Oracle® Project Manufacturing User's Guide

Release 11*i*

Part No. A75095-01

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ORACLE

Oracle Project Manufacturing User's Guide, Release 11i
Part No. A75095-01
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Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this publication. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
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- FAX - 650.506.7294 Attn: Oracle Manufacturing Documentation
- Postal service:
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  USA

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Preface

Audience for This Guide

Welcome to Release 11*i* of the Oracle Project Manufacturing User's Guide.

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

- The principles and customary practices of your business area.
- Oracle® Project Manufacturing

  If you have never used Oracle® Project Manufacturing, we suggest you attend one or more of the Oracle® Project Manufacturing 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 Guide.*

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

How To Use This Guide

This guide contains the information you need to understand and use Oracle® Project Manufacturing.

This preface explains how this user guide is organized and introduces other sources of information that can help you. This guide contains the following chapters:

- Chapter 1 provides an overview of Oracle Project Manufacturing, including integration, business flow, and features.
- Chapter 2 contains set up information for Oracle Project Manufacturing. Full information regarding implementation is located in the Oracle Project Manufacturing Implementation Manual.
- Chapter 3 provides information on defining project parameters and working with seiban numbers.
- Chapter 4 provides references to other Oracle application user guides and explains the use of validations in Project Manufacturing.
- Chapter 5 explains how to use the Task Auto-Assignment feature to allocate resources and materials based on rules.
- Chapter 6 describes how to manage projects with model or unit number effectivity.

- Chapter 7 describes how to use the borrow and payback feature for temporary transfers between projects.
- Chapter 8 describes how to run project inquiries using the Web Workbench.
- Chapter 9 explains how to transfer invoice charges.
- Chapter 10 describes the reports used in Oracle Project Manufacturing.
- Appendix A lists the window and navigator paths available in Project Manufacturing.
- Appendix B describes the project definition and scheduling exception workflows for Project Manufacturing.

Finding Out What's New

From the HTML help window for Oracle® Project Manufacturing, choose the section that describes new features or what's new from the expandable menu. This section describes:

- New features in 11*i*. This information is updated for each new release of Oracle® Project Manufacturing.
- Information about any features that were not yet available when this user guide was printed. For example, if your system administrator has installed software from a mini pack as an upgrade, this document describes the new features.

Other Information Sources

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

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

Online Documentation

All Oracle Applications documentation is available online (HTML and PDF). The technical reference guides are available in paper format only. Note that the HTML documentation is translated into over twenty languages.

The HTML version of this guide is optimized for onscreen reading, and you can use it to follow hypertext links for easy access to other HTML guides in the library.

When you have an HTML window open, you can use the features on the left side of the window to navigate freely throughout all Oracle Applications documentation.

- You can use the Search feature to search by words or phrases.
- You can use the expandable menu to search for topics in the menu structure we provide. The Library option on the menu expands to show all Oracle Applications HTML documentation.

You can view HTML help in the following ways:

- From an application window, use the help icon or the help menu to open a new Web browser and display help about that window.
- Use the documentation CD.
- Use a URL provided by your system administrator.

Your HTML help may contain information that was not available when this guide was printed.

Related User Guides

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

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

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

User Guides Related to All Products

Oracle Applications User Guide

This guide explains how to navigate the system, enter data, and query information, and introduces other basic features of the GUI available with this release of Oracle® Project Manufacturing (and any other Oracle Applications product).

You can also access this user guide online by choosing *Getting Started and Using Oracle Applications* from the Oracle Applications help system.

Oracle Alert User Guide

Use this guide to define periodic and event alerts that monitor the status of your Oracle Applications data.

Oracle Applications Implementation Wizard User Guide

If you are implementing more than one Oracle product, you can use the Oracle Applications Implementation Wizard to coordinate your setup activities. This guide describes how to use the wizard.

Oracle Applications Developer's Guide

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

Oracle Applications User Interface Standards

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.

User Guides Related to This Product

Oracle Bills of Material User's Guide

This guide describes how to create various bills of materials to maximize efficiency, improve quality and lower cost for the most sophisticated manufacturing environments. By detailing integrated product structures and processes, flexible product and process definition, and configuration management, this guide enables you to manage product details within and across multiple manufacturing sites.

Oracle Cost Management User's Guide

This guide describes how to use Oracle Cost Management in either a standard costing or average costing organization. Cost Management can be used to cost inventory, receiving, order entry, and work in process transactions. It can also be used to collect transaction costs for transfer to Oracle Projects. Cost Management

supports multiple cost elements and multiple subelements. It also provides comprehensive valuation and variance reporting.

Oracle Engineering User's Guide

This guide enables your engineers to utilize the features of Oracle Engineering to quickly introduce and manage new designs into production. Specifically, this guide details how to quickly and accurately define the resources, materials and processes necessary to implement changes in product design.

Oracle Flow Manufacturing User's Guide

This guide provides an overview of the processes of flow manufacturing and describes how to use Oracle Flow Manufacturing's features to support the entire flow manufacturing process from line design and balancing to production execution.

Oracle Inventory User's Guide

This guide describes how to define items and item information, perform receiving and inventory transactions, maintain cost control, plan items, perform cycle counting and physical inventories, and set up Oracle Inventory.

Oracle Manufacturing Scheduling User's Guide

This guide describes how to use Oracle Manufacturing Scheduling to view and reschedule single discrete jobs or the entire shop floor. Specifically, this guide details how to easily use the drag and drop functionality to view and reschedule jobs, operations, and resources.

Oracle Order Management User's Guide

This guide describes how to enter sales orders and returns, copy existing sales orders, schedule orders, release orders, create price lists and discounts for orders, run processes, and create reports.

Oracle Projects User's Guide

This guide explains how to set up projects for use in project manufacturing and project accounting.

Oracle Purchasing User's Guide

This guide describes how to create and approve purchasing documents, including requisitions, different types of purchase orders, quotations, RFQs, and receipts. This guide also describes how to manage your supply base through agreements, sourcing rules and approved supplier lists. In addition, this guide explains how you can automatically create purchasing documents based on business rules through integration with Oracle Workflow technology, which automates many of the key procurement processes.

Oracle Work in Process User's Guide

This guide describes how Oracle Work in Process provides a complete production management system. Specifically this guide describes how discrete, repetitive, assemble-to-order, project, flow, and mixed manufacturing environments are supported.

Reference Manuals

Oracle Technical Reference Manuals

Each technical reference manual 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.

You can order a technical reference manual for any Oracle Applications product you have licensed.

Oracle Automotive Implementation Manual

This manual describes the setup and implementation of the Oracle Applications used for the Oracle Automotive solution.

Oracle Manufacturing and Distribution Open Interfaces Manual

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

Oracle Applications Message Reference Manual

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

Oracle Project Manufacturing Implementation Manual

This manual describes the setup steps and implementation for Oracle Project Manufacturing.

Oracle Receivables Tax Manual

This manual provides everything you need to know about calculating tax within Oracle Receivables, Oracle Order Management, Oracle sales, and Oracle Web Customers. It includes information about implementation procedures, setup forms and windows, the Oracle Receivables Tax calculation process, tax reports and listings, and open interfaces.

Oracle Self-Service Expenses Implementation Guide

This guide explains in detail how to configure Oracle Self-Service Expenses and describes its integration with Oracle Payable and Oracle Projects.

Oracle Self-Service Web Applications Implementation Manual

This manual describes the setup steps for Oracle Self-Service Web Applications and the Web Applications dictionary.

Installation and System Administration Guides

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, and major issues, for Applications-wide features such as Business Intelligence (BIS), languages and character sets, and self-service 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 One-Hour Install, which minimizes the time it takes to install Oracle

Applications and the Oracle 8*i* Server technology stack by automating many of the required steps. This guide contains instructions for using Oracle One-Hour 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 in general and lists database upgrade and product-specific upgrade tasks. You must be at either 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.

Using the AD Utilities

Use this guide to help you run the various AD utilities, such as AutoInstall, AutoPatch, AD Administration, AD Controller, Relink, and others. It contains how-to steps, screenshots, and other information that you need to run the AD utilities.

Oracle Applications Product Update Notes

Use this guide as a reference if you are responsible 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 and enhancements and changes made to database objects, profile options, and seed data for this interval.

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 processing.

Oracle Workflow Guide

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

Training and Support

Training

We offer a complete set of training courses to help you and your staff master Oracle Applications. We can help you develop a training plan that provides thorough training for both your project team and your end users. We will work with you to organize courses appropriate to your job or area of responsibility.

Training professionals can show you how to plan your training throughout the implementation process so that the right amount of information is delivered to key people when they need it the most. You can attend courses at any one of our many Educational Centers, or you can arrange for our trainers to teach at your facility. We also offer Net classes, where training is delivered over the Internet, and many multimedia-based courses on CD. In addition, we can tailor standard courses or develop custom courses to meet your needs.

Support

From on-site support to central support, our team of experienced professionals provides the help and information you need to keep Oracle® Project Manufacturing 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

We STRONGLY RECOMMEND that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle Applications tables, unless we tell you to do so in our guides.

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 an Oracle Applications form can update many tables at once. But when you modify Oracle Applications data using anything other than Oracle Applications forms, you might 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 forms to modify your data, Oracle Applications automatically checks that your changes are valid. Oracle Applications also keeps track of who changes information. But, if you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.

About Oracle

Oracle Corporation develops and markets an integrated line of software products for database management, applications development, decision support and office automation, as well as Oracle Applications. Oracle Applications provides the E-business Suite, a fully integrated suite of more than 70 software modules for financial management, Internet procurement, business intelligence, supply chain management, manufacturing, project systems, human resources and sales and service management.

Oracle products are available for mainframes, minicomputers, personal computers, network computers, and personal digital assistants, enabling 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 application products, along with related consulting, education and support services, in over 145 countries around the world.

Your Feedback

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U.S.A.

Or, send electronic mail to **appsdoc@us.oracle.com**.

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Project Manufacturing

This chapter provides an overview of Oracle Project Manufacturing. The following topics are included:

- Overview of Project Manufacturing
- Project Manufacturing Features

Overview of Project Manufacturing

Oracle Project Manufacturing Release 11i incorporates a new set of features and enhancements designed to fully support companies in the Engineer-To-Order, Make-To-Order, Seiban, and Aerospace and Defense industries. These industries are characterized by the need to plan, track, procure, and cost based on project, contract, or Seiban numbers.

Oracle Project Manufacturing supports the following key areas:

- Project manufacturing sales management and fulfillment, including drop shipments
- Project manufacturing advanced supply chain planning
- Project manufacturing costing
- Project manufacturing procurement
- Project manufacturing shop floor execution, including Flow Manufacturing integration
- Project inventory tracking
- Project manufacturing quality management
- Assemble-To-Order and Pick-To-Order environments

In addition, Oracle Projects provides the following main features:

- Project work breakdown structure definition
- Project management system integration
- Project budgeting and funding
- Project cost tracking and control
- Project cash forecasting
- Project billing
- Project revenue recognition
- Project archive and purge

The following key features are supported specifically for the Aerospace and Defense industry:

- Model / unit effectivity (serial effectivity)

- Borrow payback
- Hard and soft full pegging across the supply chain
- Group netting
- Actual costing (moving weighted average method)
- Complete integration with Oracle Advanced Planning and Scheduling
- Complete integration with Oracle Flow Manufacturing

New in Release 11i

Oracle Project Manufacturing added the following features in Release 11i:

- Model / unit effectivity (serial effectivity)
- Borrow payback
- Invoice cost transfer (for actual costing)
- Common project
- Inter-org project manufacturing costing
- Task auto-assignment workbench
- Workflow-based schedule exception messages
- Workflow-based project MRP exception messages, with project reschedule-in, reschedule-out, and cancellation messages
- Common supply netting for hard pegged material
- Workflow-based manufacturing project definition flow
- Seiban wizard and Seiban job costing
- Project data in EDI purchase order and purchase order change transactions
- Workflow-based inventory move orders for project material
- Project manufacturing organization parameters
- Project web workbench support for inquiry of PSI (project status inquiry including project actuals and commitments), project expenditures, project budgets and budget revisions, WIP job drill down to operations and material, cost group history drill down, and flow schedules
- Project RMAs

- Pick Release by project and task
- Integration with Oracle Advanced Supply Chain Planning

Oracle Projects added the following major features in Release 11i:

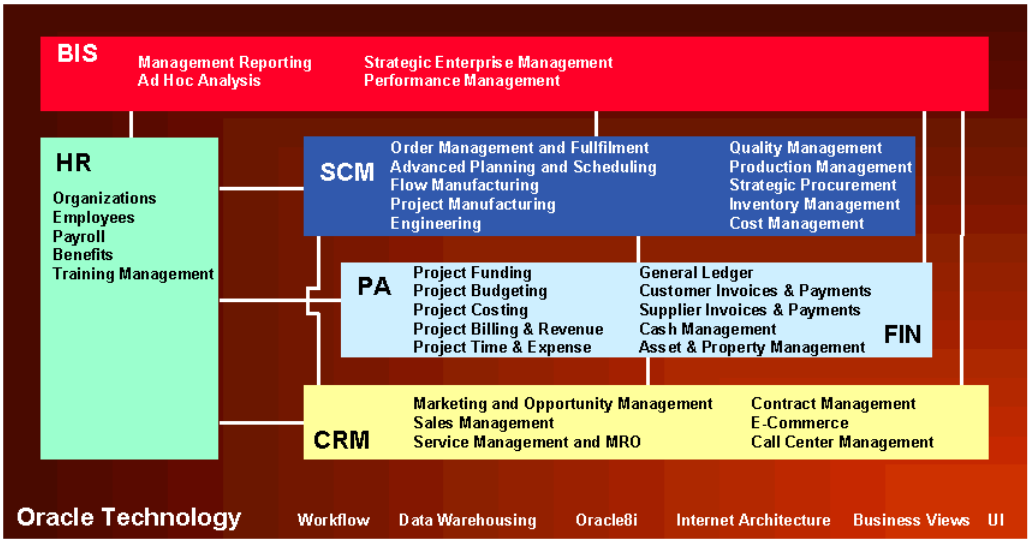
- Project cash forecasting (integration with Oracle Cash Management)
- Multi-national projects (currency and tax)
- Cost allocations
- Graphical T-Accounts
- Archive and purge
- Inter-company and inter-project billing

For more information on these features, see *Oracle Projects User's Guide*.

Oracle Project Manufacturing Integration

Oracle Project Manufacturing is fully integrated with the Oracle Projects, Oracle Financials, Oracle Human Resources, Oracle Customer Relationship Management, Oracle Business Intelligence System, and Oracle Supply Chain Management product suites.

