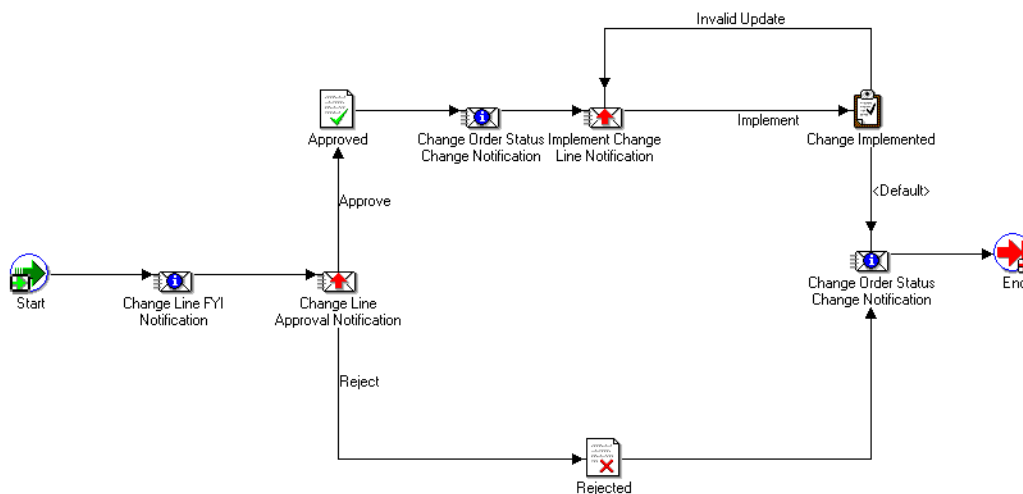


Figure A-4 Change Line Process Workflow



Activities in Workflow Processes

Each seeded process has three Notification and three Function activities. Notification activities are unique for each Workflow item type. Function activities are shared across the processes and are defined in the IPDCHSTD Workflow item type.

Notification Activities

- Informational Notification

This notification is sent to all users with a “View” privilege on the change, issue or line (IPD_VIEW_CHGORD, IPD_VIEW_CHGREQ, IPD_VIEW_ISSUE, IPD_VIEW_CHGLINE). The notification includes an URL for the work item’s Detail page. The notification requires no response.

- Approval Notification

This notification is sent to all users with an “Approve” privilege on the change, issue or line (IPD_APPROVE_CHGORD, IPD_APPROVE_CHGREQ, IPD_APPROVE_ISSUE, IPD_APPROVE_CHGLINE). The notification includes an URL for the work item’s Detail page. The notification requires an “Approve” or “Reject” response.

The Approval Notification requires all approvers to respond to the notification before the process can continue. For the change or issue to be approved, the notification requires a 100% “Approve” response.

- **Implement/ Complete Notification**

The Implement Notification is sent to all users with an “Implement” privilege on the change or line (IPD_IMPLEMENT_CHGORD, IPD_IMPLEMENT_CHGREQ, IPD_IMPLEMENT_CHGLINE). The notification includes an URL for the work item’s Detail page and requires an “Implement” response.

This notification requires all implementers to respond to the notification before the process can continue.

The Complete Notification is sent to all users with an “Implement” privilege on the Issue or Issue Line. The notification includes an URL for the work item’s Detail page and requires a “Complete” response.

This notification requires all implementers to respond to the notification before the process can continue.

Function Activities

- **Approved**

The “Approved” function updates an object’s status from “Submitted for Approval” to “Approved” and updates the object’s approval date to the current system date. The statuses and approval dates of its lines that do not have Workflow processes of their own are also updated.

- **Implemented/Completed**

The “Implemented” function updates an object’s status from “Approved” to “Implemented” and updates the object’s implementation date to the system date.

The “Completed” function updates an object’s status from “Approved” to “Completed” and updates the object’s implementation date to the system date.

The statuses and implementation dates of its lines that do not have Workflow processes of their own are also updated.

- **Rejected**

The “Rejected” function updates an object’s status from “Submitted for Approval” to “Rejected.”