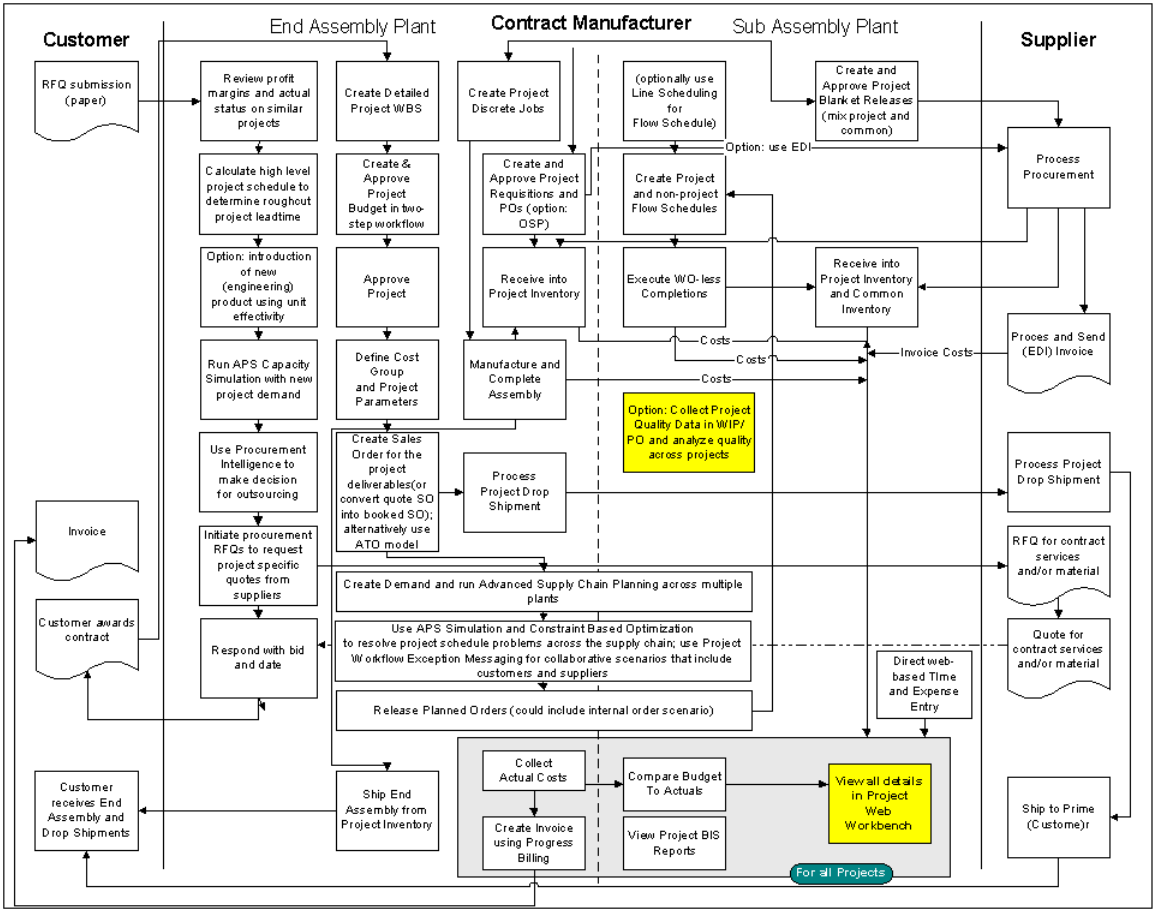
Figure 1–1 Oracle Project Manufacturing Integration with Oracle Products



Project Manufacturing Flow

Figure 1-2 portrays a generic high-level Project Manufacturing flow that is typical for the Engineer-To-Order and Aerospace and Defense industry but that is extended to include Business Intelligence, Flow Manufacturing, and Supply Chain scenarios.

Figure 1–2 Generic High-Level Project Manufacturing Flow



A complete contract cycle typically follows the steps shown in Figure 1-2. A contract cycle begins with a bid and proposal process by Sales and Engineering. This process includes review of profit margins and actual status on similar projects, calculation of a high-level project schedule to determine a rough-cut project duration, engineering reviews with optional new product introduction, infinite or constraint-based capacity simulation, procurement analysis for contract specific out-sourcing and requests for supplier quotes. The final result is a bid.

After the contract is awarded by the customer, the project work breakdown structure (WBS) and the budgeting and reporting requirements are defined and submitted for approval. The WBS represents all project activities including tasks, sub-tasks, work packages, activities, and milestones.

The next step is to drive project demand into the execution and planning system. The planning system runs a single or multiple plans across the supply chain and optimizes as needed based on constraints. Simulation of alternates provides the information needed to determine the optimal scenario. Specific project exception messages are analyzed as the outcome of each planning run. The planning results are forwarded to procurement and the shop floor for execution. Drop shipped material can be directly routed to procurement from order management, bypassing planning.

Shop floor execution uses discrete work orders, flow schedules, or a combination to manufacture (sub)assemblies. Procurement uses either blanket releases or standard purchase orders, optionally based on the project specific supplier quotes, for procured material. All project specific material (hard pegged) is tracked separately in the system, with optional borrowing or permanent transfers from one project to another.

Optionally, you can track project specific quality data and analyze defects and non-conformances.

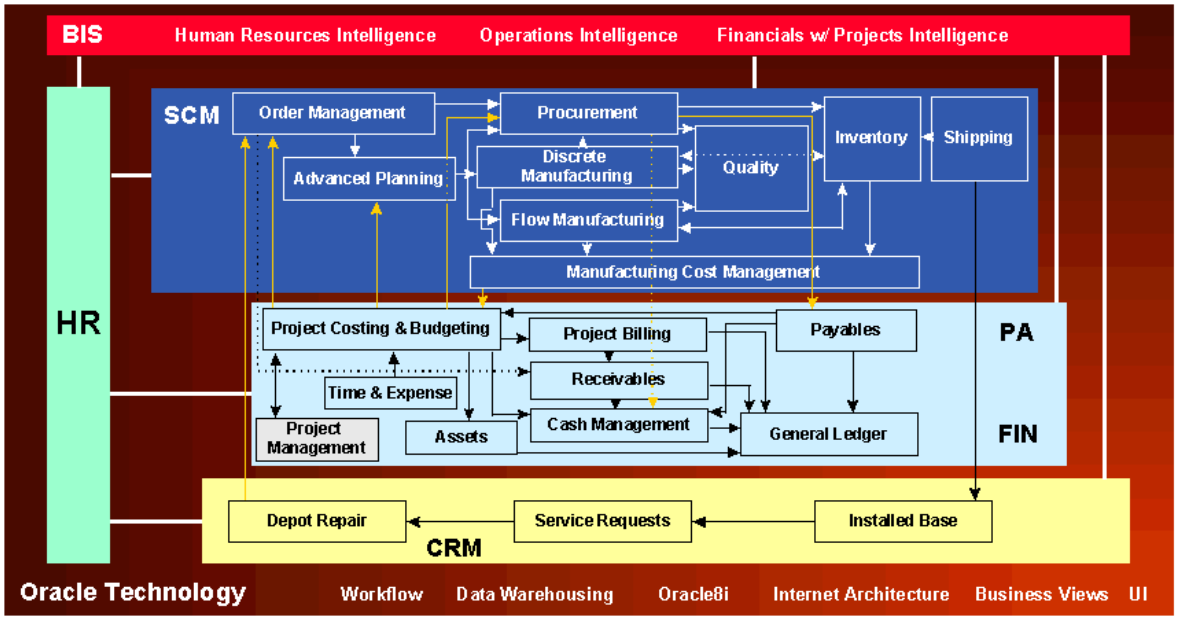
During execution, direct and indirect actual costs are collected by project. Costs can be analyzed for a specific project or across multiple projects. Based on actuals, you can perform earned value analysis, progress billing, and revenue recognition. During the execution phase, quality data are collected and analyzed by project.

After the project has been shipped and installed at the customer site, final billing, reconciliation, and close-out are executed.

Project Manufacturing Features

The Oracle Project Manufacturing features are illustrated in Figure 1-3. The dependencies between the various products used to provide a full project manufacturing solution are also shown.

Figure 1–3 Oracle Project Manufacturing Features



Project Definition

In order to define a project work breakdown structure (WBS), you can use either of three basic methods:

- Define the project structure in a third party project management system and transfer the structure (on-line) into Oracle Projects. Use basic setup data from Oracle Projects (such as project resources, project calendars, and project templates) directly in your third party project management system. Depending on the project management system you need, the Oracle Projects Connect or Oracle Projects Activity Management Gateway product to accomplish this.
- Define the project structure directly in Oracle Projects.

- Define the project structure using the Seiban Number Wizard.

Project or contract specific documentation can be entered into the system using project attachments.

Before releasing the project to collect manufacturing costs, you define the project-related manufacturing parameters for costing and planning purposes. For example, you need to decide whether to allow netting of materials within a project group across multiple projects and whether to track manufacturing costs separately by project or for a group of projects.

Project Budgeting

To track costs against budgets, you can define your budgeting in Oracle Projects. You define budgets directly in Oracle Projects or import budgets from external systems. Oracle Projects' main budgeting features are:

- **Multiple Budget Versions** You can use Oracle Projects to create multiple budget versions that include all of the costs for your project, such as engineering costs, item costs, manufacturing costs, and overheads. Having multiple budget versions allows you to revise your estimate-to-complete many times during a project. Each project can compare the current or baseline budget with earlier versions for analytical reporting.
- **Unlimited Budget Types** You can create different types of budgets. You can create cost budgets, revenue budgets, forecasted revenue budget, approved cost budget, and more.
- **Time Phased Budgeting** You can create user-defined time periods or use existing calendars in Oracle General Ledger or Oracle Projects to establish multiple budgeting periods.
- **Budget Extensions** You can use budget extensions to accommodate your company's budgeting needs.
- **Budget Baselining and Approval** You can baseline a budget and use a workflow-supported approval process for approving your budget.

Budgeting related documents, such as spreadsheets, can be included as budget attachments.

Project Setup for Manufacturing

After your project structure and budgeting have been defined in Oracle Projects, you need to define the Project Manufacturing parameters for your project. These include:

- Default WIP Accounting Class
- Cost Group, if you are using Weighted Average Costing
- Borrow Payback Variance Accounts (optional)
- Planning Group (optional)
- Task Auto-Assignment parameters (optional)
- Expenditure types for IPV, ERV, Freight, Tax, and Miscellaneous; if the parameter Transfer to PA is selected in the Project Manufacturing Organization Parameters
- Project manufacturing costing information:
  - Link new project expenditure types to new manufacturing cost elements and cost sub-elements (only when using new cost elements)
  - Link new manufacturing departments to new projects expenditure organizations (only when using new departments)
  - Optionally, define expenditure types for Invoice Price Variance, Exchange Rate Variance, Freight, Tax, and Miscellaneous Invoice Costs
  - Optionally, define borrow payback accounts

Project Sales Management

Project sales management activities include recording customer quotation documents, project specifications, quotation and sales order information, and fulfillment.

Oracle Project Manufacturing supports:

- **Project Quotations and Sales Orders** Oracle Order Management allows you to specify quotation and sales orders. A quotation can be copied easily to a sales order. Quotation, and sales order lines can be linked to projects and project tasks.
- **Project RMA** Oracle Order Management allows you to process Project RMAs using the line type category 'Return'. Examples of the line types available are return for credit without receipt of goods, return for credit with receipt of goods, and return for replacement.
- **Project Assemble-To-Order (ATO) and Pick-To-Order (PTO**) Oracle Project Manufacturing allows you to use the Oracle Configurator with Oracle Order Management with propagation of project and task on the configured model,

options, and included items. For ATO, the Final Assembly Schedule process will create a WIP Job with the configuration's project and task.

- **Project Drop Shipments** You can specify a project and task on a sales order line and automatically create a project purchase requisition using drop shipment functionality. Drop-shipped materials are shipped directly from supplier to customer.
- **Project Fulfillment** Oracle Order Management and Oracle Shipping Execution support delivery-based shipping with user-definable picking rules for order fulfillment. After manufacturing is complete, finished goods are picked automatically from the project inventory upon pick release. You can also pick all items for a project and task.
- **Project Order Import** If you use external systems to capture order information you can use Order Import to import external sales orders or quotations, including project and task references.

Project Manufacturing Planning

In order to drive project manufacturing planning, you need to enter demand in the system. The system supports three ways of entering demand:

- **Forecasts** You can enter a forecast and link a forecast entry to a project and task.
- **Sales Orders** You can enter a sales order and link a sales order line to a project and task. This can also be accomplished using Order Import functionality.
- **Master Demand/Master Production Schedule** You can enter a master schedule and link a master schedule entry to a project and task. Forecasts and sales orders can be sources for a master schedule.

After demand is created in the system, you can start your planning cycle. The planning cycle can be executed for a plan that spans one organization or an entire supply chain.

To successfully plan material for project execution, you must be able to separate all sources of supply and demand by project, identify components as shared or project specific, track existing inventories by project, and provide visibility to all supply and demand associated with a project.

Oracle Project Manufacturing provides:

- **Hard Pegging** You can plan material requirements while respecting hard pegs on all supply orders and generate planned orders with project/task references. Each item can be hard or soft pegged, thereby allowing various pegging

methods within a bill of material. Hard pegging is also supported in a supply chain planning scenario.

- **Soft Pegging** You can plan materials and soft peg them to the demand. Soft pegging is also supported in a supply chain planning scenario.
- **Group Netting** You can net within a planning group (multiple projects) and you can soft peg items to the projects within the project group.
- **Common Supply Netting** You can net excess common (non-project) supply to hard pegged demand.
- **Graphical Pegging to Project** You can use the object navigator to view your pegging information, such as project, task and sales order, graphically.
- **Planner Workbench** You can use the Planner Workbench to view project exceptions, a project horizontal plan, supply and demand per project, and unit number to simulate new or existing project demand, and to release planned orders by project.
- **Forecast by Project/Task** You can link a project WBS to a forecast entry and run the forecast demand through the planning system. This enables you to plan long term capacity and procurement for your projects.
- **Master Schedule by Project/Task** You can load the MDS/MPS from a project forecast with project sales orders or manually link a project WBS to a schedule entry. You can have project and non-project demand in one schedule.
- **Project Exception Messages** The planning system will generate project related exception messages including: items allocated across projects and tasks, items with excess inventory in a project or task, items with shortage in a project or task, reschedule-in, reschedule-out, and cancellation. You can use the workflow-based exception messages to define collaborative scenarios between internal and external organizations (suppliers and customers).
- **Single Planning Run for all Projects** You can run a single plan for multiple projects at once, thereby eliminating the need to run planning project by project. Oracle Application's fast memory-based planner allows you to execute planning much faster than traditional planning systems.
- **Project Planning Simulation** You can enter new supply and demand entries for new project and tasks or change existing supply and demand due dates directly in the Planner Workbench. On-line net-change simulation lets you view the results of your changes in minutes. This allows you to respond easily to scenarios of fluctuating and unexpected demand or to project management system rescheduling results.

- **Multi-Organization/Multi-Plant and Supply Chain Projects** Using Oracle Project Manufacturing, you can consolidate all costs for the products you manufacture for the same project in multiple plants in Oracle Projects. You can use Oracle Advanced Supply Chain Planning to plan projects across a supply chain with appropriate propagation of project and tasks on internal orders and demand and supply entities.
- **Constraint-Based Optimization** You can use Oracle Advanced Supply Chain Planning to optimize your project material and capacity plans using a variety of constraints and objective functions.
- **Borrow Payback Supply and Demand** The planning engine recognizes borrow payback supply and demand.

Project Manufacturing Execution

The planning cycle results in planned orders that are fed into the execution system:

- Internal orders driven by inter-company supply
- WIP Discrete Jobs for make items (Project Work In Process)
- Flow Schedules for make items (Project Work In Process)
- Purchase Requisitions or Blanket Releases for buy items (Project Procurement)

The execution system addresses the inventory, shop floor, and procurement activities. Project manufacturing costs are collected during execution.

Project Work In Process

Oracle Project Manufacturing supports the following features for Project Work In Process:

- **Project WIP Jobs** You can create WIP Jobs (work orders) with project/task references. Both standard and non-standard WIP Jobs are supported. Standard Project WIP Jobs can be created automatically and released from the Planner Workbench.
- **Project Outside Processing** You can use existing outside processing functionality to support Project Outside Processing. The project/task on the work order is transferred once the outside processed purchase requisition is generated.
- **Project Repair Orders** You can use non-standard WIP Jobs to capture project repair by linking these jobs to a project/task.

- **Project Flow Schedules** You can use flow schedules in a work order-less production environment. Flow schedules can be created and released from the Planner Workbench or Line Scheduling Workbench (Oracle Flow Manufacturing integration).

Project Procurement

Oracle Project Manufacturing supports the following features for Project Procurement:

- **Project Requisitions** You can create requisitions with project/task references. Project requisitions can be defined for inventory and expense destination types. Project requisitions can be implemented automatically from the Planner Workbench.
- **Project Purchase Orders** You can create purchase orders with project/task references. Project purchase orders can be defined for inventory and expense destination types.
- **Project Blanket Releases** You can create purchase blanket releases with project/task references. Project blanket releases can be automatically implemented from the Planner Workbench.
- **Project RFQs** You can create purchase Request For Quotations (RFQ) manually or auto-create a RFQ from a requisition. You can request multiple quotes within one vendor RFQ.
- **Project Supplier Quotes** You can create purchase vendor quotes manually or create a quote from an RFQ.
- **Project Outside Processing** You can create purchase orders for outside processing directly from Oracle Work In Process.

Project Inventory

Tracking inventory by project and dealing with permanent and temporary transfers from one project to another or from common inventory to project inventory is essential for a project-based environment. Oracle Project Manufacturing supports:

- **Project Inventory** You can segregate inventory by project using project locators. Purchase order receipt locators are validated automatically for project purchase orders. You can reference existing project locators or you can dynamically create project locators upon receipt. The issue, back-flush, and completion locators are validated automatically for project WIP jobs and their associated material. Similar logic applies in processing flow schedules using work order-less completions.

- **Project Material Transactions** You can use existing material transactions such as Miscellaneous Issue / Receipt, Move Orders (material transfer within one project), PO Receipt, WIP Issue, WIP Return, and WIP Completion to handle all of your project material transaction needs.
- **Permanent Project to Project Transfers** You can transfer material from one project to another with appropriate transfer of inventory value, using project transfer transactions.
- **Temporary Project to Project Transfers** You can use borrow payback transactions to borrow material from one project to another, with payback being assured against the original value.
- **Common-to-Project and Project-to-Common Transfers** You can use project transfer transactions to transfer material from common inventory to project inventory and vice versa, with appropriate transfer of inventory value.

After completion of the assembly on the project sales order lines, the goods can be shipped to the customer for installation.

Project Manufacturing Costing

During the execution phase, project-related costs can be collected in four ways:

- Import of costs from external systems directly into Oracle Projects' Transaction Import
- Entry of direct labor and expenses directly into Oracle Projects using time and expense entry
- Collection of manufacturing labor, material, and manufacturing overhead in Oracle Cost Management as a result of Work In Process and Inventory transactions
- Import of manufacturing costs from external systems using Oracle Manufacturing Transaction Import

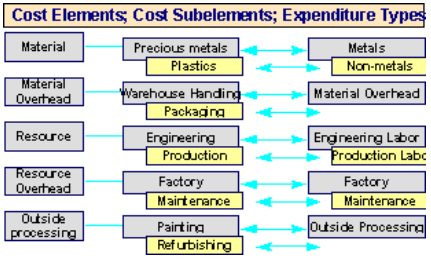
For expense purchases, the invoice costs flow to a project through Oracle Payables. For inventory purchases, the purchase costs flow to a project through Oracle Cost Management upon receiving into destination. As soon as invoices are matched, approved, and posted to the General Ledger, you can transfer the appropriate invoice charges (IPV, ERV, Freight, Tax, and Miscellaneous) to Oracle Projects, using the Invoice Charge Transfer Request.

For inter-company costs, the system transfers costs at cost group value (determined by FOB point), either collapsed into the material element or with elemental details.

Oracle Project Manufacturing supports project costing with the following features:

- **Cost Groups** You can create cost groups and link cost groups to projects to identify and separate costs by item and by project. Costs are tracked using perpetual weighted average costing. You can use one cost group for multiple projects if you want to establish a weighted average cost by item for a group of projects.
- **Linking Project Expense Organizations to Manufacturing Departments** You can link project expense organizations to manufacturing departments to allow for departmental cost visibility and analysis for a project.
- **Common Project** You can define a common project to collect cost for all common material transactions into Oracle Projects. You can use standard tools such as Expenditure Inquiry and Project Status Inquiry to analyze your common project, view commitments and actuals, and compare common and project-specific costs.
- **Linking Project Cost Elements To Manufacturing Cost Elements** You can create user-defined project cost elements (Oracle Projects expenditure types), and manufacturing cost (sub)elements. Project cost elements can be mapped into user definable categories for analysis and reporting. You can specify which project cost elements you will use on an individual project. Oracle Project Manufacturing allows you to link manufacturing cost elements (labor, material, overhead, outside processing), resources, and departments to project cost elements. This allows you to track all costs within a project, whether a given cost's source is purchasing, project direct labor and expenses, shop floor activity, or external systems.

Figure 1–4



- **Manufacturing Cost Collector** Oracle's Manufacturing Cost Collector allows you to transfer manufacturing costs to Oracle Projects. The engine intelligently

derives all required information such as expenditure organization, expenditure date, and project cost element, automatically. All manufacturing costs are transferred to Oracle Project's Transaction Import for project cost distribution. The Cost Collector also calls the Task Auto Assignment Rules to assign tasks to costed transactions when running a project-only manufacturing scenario.

- **Project Inventory Valuation** You can use the full functionality of Weighted Average Actual Costing in a Project Manufacturing environment. Project inventory material costs will be maintained by project on a perpetual weighted average basis. Common inventory material costs will be maintained by item. All costs are maintained per organization on elemental detail.

Oracle Projects supports costing with the following additional features to keep track of project progress, actual-versus-planned budget, control of project purchase commitments, and reporting:

- **Project Status Inquiry (PSI)** Use this feature to research facts about your project. You can go up and down on your project WBS and obtain project summary information, and drill down to detail transaction information. You can also obtain project commitments, revenue, invoices, unbilled costs, backlog and receivable information. The PSI Extension allows you to pull project information from any part of the database. You can export data in on-line queries to your desktop spreadsheet and reporting tools, to meet the requirements of your company.
- **Project Comparison** Oracle Projects and most project management systems allow you to compare multiple project versions. You can use Oracle Projects to compare baseline and current project budgets.
- **Project Status Reporting** Both Oracle Projects and most third-party project management systems support a large number of project status reports to analyze your project financial status.
- **Project Expenditure Types** You can create user defined project cost elements (expenditure types) and group these elements into categories.

The Oracle Business Intelligence System supports management reporting across all projects and all organizations for revenue and cost incurred. Starting from the top level, you can drill down across the organization and classification hierarchies to the project level.

Project Billing

Oracle Projects is the repository for all project costs. These costs can be used for earned value analysis, which is handled in the third-party project management system. The result of the earned value analysis can trigger project billing.

Within the Project Manufacturing solution, there are three ways to accomplish billing:

- Drive billing from Oracle Order Management using order types (workflows) that interface to Oracle Receivables.
- Drive billing from Oracle Project Billing using billing schedules that interface to Oracle Receivables.
- Use a combination of the first two methods. For example, you might drive project billing from Oracle Project Billing and spare-part billing from Oracle Order Management. If you use Oracle Shipping Execution to ship your project-related assemblies, but not to bill for them, use order types (workflows) that do not interface to Oracle Receivables to avoid double billing.

Project Quality Management

Optionally, you can implement Oracle Quality for managing project quality. Oracle Quality in combination with Oracle Project Manufacturing supports:

- **Project Quality Collection Elements** You can use project and task as quality collection elements.
- **Specify Project on Quality Collection Plan** You can specify a project on a quality collection plan.
- **Project Quality Data Collection** You can collect project and task related quality information using manual entry or Oracle Quality's Data Collection Open Interface.
- **Project Quality Analysis** You can use project and task as selection criteria for quality analysis.

Figure 1-3 includes Oracle financial products that have not been discussed. If you implement an Oracle Projects functionality called Capital Projects, you will generate asset lines for Oracle Assets. All journals from all subsystems will be posted to Oracle General Ledger. Oracle General Ledger is also the place holder for the chart of accounts used throughout the entire system.

Special Features

Oracle Project Manufacturing provides additional special features:

- **Model/Unit Effectivity (Serial Effectivity)** You can define unit effective items and bills of materials, allowing you to implement product structure variations driven by unit number effectivity as opposed to date effectivity. You can engineer, sell, plan, produce, procure, ship, and track against a unit number. Model / Unit Effectivity can be used in a non-project based environment.
- **Task Auto Assignment Workbench** You can use the Task Auto Assignment Workbench to define material and resource rules for task allocation. This feature supports scenarios where you intend to run the manufacturing side under project control only. Task Auto Assignment supports a myriad of rules to assign tasks dynamically to project-only manufacturing transactions for more flexible costing scenarios. For example, instead of allocating all costs for a work order to one task, you could implement rules that allow certain resource cost to be allocated to one task, other resource costs to another task, and material costs to be allocated to yet another.
- **Project Web Workbench** This workbench operates in a separate browser window and allows continuous monitoring of one or more projects. The web workbench shows project related data such as project sales orders, project procurement documents, project discrete jobs with material and operation details, project flow schedules, project cost group with history, project budgeting, project expenditures, and project commitments.
- **Manufacturing Project Definition** This workflow-based process guides the user through the setup steps required to define a project manufacturing project. The process keeps track of completion and can notify a user on steps to be done or completed.
- **Project Schedule Exceptions** This workflow-based process assists users in identifying project schedule inconsistencies. Inconsistencies can be sent to project and task managers using workflow notifications or standard exception reports. The process monitors overdue work orders, procurement documents, and sales orders, as well as out of sync work orders, procurement documents, planning entries, and sales orders.
- **Seiban Number Wizard** The Seiban Number Wizard guides the user in the definition of seiban number, which is visible in the system as a project number. Seiban numbers can be represented as unique numbers using Project Manufacturing without Oracle Projects. For ETO-type seiban or lot-type seiban, you can define a multi-level project structure in Oracle Projects, or a top-level project structure that can be generated through the wizard.

2

Setup Parameters

This chapter addresses defining organization parameters for project manufacturing organizations, the use of locators, and the use of the Task Auto-Assignment Flexsequence feature. For information on implementing Oracle Project Manufacturing, see: *Oracle Project Manufacturing Implementation Manual.*

Topics include:

- Project Manufacturing Organization Parameters
- Locators in Project Manufacturing
- Using Task Auto Assignment FlexSequence

Project Manufacturing Organization Parameters

Use the Project Manufacturing Organization Setup Parameters form to enter all Project Manufacturing setup information at the inventory organization in a single place. The setup attributes are grouped into tab pages for easier access to related information.

The PJM Organization Parameter form can be accessed through navigator directly or through Oracle Human Resource's Define Organization form using a new Project Manufacturing organization classification and information type.

The PJM Organization Parameter form includes the following setup attributes:

General

- Project Reference Enabled
- Project Control Level
- Allow Cross Project Issues
- Allow Cross Unit Number Issues
- Common Project

Invoice Transfer

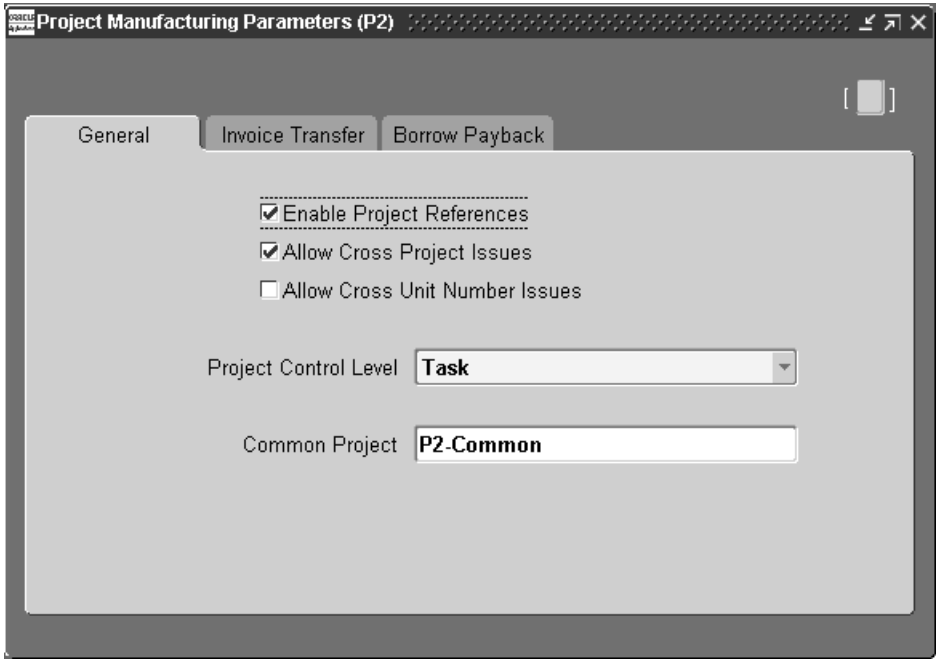
- Default IPV Expenditure Type
- Default ERV Expenditure Type
- Default Freight Expenditure Type
- Default Tax Expenditure Type
- Default Miscellaneous Invoice Charges Expenditure Type

Borrow Payback

- Default Payback Variance Accounts

To set up the General attributes

1. Navigate to the PJM Organization Parameters form. The form displays with the General tab region showing.



2. Optionally, select Project Reference Enabled.

   When you check this box, the organization is Project Reference Enabled. Project number and, optionally, task numbers can be associated with various supply and demand entities in the organization.

   In Release 11, this checkbox was found in the Inventory Organization Parameters form in the Projects tab region.

3. Select the control level for the inventory organization: project or task.

   If Project References is enabled and you choose the Project Control Level, you can associate projects and, optionally, tasks with the supply and demand entities.

   If Project Reference is enabled and you choose the Task Control Level, you must associate tasks when you associate a project with supply and demand entities.

In Release 11, this checkbox was found in the Inventory Organization Parameters form in the Projects tab region.

4. Optionally select Allow Cross Project Issues.

   Check this box to allow cross project issues for projects belonging to the same planning and cost group in the inventory organization.

   In Release 11, this parameter was available as a profile option.