The statuses of lines that do not have Workflow processes of their own are also updated.

Item Attributes

Following is a list of item attributes defined in the `IPDCHORD` (Change Order), `IPDCHREQ` (Change Request), and `IPDISSUE` (Issue) Workflow Item type. The values are populated with the data from the corresponding columns in the `ipd_change_headers` table at the time the Workflow process is started.

- Change Number
- Short Description
- Long Description
- Project
- Task
- Item
- Change Header Type
- Effort
- Duration
- Requestor
- Scope
- Priority
- Status
- Implementation Cost
- Other Cost
- Reason
- Phase When Started
- Schedule Date
- Late Change
- Assign To Person
- Implementer

-
- Approvers
 - Resolution
 - Parent Item
 - Top Level Item
 - Date Committed
 - Date Required
 - Progress Status
 - Item Revision
 - Detail - URL for Detail Page

The following is a list of item attributes defined in the IPDCHLIN (Line) Workflow Item type. The values are populated with the data from the corresponding columns in the ipd_change_lines table at the time the Workflow process is started.

- Line Number
- Header Change Number
- Description
- Subject
- Subject New Revision
- Priority
- Scope
- Implementation Cost
- Other Cost
- Schedule Date
- Change Line Type
- Effort
- Duration
- Status
- Subject Current Revision
- Header Change Type

Using the Default Change Management Workflow

Every change and issue requires a Workflow process. A Workflow process is optional for a line. You use a Workflow process to update the status of a change or issue. Status cannot be updated using the **Change Management** page.

Assigning a Change Management Work Item to a Workflow Process You assign a Workflow process to a change, issue, or line from the **Edit** page.

Starting a Workflow Process You start an associated Workflow process for a change, issue, or line from the **Detail** page.

Aborting a Workflow Process You abort a Workflow process for a change, issue, or line from the **Detail** page. You can abort a process that is in the “Submitted for Approval” status or the “Approved” status. Aborting a process cancels any outstanding notifications.

Viewing and Responding to Notifications You can view and respond to notifications from the **Notifications Detail** page. You can optionally view and respond to notifications from the email account that you entered when you registered as an Oracle Exchange user.

Status for the Default Workflow Processes The default Workflow process updates the status of a change, issue, or line.

Table A-3 Default Change Management Workflow Processes Status

Action	From Status	To Status	Comment
Create Change, Issue, or Line		Open	
Start Workflow for Change, Issue or Line	Open	Submitted for Approval	

Table A-3 Default Change Management Workflow Processes Status

Approve “Approval Notification”	Submitted for Approval	Approved	Approval Date is updated to the date the change, issue or line is approved
Reject “Approval Notification”	Submitted for Approval	Rejected (End of process)	
Respond to “Implement Notification” or “Complete Notification”	Approved	Implemented or Completed (End of process)	Implementation Dates updated to date the change, issue or line is implemented or completed

Customizing the Change Management Workflow

You can customize the seeded Change Management Workflow processes by creating your own processes or modifying the seeded ones.

To customize the Change Management Workflow for Product Development Exchange 6.2, you must use Workflow Builder 2.5. Custom workflow objects must be created under the appropriate Workflow Item Type. See the Change Management Workflow Design section for a description of the Workflow Item Types.

Creating a New Workflow Activity You can create a new activity to include in a seeded process or for a new process. If the activity will be shared by more than one object’s process, create the activity in the IPDCHSTD item type. Otherwise, create the activity in the appropriate object’s item type. See Workflow Design section for a description of the item types.

Modifying a Seeded Workflow Process You can customize a seeded process by adding or removing activities to or from the process.

Creating a New Workflow Process You can create one or more processes for a Change Order, a Change Request, an Issue, or a Line. A process has to be created in one of these four Workflow item types: IPDCHORD, IPDCHREQ, IPDISSUE, IPDCHLIN. It should not be created in the IPDCHSTD item type.