5. Optionally, select Allow Cross Unit Number Issues.

   Check this box to allow cross unit number issues for projects belonging to the same planning and cost group in the inventory organization.

6. Optionally, select a Common Project.

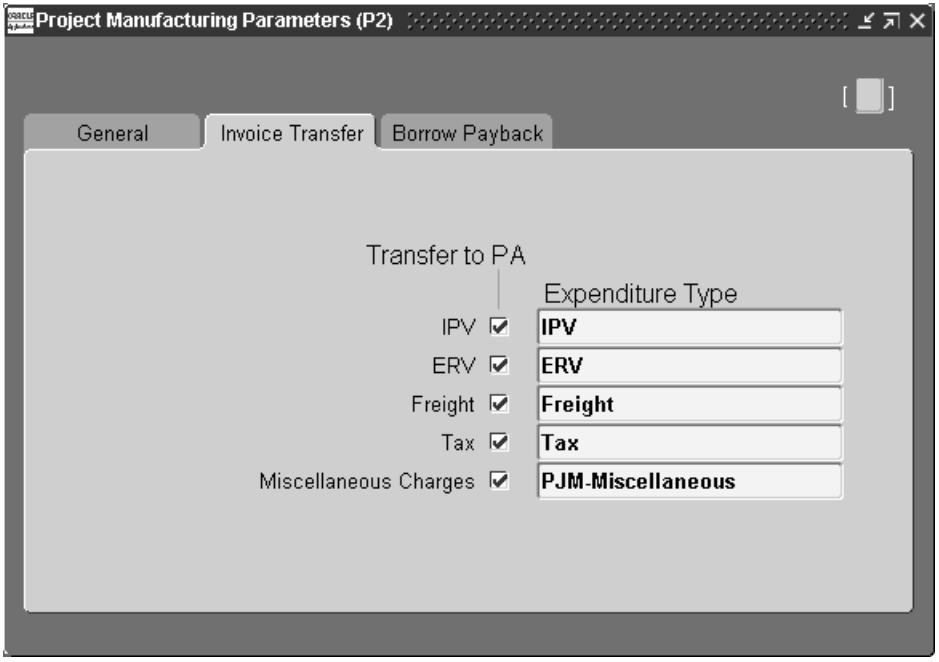
   Select a project which has been defined in Oracle Projects. If you do not use Oracle Projects, you do not need to perform this setup.

   Selecting a common project allows you to track the cost of manufacturing transactions that have not been associated with a specific project. This enables you to budget for common costs and to view commitments, actual, and budgeted cost for your common project on the standard Project Status Inquiry. You can set up a different common project for each inventory organization.

7. When you run the Cost Collector, the common project value set up on the PJM Organization Parameters form is assigned to all transactions related to common items. The common cost group cost of each item is used for the common transactions. Tasks are assigned for common project transactions based on the Task Auto Assignment Rules for the common project. You must set up at least one rule for each material and resource transaction in the Task Auto Assignment Workbench.Save your work.

To set up Invoice Transfer attributes

1. Navigate to the PJM Organization Parameters form and select the Invoice Transfer tab region.



2. Select the Transfer to PA checkbox, if appropriate.

   You must check this box if you wish to transfer any invoice charges for an invoice charge type. If you check this box, you must select an expenditure type for the appropriate invoice charge type.

3. Select the Default IPV Expenditure Type, if appropriate.

   This is mandatory if you have checked the Transfer to PA checkbox. Select an expenditure type that has been associated with expenditure type class Inventory. See: Defining Expenditure types, *Oracle Projects User's Guide*. This value is defaulted into the Project Parameters form for each project and can be updated for a project.

   If an Invoice Price Variance is generated when approving an inventory / shopfloor related invoice, the Invoice Charge transfer process will use the IPV

expenditure type defined in the Project Parameters form along with the IPV amount, IPV account and Expenditure Organization to transfer the IPV amount for the project to Oracle Projects.

4. Default ERV Expenditure Type

   Mandatory if you have checked the Transfer to PA checkbox. Select an expenditure type that has been associated with expenditure type class Inventory. See: Defining Expenditure types, *Oracle Projects User's Guide*.This value is defaulted into the Project Parameters form for each project and can be updated for a project.

   If an Exchange Rate Variance is generated when approving an inventory / shopfloor related invoice, the Invoice Charge transfer process will use the ERV expenditure type defined in the Project Parameters along with the ERV amount, ERV account from Oracle Payables and Expenditure Organization to transfer the ERV amount for the project to Oracle Projects.

5. Default Freight Expenditure Type

   Mandatory if you have checked the Transfer to PA checkbox. Select an expenditure type that has been associated with expenditure type class Inventory.See: Defining Expenditure types, *Oracle Projects User's Guide*.This value is defaulted into the Project Parameters form for each project and can be updated for a project.

   If you use Receipt based Matching for your Invoice, and Freight is entered on the distribution when approving an inventory / shop floor related invoice, the Invoice Charge transfer process will use the Freight expenditure type defined in the Project Parameters window along with the freight amount, freight account from Oracle Payables and expenditure organization from the purchase order to transfer the freight amount for the project to Oracle Projects.

6. Default Tax Expenditure Type

   Mandatory if you have checked the Transfer to PA checkbox. Select an expenditure type that has been associated with expenditure type class Inventory. See: Defining Expenditure types, *Oracle Projects User's Guide*.This value is defaulted into the Project Parameters form for each project and can be updated for a project.

   If a distribution is generated for Miscellaneous Charge when performing receipt based matching for an inventory / shop floor related invoice, the Invoice Charge transfer process will use the Miscellaneous Charge tax expenditure type defined in the Project Parameters window along with the tax amount, tax

account defined in Oracle Payables and Expenditure Organization from the purchase order to transfer the tax amount for the project to Oracle Projects.

7. Default Miscellaneous Invoice Charges Expenditure Type.

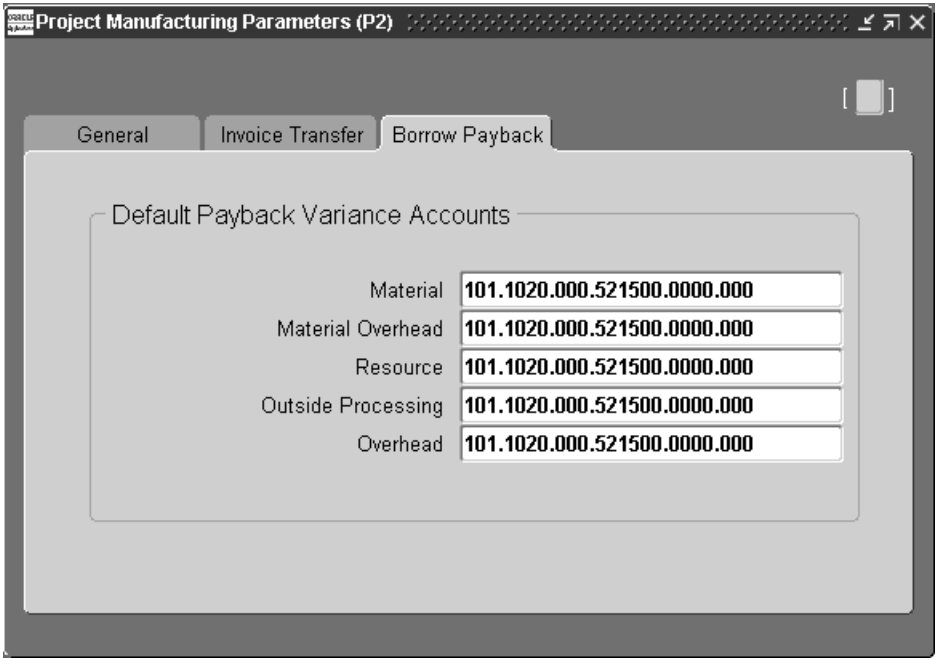
   Mandatory if you have checked the Transfer to PA checkbox. Select an expenditure type that has been associated with expenditure type class Inventory. See: Defining Expenditure types, *Oracle Projects User's Guide*. This value is defaulted into the Project Parameters form for each project and can be updated for a project.

   If a distribution is generated for Tax when performing receipt based matching for an inventory / shop floor related invoice, the Invoice Charge transfer process will use the ERV expenditure type defined in the Project Parameters window along with the miscellaneous amount and account from invoice distributions and expenditure organization from the purchase order to transfer the Miscellaneous charge for the project to Oracle Projects.

8. Save your work.

◗◗ To set up Borrow Payback attributes

1. Navigate to the PJM Organization Parameters form and select the Borrow Payback tab region.



2. Default Payback Variance Accounts.

   Select elemental payback variance accounts from the list of valid accounts to be used as default for all projects for the inventory organization. This set of accounts defaults to the cost group and can be updated for each cost group. The difference between the average cost at the time of payback and the original borrowing cost will be posted to this set of accounts for the borrowing project's cost group.

3. Save your work.

Note: The PJM Organization Parameter form includes conditional logic to enable / disable fields and tab pages based on other organization settings.

Table 2–1 Field and Tab Logic for PJM Organization Parameters Form

Field / Tab Page	Conditional / Dependency Logic
Project Control Level	Enabled and Required if Project Reference Enabled checkbox is checked
Allow Cross Project Issues	Enabled if Project Reference Enabled checkbox is checked
Common Project	Enabled if Cost Collection is enabled for this organization and Project Reference Enabled checkbox is checked
Invoice Transfer Tab Page	Visible if Oracle Payables is installed or implemented; Enabled if Oracle Payables is installed or implemented and Project Reference Enabled checkbox is checked
Borrow Payback Tab Page	Enabled if Project Reference Enabled checkbox is checked
Transfer to PA checkboxes (IPV, ERV, Freight, Tax and Miscellaneous)	Enabled if Oracle Payables is installed or implemented and Project Reference Enabled checkbox is checked
Expenditure Types (IPV, ERV, Freight, Tax and Miscellaneous)	Enabled if: Oracle Payables is installed or implemented Project Reference Enabled checkbox is checked Corresponding Transfer to PA checkbox is checked

When the Project Reference Enabled checkbox is checked for a new inventory organization, or when the Project Reference Enabled checkbox is changed to checked from unchecked in an existing inventory organization, the form will invoke an API to modify the stock locator FlexField to add Project and Task segments.

Locators in Project Manufacturing

Locator Flexfield

Oracle Project Manufacturing reserves segment19 and segment20 of the Stock Locator key flexfield to store the project and task numbers. Users should not attempt to modify these two segments.

If you are installing Oracle Project Manufacturing for the first time, the system automatically enables segment19 and segment20 of the Stock Locator key flexfield when you create the first inventory organization and check the Project Reference Enabled checkbox. You can then enable additional segments (for example, Segment1, segment2) to reflect your physical stock location layout.

If you are installing Oracle Project Manufacturing in an existing Oracle Applications installation and are currently using segment19 and segment20 of the Stock Locator key flexfield, you need to change your current flexfield schema and use other segments instead. The system does not support an automatic conversion.

Definition

Project Locator A project locator is a locator with a project or project and task reference. It is also a logical partition of a physical location.

Project locators are used to track project hard pegged material.

Project inventory needs to be stocked in a project locator and needs to be transacted in and out of a project locator. Since locators can be dynamically created, it is not necessary to predefined project locators.

Common Locator A common locator is a locator without a project or project and task reference. It is also a real, physical location. Common locators are used to track common (soft pegged) material.

> **Note:** Although a project locator is a logical partition, the system still regards it as a physical locator for physical and cycle counting.

Example Project locators differ from common locators by the existence of values in the project and task segments in the flexfield definition of the Locator. If the structure of the physical location is Row / Rack / Bin, the structure of the Locator flexfield would be Row / Rack / Bin / Project / Task. For example, the concatenated

value for a common item in Row 1, Rack 4, Bin 2 would be 1/4/2/ / while the concatenated value for a project item in Row 1, Rack 4, Bin 2, Project C4501, Task 2.1 would be 1/4/2/C4501/2.1.

Use of Locator

The Project Locator is a mechanism to track inventory by project. If an inventory item needs to be identified by project, you need to turn on *Locator Control* for the item.

Since locators can be created dynamically (Locator Control = Dynamic Entry Allowed at item level), you do not need to predefined all project locators. Oracle Project Manufacturing provides defaulting and validation logic in order to keep the use of project locators transparent to the user.

Using Task Auto Assignment FlexSequence

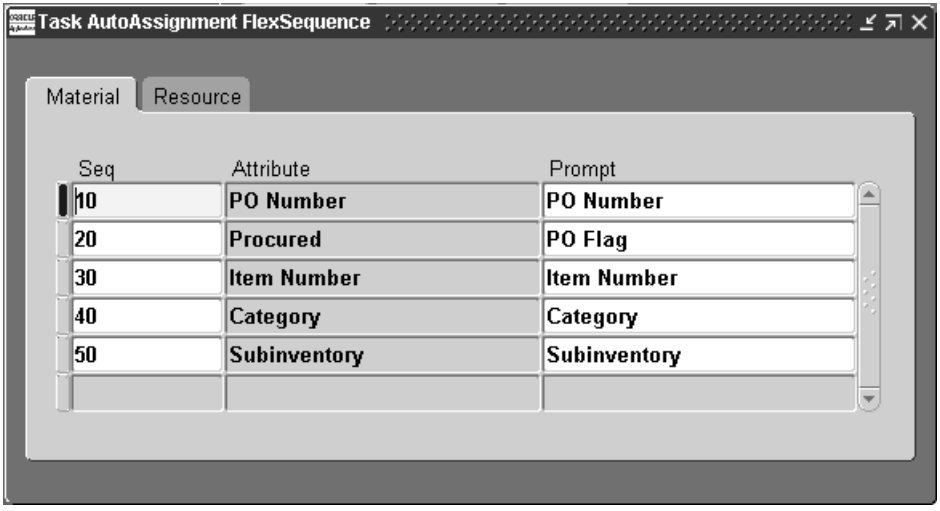
The Task Auto Assignment workbench allows you to define how to allocate material and resource costs to different tasks within a project. Material task assignments are based on rules using the following attributes: item, purchase order number, item category, subinventory, and procured flag. Resource Task assignments are based on rules using the following attributes: department, operation, assembly item, and WIP job.

The Task Auto Assignment FlexSequence feature allows these attributes to be ranked according to which should take precedence in terms of task allocation. The Task Auto Assignment workbench displays the material and resource task assignment attributes and assigns tasks according to the sequence by version selected.

It is strongly recommended that you do not change the sequence after transactions have been performed and cost collector is run in the system as it impacts the allocation of costs to tasks.

◗◗ To set up the hierarchy of attributes for material task assignment

1. Navigate to the Material tab on the FlexSequence form.



2. Enter a Seq., or sequence number.

The sequence number of the attribute determines the sequence / order of rule assignment and attribute display in the Task Auto Assignment Rules form.

3. Select an Attribute.

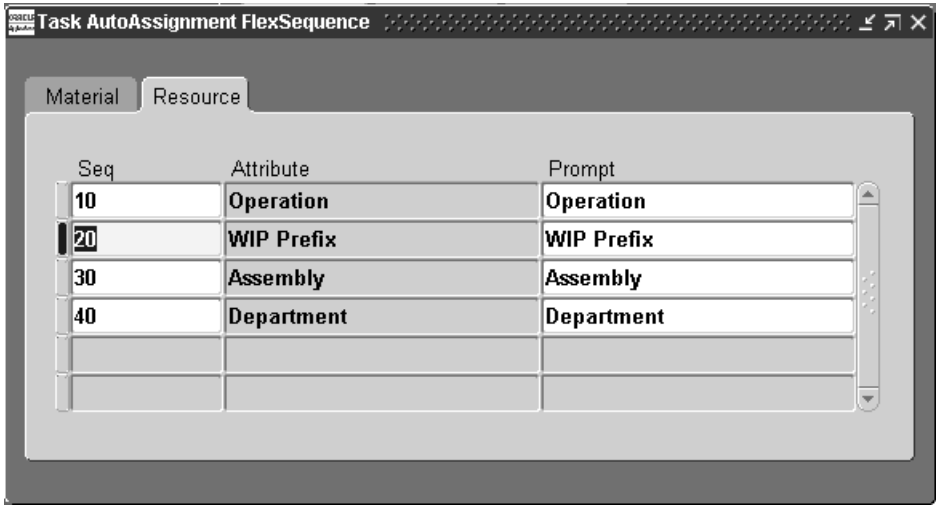
   For material task assignment, you can use the attributes Item Number, Subinventory, Purchase Order Number, Procured, Flag, and Category.

4. Optionally, enter a Prompt.

   For each attribute, you can define the prompt or column heading to be displayed for the attribute on the Task Auto Assignment Rules form.

To set up the hierarchy of attributes for resource task assignment

1. Navigate to the Resource Material tab on the FlexSequence form.



2. Enter a Seq., or sequence number.

   The sequence number of the attribute determines the hierarchy of rule assignment and attribute display in the Task Auto Assignment Rules form.

3. Select an Attribute.

   For resource task assignment, you can use the attributes Assembly, WIP Job Prefix, Operation, and Department

4. Optionally, enter a Prompt.

For each attribute, you can define the prompt or column heading to be displayed for the attribute on the Task Auto Assignment Rules form.

3

Project Definition

This chapter provides the information you need to define projects, including the following topics:

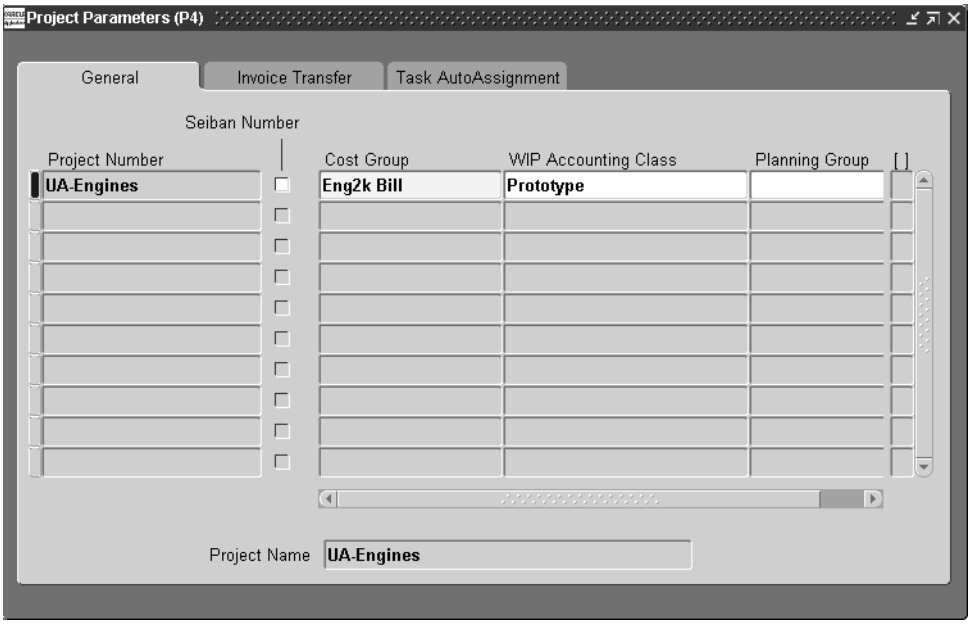
- Defining Project Parameters
- Seiban Number Wizard

You need to associate a project number or a seiban number with a Planning Group, a Cost Group, and a Default WIP Accounting Class.

Defining Project Parameters

◗◗ To set up project parameters

1. Navigate to the Project Parameters window.



2. If you are making the first assignment, enter the project or seiban number you want to associate with a planning group. If you are updating an existing assignment, query the existing record and make the necessary changes.

   If the number you enter is a Seiban number, the Seiban Number flag is automatically enabled.

3. Select a Cost Group.

   If the organization has selected Standard as its primary costing method in the Organization Parameters window, the Cost Group field is disabled. Standard Costing is only available when you do not use cost collection from manufacturing to Oracle Projects. Standard Costing does not require cost groups.

If the organization has selected Average as its primary costing method in the Organization Parameters window, the Cost Group field is enabled. You must select a Cost Group from the list of valid Cost Groups for a project in an average costing organization. The list of values includes the Common Cost Group and the user defined cost groups. The list of user defined cost group includes only those cost groups with valid accounts in the Cost Group form. Please refer to the Costing User Guide for details on Cost Group definition. Weighted average costing for Inventory and WIP is maintained at the Cost Group level. Therefore, if you want to keep weighted average costing at the project level, you must assign the project to its own Cost Group.

4. Optionally, enter a WIP accounting class.

   If the organization has selected Standard as its primary costing method in the Organization Parameters window, you can choose any discrete WIP accounting classes.

   If the organization has selected Average as its primary costing method in the Organization Parameters window, you can choose any WIP accounting class that has been associated with the selected cost group in the WIP Accounting Classes for Cost Groups window in Cost Management.

   When you create project jobs or complete work order-less schedules for a project, this accounting class is defaulted if an accounting class, based on the assembly item's category set, cannot be found. It can be overridden, but only with another accounting class that is assigned to the cost group. See: WIP Accounting Class Defaults, *Oracle Work in Process User's Guide*.

   Note: When you create a project WIP job either manually or through MRP, the system checks whether you've assigned a default WIP accounting class to this WIP job's item category and cost group in the Default WIP Accounting Classes for Categories window. If you have, the program uses this WIP accounting class for the job. If you have not, the program uses the WIP accounting class you entered for the project.

5. Optionally, select the name of the planning group with which you want to associate your project or Seiban number.

   If you plan material requirements by a group of projects, rather than by each individual project, you need to define a planning group and to assign all the

projects to this planning group. If you plan net material requirements only by a single project, you do not need to associate the project with any planning group.

For more information about planning groups, see Defining Planning Group Quick Codes, *Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User's Guide*.

6. Choose the Invoice Transfer tab.

7. Enter an expenditure type for IPV.

   This field is mandatory in a Project Manufacturing organization, if the *Transfer to PA IPV* option has been selected on the Organization Parameters form. You can use the IPV expenditure type that has defaulted from the PJM Org Parameter form or modify it to choose any one of expenditure types that has been associated with expenditure type class Inventory. See: Defining Expenditure types, *Oracle Projects User's Guide*.

   If an Invoice Price Variance is generated when approving an inventory or shopfloor (outside processing) related invoice, the Invoice Charge transfer process will use the IPV expenditure type defined in the Project Parameters window along with the IPV amount, IPV account, and Expenditure Organization to transfer the IPV amount for the project to Oracle Projects.

8. Enter an expenditure type for ERV.

   This field is mandatory in a Project Manufacturing organization, if the *Transfer to PA ERV* option has been selected on the Organization Parameters form. You can use the ERV expenditure type that has defaulted from the PJM Org Parameter form or modify it to choose any one of expenditure types that has been associated with the expenditure type class Inventory. See: Defining Expenditure types, *Oracle Projects User's Guide*.

   If an Exchange Rate Variance is generated when approving an inventory or shopfloor (outside processing) related invoice, the ERV transfer process will use the ERV expenditure type defined in the Project Parameters window along with the ERV amount, ERV account, and Expenditure Organization to transfer the ERV amount for the project to Oracle Projects.

9. Enter an expenditure type for Freight.

   This field is mandatory in a Project Manufacturing organization, if the *Transfer to PA Freight* option has been selected on the Organization Parameters form. You can use the Freight expenditure type that has defaulted from the PJM Org Parameter form or modify it to choose any one of expenditure types that has

been associated with the expenditure type class Inventory. See: Defining Expenditure types, *Oracle Projects User's Guide*.

If you use receipt based matching for your invoice, and freight is entered on the distribution when approving an inventor or shopfloor (outside processing) related invoice, the invoice charge transfer process will use the freight expenditure type defined in the Project Parameters window It will also use the freight amount and freight account from Oracle Payables, and the expenditure organization from the purchase order to transfer the freight amount for the project to Oracle Projects.

10. Enter an expenditure type for Tax.

This field is mandatory in a Project Manufacturing organization, if the *Transfer to PA Tax* option has been selected on the Organization Parameters form. You can use the tax expenditure type that has defaulted from the PJM Org Parameter form or modify it to choose any one of expenditure types that has been associated with the expenditure type class Inventory.See: Defining Expenditure types, *Oracle Projects User's Guide*.

The method you choose to match tax to your invoiced items determines which expenditure type is assigned to the tax you enter on the Payables invoice. You can allocate tax at the line match level or you can enter tax as an invoice distribution line and manually allocate it to item distributions.

If you allocate tax at the match to line level as described below, tax entered on the invoice will be charged to the IPV expenditure type:

- You can select the option of matching the supplier invoice to the purchase order or purchase order receipt on the shipments form of the purchase order. When you enter the Payables invoice, you select the same matching method that you chose on the purchase order.
- On the Match to Purchase Order form of Invoice Entry, you can check the Allocate checkbox next to each matching line to allocate tax, freight, and miscellaneous charges to the matched lines.
- Tax matched to a purchase order or receipt line on this form is designated as an invoice price variance - the difference between the tax amount allocated on the invoice and the tax entered on the purchase order line. In Oracle Projects you will see the Invoice Price Variance expenditure type on the transaction for tax allocated on the invoice.

If you allocate tax at the invoice distribution line level as described below, tax entered on the invoice will be charged to the tax expenditure type:

- You can select the same matching method on the invoice as you selected on the purchase order as described above and perform matching to lines, but do not check the Allocate checkbox.
- You can enter a new distribution line for tax on the Invoice Distributions form and hit the Allocate button.
- You can manually allocate the tax to any of the item distribution lines.

11. Tax matched on this form is designated as a tax (not invoice price variance) and is charged to the tax expenditure type which you set up on the Project Parameters form.Enter an expenditure type for Miscellaneous charge.

This field is mandatory in a Project Manufacturing organization, if the *Transfer to PA Miscellaneous* option has been selected on the Organization Parameters form.You can use the Miscellaneous expenditure type that has defaulted from the PJM Org Parameter form or modify it to choose any one of expenditure types that has been associated with the expenditure type class Inventory. See: Defining Expenditure types, *Oracle Projects User's Guide*.

If a distribution is generated for Tax when performing receipt based matching for an inventory or shopfloor (outside processing) related invoice, the Invoice Charge transfer process will use the ERV expenditure type defined in the Project Parameters window along with the miscellaneous amount and account from invoice distributions and expenditure organization from the purchase order to transfer the miscellaneous charge for the project to Oracle Projects.

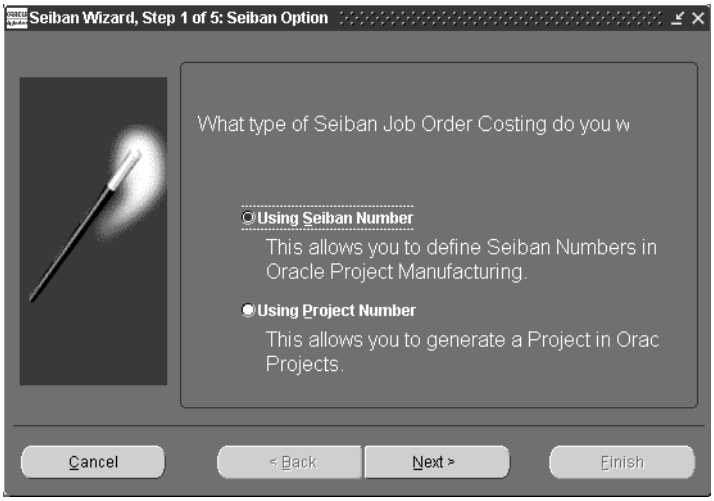
Seiban Number Wizard

The Seiban Number Wizard allows you to define Seiban numbers and to create and modify projects using with top-level task structures only. For example, this is used for project creation in Lot Type Seiban environments.

Defining Seiban Numbers

◗◗ To define Seiban numbers

1. Navigate to the Seiban Number Wizard.



2. Select Using Seiban Number.
3. Choose the Next button. The Seiban Numbers window will display, and you will no longer be in the Seiban Number Wizard.
4. Enter a Seiban number and name unique within an Operating Unit. Alternatively, query any existing Seiban numbers and choose New; then enter a Seiban number and name.
5. Optionally, choose Parameters to navigate to the Project Parameters window.

   This will automatically save your new Seiban number and name. If you do not choose Parameters, save your work.
6. In the Project Parameters window, select the Organization. The LOV shows only organizations that have project level control.
7. Optionally, select values for the following fields:
   - Cost Group - Select when using Average as your costing method.
   - WIP Accounting Class
   - Planning Group
8. Save your work.

Creating a Project with Lot Type Seiban Numbers

You can use the new project and tasks in Oracle Projects and Oracle Project Manufacturing. You can use the Seiban Wizard to generate a project structure with only top-level tasks. This is typically used in a lot-type Seiban environment but is also usable in a non -Seiban environment.

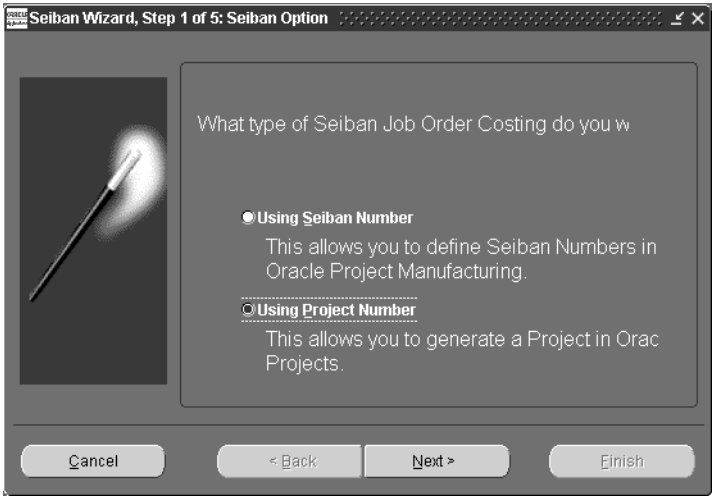
All conditions related to Oracle Projects integration apply.