Creating a process in one of these item types ensures that the new process will be available in the Workflow Process LOV for that work item type. For example, if you want to create a new approval process for a Change Order, the new process must be created in the IPDCHORD item type. By creating this new approval process in the

IPDCHORD item type, that new approval process will be available in the Change Order's Workflow LOV the next time you create a new Change Order. The following table shows under which Workflow item type a process must be created.

Table A-4 New Change Management Processes

Process For	Create in Workflow Item Type
Change Order	IPDCHORD
Change Request	IPDCHREQ
Issue	IPDISSUE
Line	IPDCHLIN

Creating Custom Change Management Status Codes You can create custom status codes for Change Management and use custom Workflow processes to update the change, issue, or line with the custom statuses. The following are the seeded status codes used by the default Workflow processes when updating the status of a change or issue.

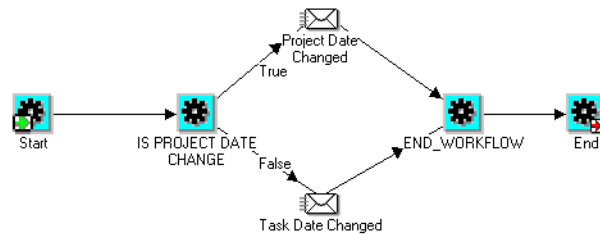
- Open
- Submitted for Approval
- Approved
- Rejected
- Implemented (Change)/Completed (Issue)

If you create custom status codes, note the following:

- Changes, issues, and lines are not editable when their status is "Submitted for Approval," "Approved," "Rejected," or "Implemented/Completed."
- Starting a Workflow process from the Detail pages requires that the status of the change, issue or line is "Open."
- Aborting a Workflow process from the Detail pages requires that the status of the change, issue or line is "Submitted for Approval" or "Approved."

Project/Task Date Change Notification to Dependents Workflow

Figure A-5 Projects Workflow



When you change the date (start date, end date, etc.) related to a project or task, you can start a Workflow that sends notification to all people depending on the task or project.

You can notify people who are dependent on your task or project using by doing the following:

1. In the **Edit Progress Status** page, you can launch the workflow for date changes by selecting the Workflow process "Date Notification to Dependents" and then clicking on "Done."
2. In the **Task Detail and Progress Status** page, you can launch the workflow for date changes by selecting the Workflow process "Date Notification to Dependents" and then clicking on "Done."
3. If you choose to launch the Workflow but there is no change in the "Date" field, OPDX will still send out the notification. This is an informational notification that informs people about the current date information of the task or project.

-
4. To cancel a Workflow on a given task or project, click on “Cancel.”
 5. To view a Workflow for the date change on a given task or project, click on “View.”

Index

A

alternate item identifiers, 1-2

C

change management, 1-11
 default workflow, A-9
 seeded processes, A-3
 workflow design, A-2
change notifications, 1-2
change subscriptions, 1-2

D

defect management system integration
 setup, 3-2
document management, 1-6
 check-in/check-out, 1-7
 folders, 1-7
 revisions, 1-7
 unlimited attachments, 1-6

I

information web pages, 1-4
IPD_PRODUCT_DEFECTS_V view, 3-4
issue management, 1-11
item
 attributes, A-7
 bulk load capability, 1-3
 catalog, 1-1
 cross references, 1-2
 Item Information Management, 1-1

 public access, 1-3
 revision import, 1-3
 revisions, 1-3
 role-based security, 1-3
item association, 1-6
item, catalog import, 1-1

O

OPDI, 1-12

P

people and roles, 1-5
people management, 1-8
people management, groups, 1-8
people management, security, 1-8
Preface, vii
privilege, 1-9
Product Development Intelligence, 1-12
Product Structure Navigator, 1-4
product structures, 1-3
 multiple, 1-3
 types, 1-3
projects, 1-4, 1-5, 1-6
 collaboration, 1-4
 documents, 1-5
 integration with planning tools, 1-4
 notifications, 1-6
 reporting classifications, 1-5
 workflow, A-12

R

role, 1-9

T

task workflows, 1-6

W

workflow process activities, A-5