Prerequisite

- Define a project template. See: Creating a Project Template, *Oracle Projects User's Guide*

◗◗ To define a project with lot type Seiban numbers

1. Navigate to the Seiban Number Wizard.



2. Select Using Project Number.
3. Choose the Next button. The Seiban Wizard Step 2 of 5: Project Option window will display.
4. Choose the Create a New Project option.
5. Choose the Next button. The Seiban Wizard Step 3 of 5: Project Option window will display.

6. Select the Template.
7. Enter the following information:
   - Project Number
   - Project Name
   - Start Date (for project)
   - Completion Date (for project)
8. Optionally, select the Submit Approval Window.Choose the Next button. The Seiban Wizard Step 4 of 5: Task Information window will display.
9. Enter the following information:

Parameter	Meaning	Example
Prefix (optional)	All tasks generated by the Wizard will begin with this value.	T
Suffix (optional)	All tasks generated by the Wizard will end with this value	-X
Starting Number	This will be the first task generated.	1
Ending Number	This is the last task that could be generated. The actual ending task number will be dependent on the increment parameter selected by the user.	1000
Increment by	The task numbers generated will be incremented by this value.	If this value is 5 then the tasks would be 1,6,11 and so on.
Numeric Width (optional)	This value will cause leading zeros to appear before the task number, ensuring a fixed length for the task numbers. If you do not specify a value, there will be no leading zeros.	If this value is 4 then the tasks listed above would be 0001, 0006, 0011, and so on.

   The lists of tasks generated in this example would be T0001-X, T0006-X, T0011-X and so on.

10. Choose the Next button. The Seiban Wizard Step 4 of 5: Task Information window will display.

11. Enter the following information:

Parameter	Meaning	Example
Prefix (optional)	All tasks generated by the Wizard will begin with this value.	T
Suffix (optional)	All tasks generated by the Wizard will end with this value	-X
Starting Number	This will be the first task generated.	1
Ending Number	This is the last task that could be generated. The actual ending task number will be dependent on the increment parameter selected by the user.	1000
Increment by	The task numbers generated will be incremented by this value.	If this value is 5 then the tasks would be 1,6,11 and so on.
Numeric Width (optional)	This value will cause leading zeros to appear before the task number, ensuring a fixed length for the task numbers. If you do not specify a value, there will be no leading zeros.	If this value is 4 then the tasks listed above would be 0001, 0006, 0011, and so on.

The lists of tasks generated in this example would be T0001-X, T0006-X, T0011-X and so on.

Modify an Existing Project with Lot Type Seiban Numbers

◗◗ To modify a project with lot type Seiban numbers

1. Navigate to the Seiban Number Wizard.
2. Select Using Project Number.
3. Choose the Next button. The Seiban Wizard Step 2 of 5: Project Option window will display.
4. Choose the Add to an existing project option.
5. Choose the Next button. The Seiban Wizard Step 3 of 5: Project Selection window will display.

6. Select the Project Number.
7. Choose the Next button. The Seiban Wizard Step 4 of 5: Task Information window will display.
8. Enter the following information:

Parameter	Meaning	Example
Prefix (optional)	All tasks generated by the Wizard will begin with this value.	T
Suffix (optional)	All tasks generated by the Wizard will end with this value	-X
Starting Number	This will be the first task generated.	1
Ending Number	This is the last task that could be generated. The actual ending task number will be dependent on the increment parameter selected by the user.	1000
Increment by	The task numbers generated will be incremented by this value.	If this value is 5 then the tasks would be 1,6,11 and so on.
Numeric Width (optional)	This value will cause leading zeros to appear before the task number, ensuring a fixed length for the task numbers. If you do not specify a value, there will be no leading zeros.	If this value is 4 then the tasks listed above would be 0001, 0006, 0011, and so on.

The lists of tasks generated in this example would be T0001-X, T0006-X, T0011-X and so on.

9. Choose the Next button. The Seiban Wizard Step 5 of 5: Confirmation will display.
10. Choose the Finish button.

4

Project References

This chapter provides references to documentation for other Oracle applications and information on validations in Project Manufacturing. Topics include:

- References
- Validations

References to Other Oracle Products

Oracle Project Manufacturing enables you to enter project or project and task on various entities within Oracle Applications. The following table provides a list of these entities and cites the documentation where you find can detailed information.

Product	Form/Window, Region	Documentation Reference
PJM	Project Parameters	Project Parameters: Assigning Project Parameters, *Oracle Project Manufacturing User's Guide*
APS	Planner Workbench	Planner Workbench / User Interface, *Oracle ASCP* and *Oracle GATP Server*
INV	Stock Locator	Defining Stock Locators, *Oracle Inventory User's Guide*
INV	Transaction Type	Defining and Updating Transaction Types, *Oracle Inventory User's Guide*
INV	Transaction Interface, Other alternative region	Viewing and Updating Transaction Open Interface Activity, *Oracle Inventory User's Guide*
INV	Move Orders (Projects / Tasks tab)	*Oracle Inventory User's Guide*
INV	Transaction Move Orders	*Oracle Inventory User's Guide*
MRP	Forecast Entries	Defining a Forecast, *Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User's Guide*
MRP	MDS Entries	Defining Schedule Entries Manually, *Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User's Guide*
MRP	MPS Entries	Defining Schedule Entries Manually, *Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User's Guide*
MRP	MPS Workbench, Implement	Implementing Planned Orders, *Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User's Guide*
MRP	MRP Workbench, Implement	Implementing Planned Orders, *Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User's Guide*
ONT	Sales Orders, Project Sales Orders (Line Items tab), Proect alternative region	Defining Sales Order Line Project Information, *Oracle Order Management*
ONT	Schedule, Schedule Sales Order), Project tab	Updating Lines to Schedule, *Oracle Order Management*
ONT	Sales Orders, Option Lines (Option) {Tools Menu>Show Line Details}	Choosing Options,*Oracle Order Management*

Product	Form/Window, Region	Documentation Reference
PO	Requisitions, Distribution (Distribution), Project alternative region	Entering Requisition Distributions, *Oracle Purchasing User's Guide*
PO	Requisitions, Preferences (Preferences), Project Information alternative region	Entering Requisition Preferences, *Oracle Purchasing User's Guide*
PO	Purchase Orders, Distribution (Distribution), Project alternative region)	Entering Purchase Order Distributions, *Oracle Purchasing User's Guide*
PO	Purchase Orders, Preferences (Preferences), Project Information alternative region	Entering Purchase Order Preferences, *Oracle Purchasing User's Guide*
PO	Releases, (Distribution), Project alternative region	Entering Release Distributions, *Oracle Purchasing User's Guide*
PO	Releases, Preferences	*Oracle Purchasing User's Guide*
PO	RFQ, More alternative region	Entering RFQ Lines, *Oracle Purchasing User's Guide*
PO	Quotations, More alternative region	Entering Quotation Lines, *Oracle Purchasing User's Guide*
WIP	Discrete Job, Project alternative region	Defining Discrete Jobs Manually, *Oracle Work in Process User's Guide*
WIP	Pending Jobs and Schedules, Discrete region	Processing Pending Jobs and Schedules, *Oracle Work in Process User's Guide*
WIP	Work Order-less Completions	Performing Work Order-less Completions, *Oracle Work in Process User's Guide*
QA	Collection Element, Plan	Collection Elements, *Oracle Quality User's Guide*
WSH	Release Sales Order	*Oracle Shipping Execution User's Guide*
WSH	Shipping Transactions (Lines and Containers tab)	*Oracle Shipping Execution User's Guide*

Project Manufacturing Validations

Common Validation

The system validates the project and task segments of a locator based on the value of the Project Control Level parameter you set up in Organization Parameter. The following table describes the validation logic:

Project Control Level	Project Segment	Task Segment
Null	Cannot enter any value.	Cannot enter any value.
Project	Optional.	If Project is entered, Task is optional. If Project is not entered, Task cannot be entered.
Task	Optional.	If Project is entered, Task is mandatory. If Project is not entered, Task cannot be entered.

Validations in Purchasing

Purchase Order Delivery Transaction

When you perform a Purchase Order Delivery transaction for a project purchase order, the system defaults the project and task from the distribution line of the purchase order to the receiving locator.

If you define Item Transaction Defaults for receiving locators for specific items in Inventory set up (provided these are physical locators), the system concatenates the default locator with the project and task references from the purchase order distribution line when it is received into its inventory destination.

If you update the project and task on the receiving locator, they are validated against, and must exactly match, the project and task on the distribution line of the purchase order.

Purchase Order Return Transaction

When you perform a Purchase Order Return transaction, the system defaults the project and task from the purchase order distribution line to the from locator.

If you update the project and task segments of the from locator on a purchase order return, they are validated against, and must exactly match, the project and task on the purchase order distribution line.

Purchase Order Adjustment Transaction

When you perform a Purchase Order Adjustment transaction, the system defaults the project and task from the purchase order distribution line to the locator.

If you update the project and task segments of the locator on a purchase order adjustment, they are validated against and must exactly match the project and task on the purchase order distribution line.

> **Note:** You can not use a project locator for all the above transactions if the purchase order distribution does not have project and task.

Validations in Inventory

- The system applies the Common Validation logic to the following transactions:Miscellaneous Issue
- Miscellaneous Receipt
- Subinventory Transfer
- Locator Transfer
- Interorganization Transfer (Direct)
- Internal Order Interorganization Transfer (Intransit)
- Cycle Count Adjustment
- Physical Count Adjustment

Validations in WIP

Project Discrete Job Completion Locator

When you create a project discrete job (either manually or from the Planner Workbench), the system defaults the project and task from the project discrete job to the project and task segments of the completion locator. If you have assigned a completion locator (common locator) to the routing, the system concatenates the common locator segments with the project and task to create a project locator.

When you update the project and task on the Project Discrete Job, the system re-defaults the project and task segments of the Completion Locator.

If you update the project and task segments of the Completion Locator, they are validated against and must exactly match the project and task on the Project Discrete Job header. They cannot be null.

Project Discrete Job Completion Transaction

When you perform a Completion Transaction, the system defaults the Completion Locator from the Project Discrete Job header.

If you update the project and task segments of the Completion Locator, they are validated against and must exactly match the project and task on the Project Discrete Job header. They cannot be null.

Project Discrete Job Material Requirements

When you define a project discrete job for an item that has a bill of material, the bill is copied to the project discrete job. If the components are *hard pegged* (their pegging attribute is set to either Hard Pegging or End Assembly / Hard Pegging), then the system defaults the project and task from the project discrete job header to their supply locator. If you have assigned supply locators (common locator) on the bills of material, the system concatenates the supply locators with the project and task to create a project locator.

If you update the project and task on the project discrete job, the system re-defaults the project and task segments of any hard pegged components.

If you update the project and task segments of the supply locator for any components of a project discrete job, they are validated against and must either match the project and task on the project discrete job or be null.

If the components are *soft pegged*, (their pegging attribute is set to either Soft Pegging or End Assembly / Soft Pegging) the system does not default the project and task segments to the supply locators. You can optionally override this and assign the project and task to the supply locator. The system validates the project and task against the project and task from the project discrete job header.

Project Discrete Job Component Issue Transaction

The system validates the supply locator for a Component Issue Transaction for a project discrete job. The supply locator must satisfy one of the following criteria:

- No project / task reference on the supply locator.

- The project and task on the supply locator must exactly match the project and task on the project discrete job.
- Same project but different task, if the profile *PJM: Allow Cross Project Issues* is set to Yes.
- A different project with the same cost group and planning group association as the project on the project discrete job. The profile *PJM: Allow Cross Project Issues* is set to Yes.

Project Discrete Job Return Assembly to WIP Transaction

If you enter or update the project and task segments of the completion locator on a Return Assembly to WIP Transaction, they are validated against and must exactly match, the project and task on the project discrete job.

Project Discrete Job Component Return Transaction

If you enter or update the project and task segments of the supply locator on a Component Return, they are validated and must satisfy one of the following criteria:

- No project / task reference on the supply locator.
- The project and task on the supply locator must exactly match the project and task on the project discrete job.
- Same project but different task, if the profile *PJM: Allow Cross Project Issues* is set to Yes.
- A different project with the same cost group and planning group association as the project on the project discrete job. The profile *PJM: Allow Cross Project Issues* is set to Yes.

Project Work Order-less Completion

When you perform a project work order-less completion, you must specify the assembly, quantity, project or project and task, and other information. If you have set up a default completion locator on the routing, the system defaults it in for the transaction. If you have not set up a default completion locator, you can specify one for the transaction. When the transaction is saved, the system defaults the project and task from the transaction to the completion locator.

Work order-less completion automatically backflushes all operation pull, assembly pull, and push components. The system builds the supply locators for the

components by concatenating the supply locator from the item and the project or project and task you specify.

Note: You can not use a project locator as completion locator or supply locator for all the above transactions against a non-project (common) discrete job.

Validations in Shipping

Pick Release

When you perform Pick Release for a project sales order, the system ensures that you can only pick release from the project locators that have the same project and task as the sales order line.

5

Task Auto Assignment

This chapter provides information on how to allocate material and resource costs to different tasks within a project according to established rules. Topics include:

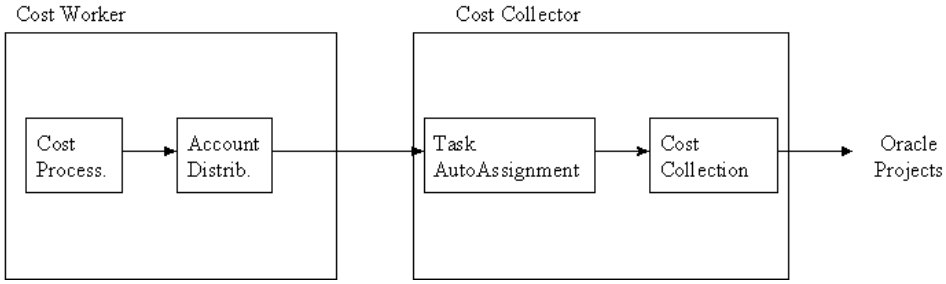
- Task Auto Assignment Process Flow
- Task Auto Assignment Workbench

Task Auto Assignment provides a flexible way to specify how to allocate material and resource costs to different tasks within a project. For example, when you establish the work breakdown structure for your project, you might decide to track certain procured items by a specific task and others by another task. You might also decide to designate different tasks for different manufacturing departments to track specific resource and overhead costs. Task Auto Assignment enables you to manage manufacturing activities by project and to collect manufacturing costs by tasks.

Additionally, a new one-time setup feature, FlexSequence, allows you to change the seeded hierarchy of the attributes in the Task Auto Assignment workbench. See: Using Task Auto Assignment FlexSequence.

Task Auto Assignment Process Flow

After Inventory and WIP transactions are costed and before they are cost collected, Task Auto Assignment assigns a task to each transaction based on rules defined in the Task Auto Assignment Rules workbench. When the transaction costs are transferred to Oracle Projects, costs are collected under the desired task. The Task Auto Assignment Rules are called automatically by the Cost Collector during cost transfer.



Task Auto Assignment Workbench

The Task Auto Assignment workbench allows you to define task assignment rules for material and resource transactions for a given organization.

For material task assignments, you can associate a task with an item, purchase order number, item category, subinventory, and procured flag or a combination of these. This information is used to assign a task number for an inventory material and material overhead transaction.

For resource task assignments, you can associate a task with a department, operation, assembly item, and WIP prefix or a combination of these. This information is used to assign a task number for WIP resource transactions.

Defining Material Task Assignment

The Material Task Assignment tab lets you associate a task with an item, purchase order number, item category, subinventory, and procured flag. Task Auto Assignment examines these factors and finds a rule that matches the material transaction. It then assigns a task to the transaction. Material transactions include miscellaneous receipt, miscellaneous issue, project transfer, purchase order receipt, purchase order return, WIP material issue, WIP material return and WIP completion.

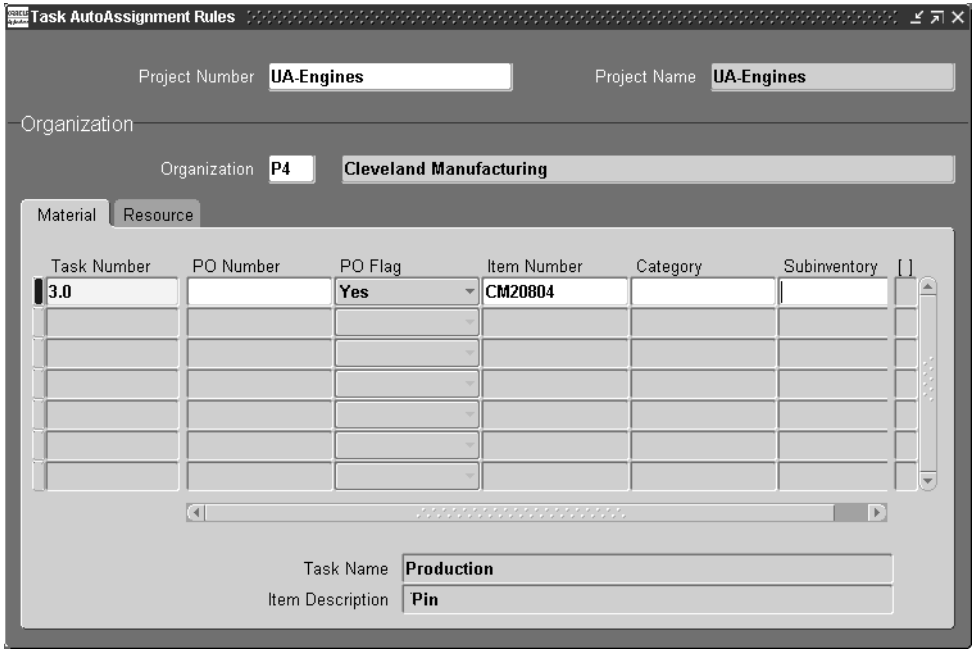
If more than one rule matches the values of some of these attributes, Task Auto Assignment looks for the rule that corresponds to the highest priority attribute. Attributes decrease in priority from left to right. For example, suppose you have defined two rules for project 1 in your Los Angeles organization. Both rules contain an Item Number A, but one rule is based on a procure flag and the other on a subinventory name.

Task	Item	P.O. Number	Procure Flag	Category	Subinventory
T1	A		X		
T2	A				Stores

When you deliver a purchase order. for item A into subinventory Stores, Task Auto Assignment matches the transaction with the first rule and assigns task T1 to the transaction. It picks the first rule, even though both contain matching fields, because the attribute procure flag has been assigned a higher priority than the attribute subinventory. The second rule will be used when a project transfer is done.

To assign tasks to material transactions

1. Navigate to the Material tab in the Task Auto Assignment Rules workbench.



2. Select a Project Number.

   This is the project number for which the tasks are being auto-assigned.

3. Select an Organization.

   The LOV includes only organizations that have the project control level set to Project and Project Cost Collection enabled for that inventory organization.

4. Select a Task Number.

   This number must correspond to a task defined in Oracle Projects.

5. Optionally, enter a value for one or more of the following fields:

- **Item Number** This number refers to the item number defined in Oracle Inventory.
- **P.O. Number** This is the purchase order number defined in Oracle Purchasing. The LOV for this field shows only purchase order numbers that have no receipts against them.
- **Category** This is the Inventory Category.

- **Subinventory** This is the destination subinventory used in a transaction.
- **Procured** This value can be set to Yes or Null. If set to Yes, cost for procured items will be assigned the corresponding task.

> **Note:** You cannot enter values in both the Item Number field and the Category field for the same rule since you associate only one Inventory Category to an item. You cannot enter values in both the Procured field and the P.O. Number field for the same rule.

Resource Task Assignment

The Resource Task Assignment tab lets you associate a task with an operation, WIP prefix (or WIP job number), assembly, and department. Task Auto Assignment allows you to enter WIP job prefixes as one of the criteria. For example, you might use different prefixes for different types of work orders. Regular work orders may have a prefix of Wxxx, while rework orders have the prefix RWxxx. Task Auto Assignment examines the values entered in these fields and finds a rule that matches a resource transaction. It then assigns the task to the resource transaction.

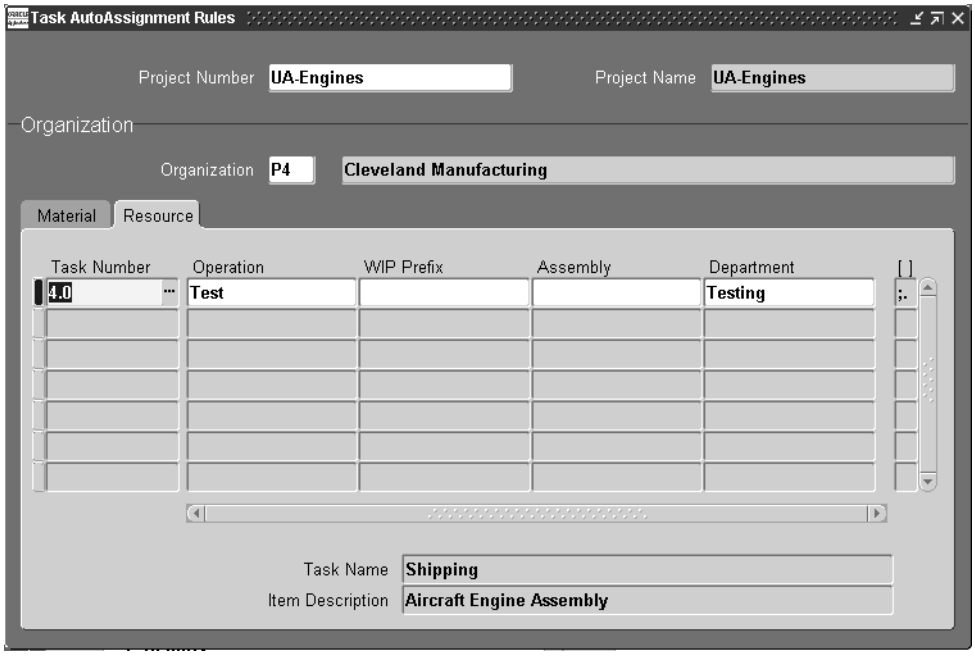
If more than one rule matches the transaction, Task Auto Assignment looks for the rule that corresponds to the highest-priority attribute. Attributes decrease in priority from left to right. For example, suppose you have defined two rules for project 1 in your Los Angeles organization. Both rules contain an operation code Final Inspection, but one rule is based on a WIP prefix and the other on a department code.

Task	Operation Code	WIP Prefix	Assembly	Department Code
T1	Final Inspection	WIP%		
T2	Final Inspection			AS2

When you perform a resource transaction for WIP2305 in the Final Inspection operation in the AS2 department, Task Auto Assignment matches the transaction with the first rule and assigns task T1 to the transaction. The reason it picks the first rule, even though both contain matching fields, is that WIP prefix has a higher priority than Department Code.

To assign WIP labor and overhead tasks

1. Navigate to the Task Auto Assignment Rules workbench.



2. Select a Project Number.

   This is the number of the project for which the tasks are being auto-assigned.

3. Select a Task Number.

   This number corresponds to a task defined in Oracle Projects.

4. Optionally, select a value for one or more of the following fields:

- **Operation Code** This is a code defined in Oracle Bills of Material that refers to a specific standard operation.
- **WIP Prefix%** This allows you to assign specific tasks based on WIP Prefix%. Only non-released jobs show in the LOV. You can also enter a job number created in Oracle Work in Process.
- **Assembly** If you want to assign the task to a particular assembly, enter the assembly item number in this field.
- **Department** This code is defined in Oracle Bills of Material.

Setup for Common Project in Task Auto Assignment

You can optionally set up a common project to hold the cost of manufacturing transactions that have not been associated with a specific project. This will enable you to budget for common costs and view commitments, actual, and budgeted cost for your common project on the standard Project Status Inquiry.

You can assign a common project if Cost Collection is enabled for the inventory organization and Project Reference Enabled checkbox is checked. You can set up a different common project for each inventory organization. You specify the common project number on the PJM Organization Parameters.

Task numbers for the common project are derived from the Task Auto Assignment Rules. If you have set up a common project in the PJM Organization Parameters form in an inventory organization, then you must add at least one rule in each of the material and resource task assignment forms for the common project. When you run the Cost Collector, the common project is assigned to all transactions related to common items and the task number will be assigned based on the rules set up in the Task Auto Assignment form.

For example, in Inventory Organization Los Angeles:

Common project in the PJM Organization Parameter = P2-Common

Task Auto Assignment Rules set up are as follows:

Table 5–1 Material Rule

Task	PO Number	PO Flag	Item	Category	Subinventory
3.0					

The rule above will result in all material transactions for common items to be assigned to task 3.

Table 5–2 Resource Rule

Task	Operation	WIP Prefix	Assembly	Department
2.0				

The rule above will result in all resource transactions for common items to be assigned to task 2.

When you perform a receiving transaction for a common (non-project) Purchase Order, and run the Cost Collector, the material transaction will be assigned the project P2-Common and the task 3.0 based on the above setup.

6

Model/Unit Numbers

This chapter describes how use model/unit number effectivity to control the effectivity of changes to bills of material and rouings. The following topics are included:

- Model/Unit Number Effectivity
- Generating Model/Unit Numbers
- Maintaining Model/Unit Numbers

Overview of Model/Unit Number Effectivity

You can control the effectivity of changes to bills of material and routings with model/unit number effectivity. By specifying a model/unit number as the effectivity, you can enter a particular change for a specific deliverable end item. The change can be effective for that item and all subsequently produced items, for only one model/unit number of the product family, or for a contiguous block of model/unit numbers. This technique does not use date to control effectivity and therefore provides a convenient way to specify engineering changes for products requiring a long lead time. This change can occur at any level in the bill of material structure of the end item.

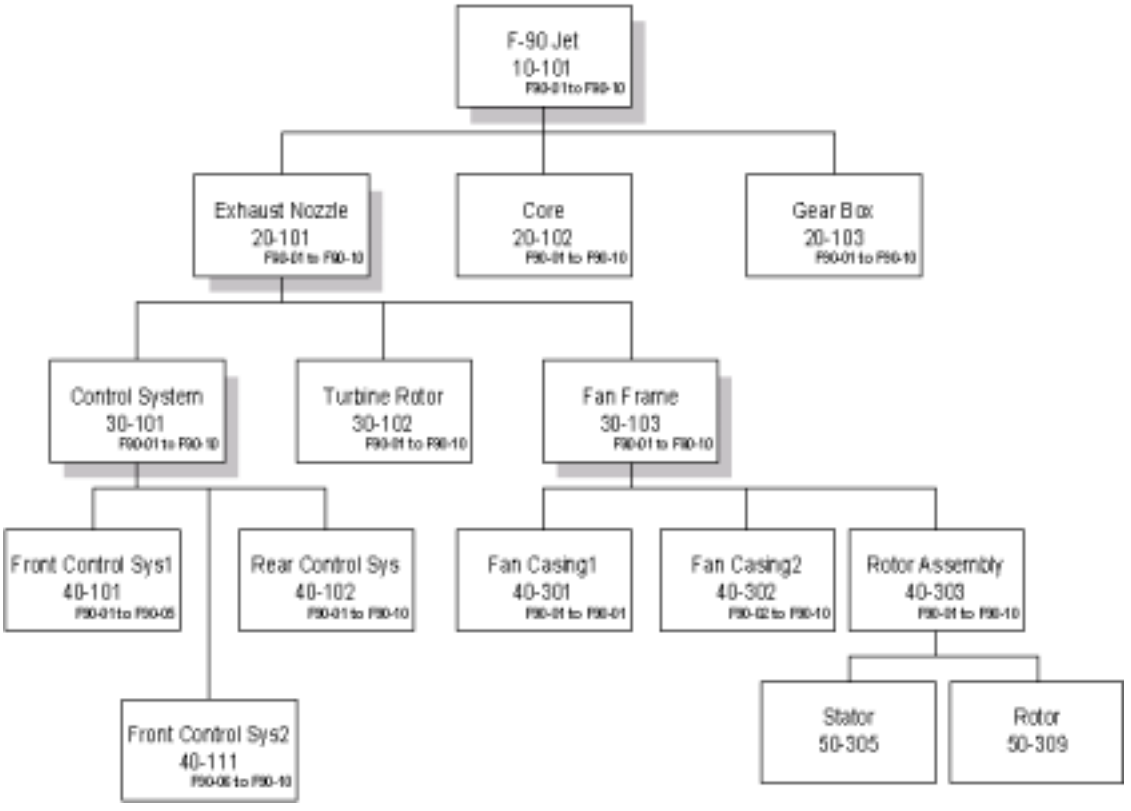
Model/unit effectivity provides many versions of the same end item part number. A model/unit number consists of the alphanumeric prefix for the model/unit number of the end item followed by the specific item number.

Note: Model/unit numbers are unique across organizations.

Note: If you want to perform cross unit issues, you must select this parameter in the PJM Organization Parameters form.

Model/Unit Effectivity - An Example

The following bill demonstrates the use of model / unit effectivity to define item configurations. In the following figures, shaded boxes for the items represent a model / unit effective item. All other items are date effective.



Components of a model / unit effective item can be defined to be effective for a single model / unit number (for example, Fan Casing1 40-301) or defined to be effective for a range of model / unit numbers (for example, Fan Casing2 40-302)

Please note the following in the above bill of material definition:

1. Model / unit effective items can have date effective items or other model / unit effective items as components. For example, F-90 Jet (10-101), has both date

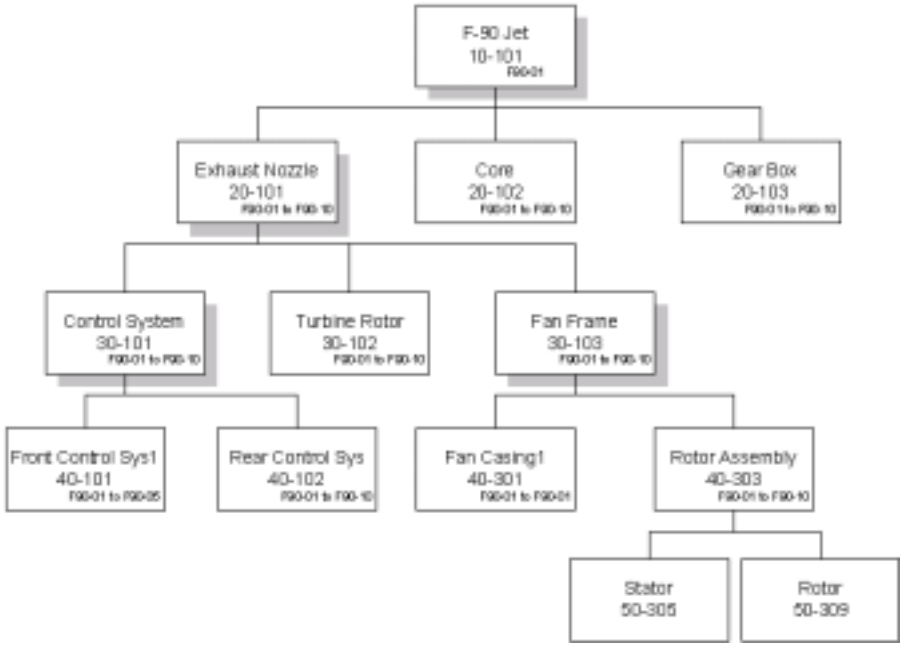
effective (20-102 and 20-103) and model/unit effective (20-101) items as its components.

2. All components in the bill of a model/unit effective item must be effective for a single model/unit number or for a range of model/unit numbers. This is also true for date effective components of model/unit effective assemblies. For example, even though Core (20-101) is a date effective item, you must specify a model/unit number when the item appears on the bill of a model/unit effective parent, F-90 Jet (10-101). Although components for a (sub)assembly could be comprised of date effective items, you would still need to define their unit effectivity if the (sub)assembly is unit effective.

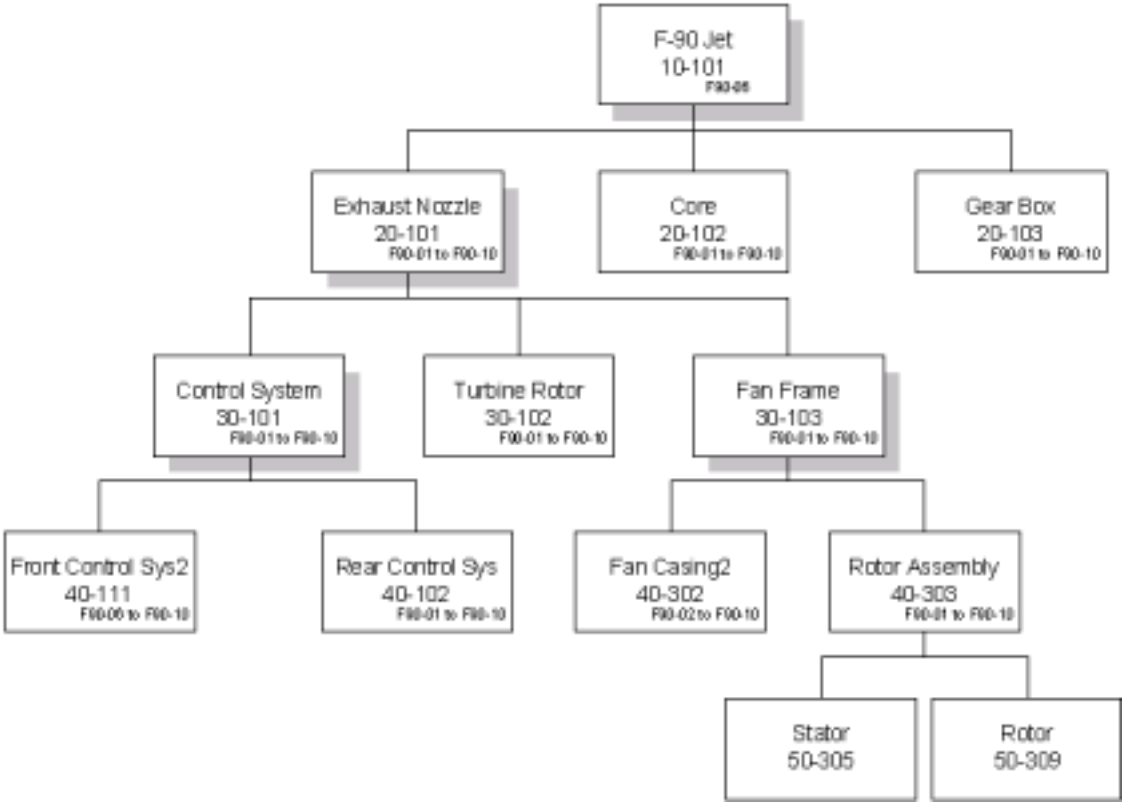
3. Bills for date effective assemblies cannot have unit effective components and you cannot enter model/unit effectivity on these bills. For example, Rotor Assembly (40-303) is a date effective component in the bill of model/unit effective item Fan Frame (30-103). The bill of Rotor Assembly can have only date effective items as its components and you cannot specify model/unit numbers on the bill.

Explosion of an end item with a specific unit number will yield different configurations of the same end item.

The following figure shows the configuration for F-90 Jet (Item Number 10-101) with a model / unit number F90-01.



Similarly for a model / unit Number of F90-06, the configuration will be as shown in the following figure.



Generating Model/Unit Numbers

Use the Generate Model/Unit Numbers window to define and generate model or unit numbers associated with a specific end item number.

Prerequisites

- Install Oracle Project Manufacturing
- Setup Project Organization Parameters

◗◗ To generate model/unit numbers

1. Navigate to the Generate Model/Unit Numbers window.

2. Enter the following parameters:
   - Select the item number.
   - Enter the Prefix.
   - Enter the Start number.

- Enter the Count, or quantity of numbers needed.
- Enter the Numeric Width or number of digits for each item number.

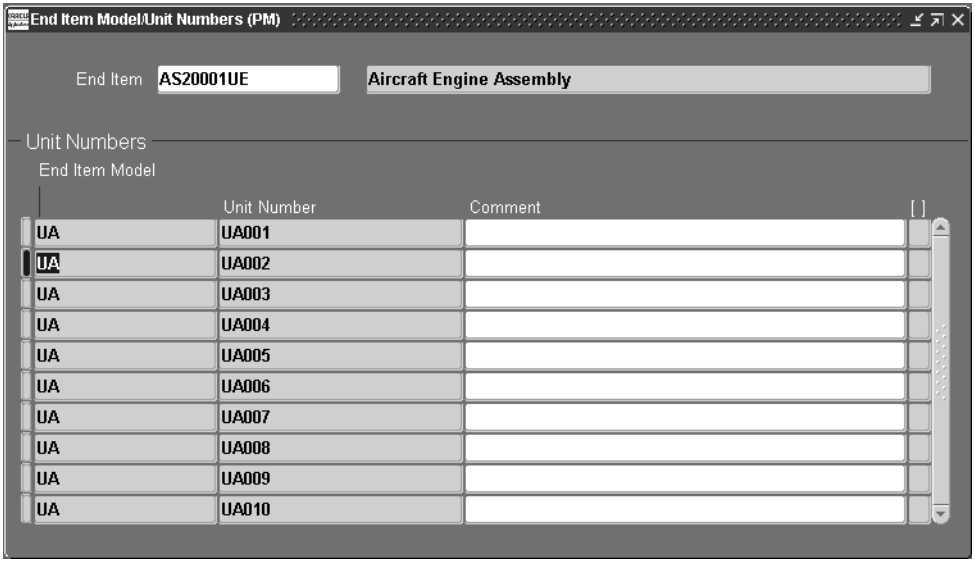
3. Choose Submit.

Maintaining Model/Unit Numbers

Use the Maintain Model/Unit Number windows to view and define new model/unit numbers. You can add or modify comments only on previously defined model/unit numbers.

To view or modify model/unit numbers

1. Navigate to the Maintain Model/Unit Numbers window.



2. Select an end item.
3. View or enter the following parameters:
   - End Item Number
   - Unit Number
   - Comment

4. Choose Submit.

See also

Model / Unit Effectivity, *Oracle Project Manufacturing Implementation Manual*

7

Borrow Payback

This chapter provides information on using the Borrow / Payback feature to transfer costs between projects temporarily. Topics include:

- Recording Borrow / Payback Transactions
- Project Inventory Inquiries

Overview of Borrow Payback

Borrow / Payback allows parts to be moved between projects and manages the replenishment accounting. Transaction are recorded and repayment made to the lending project when a replenishment order is received by the borrowing project. The original cost of the material is transferred to the lending project, and the borrowing project absorbs the difference in cost.

You should be able to:

- Determine project inventory shortages and surpluses.
- Record borrow transaction.
- View borrow / payback related exception messages while planning your items.
- Manage inter-project loan balances.
- Implement orders (purchase orders or WIP jobs) to fulfill payback demand.
- Optionally view borrow / payback transactions using the dedicated transaction types.
- View outstanding loan summary balances and detail borrow / payback transactions.
- Locate project on-hand to payback.
- Record payback transaction.
- Reschedule payback.

Major Features

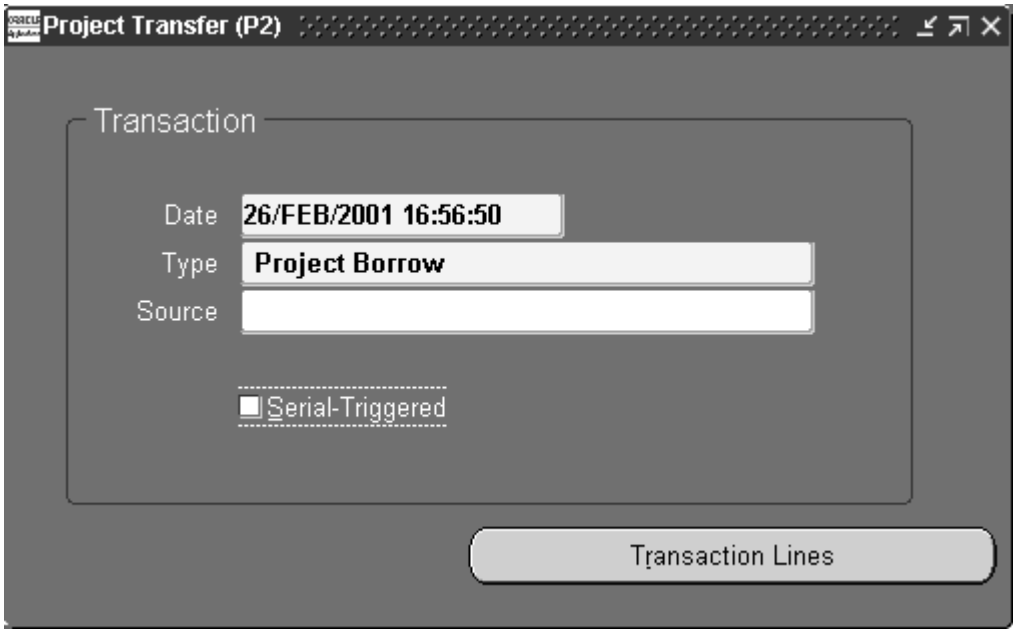
When entering a payback transaction, upon identifying the item, lending project and quantity, the system will automatically allocate the payback transaction to borrow transactions using a FIFO algorithm.

Recording Borrow/Payback Transactions

Borrow / Payback allows you to transfer material between projects within your current organization. Borrow / Payback transactions apply to temporary project-to-project transfers.

To enter a borrow transfer

1. Navigate to the Project Transfer window.



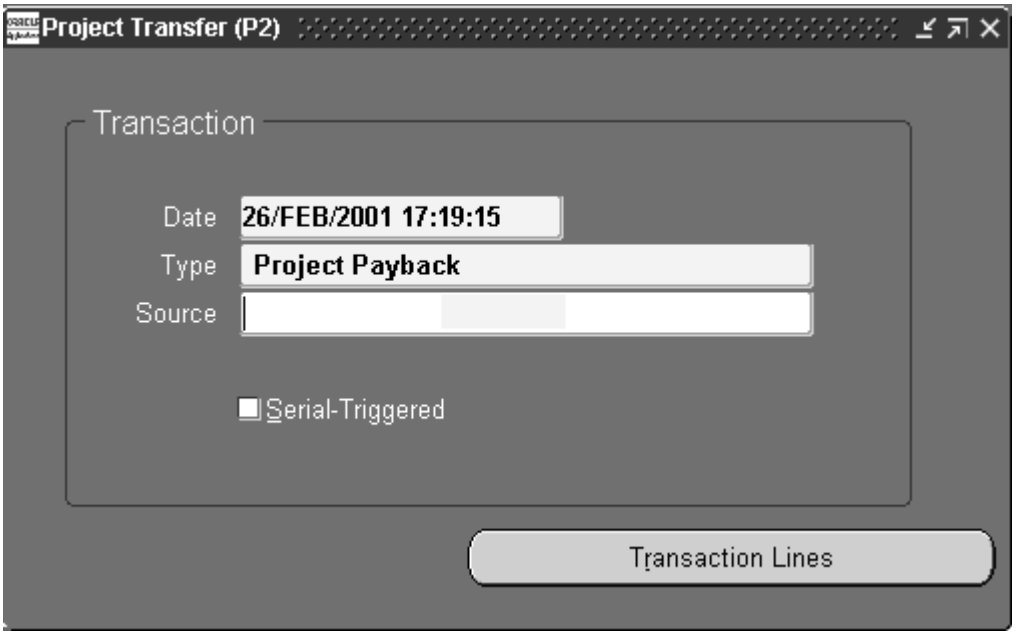
2. Enter the date and time of entry for the transaction.

   The date you can enter is controlled by the *INV:Transaction Date Validation* profile option. See Oracle Inventory Profile Options, *Oracle Inventory User's Guide* .

3. Select Project Borrow for the transaction type.
4. Optionally, enter the source of the transaction type.
5. Optionally, indicate that you want inventory information to be defaulted from the serial number.

To enter a payback transfer

1. Navigate to the Project Transfer window.



2. Enter the date and time of entry for the transaction.

   The date you can enter is controlled by the *INV:Transaction Date Validation* profile option. See Oracle Inventory Profile Options, *Oracle Inventory User's Guide* .

3. Select Project Payback for the transaction type.
4. Optionally, enter the source of the transaction type.
5. Optionally, indicate that you want inventory information to be defaulted from the serial number.

To enter the item to transfer

1. Choose Transaction Lines in the Project Transfer window. The Transaction Lines Detail folder window appears.

2. Enter an inventory item to transfer. If you choose to default inventory information from the serial number, enter a serial number.
3. Optionally, enter the revision for the item. You must enter a value here if the item is under revision control.
4. Enter the subinventories from and to which to transfer material. Enter the same subinventory in the Sub and To Sub fields to transfer material between locators.
5. Enter the locators from and to which to transfer the item. In the Project Manufacturing environment, the project and task are stored as segments in the locator flexfield.
6. Optionally, enter a lot number for the item. If you want to enter multiple lot numbers, complete the remaining steps, then choose the Lot/Serial button to display the Lot Entry window.
7. Select a unit of measure. This can be the primary unit of measure (the default) or any valid alternate unit of measure.

   If you enter an alternate unit of measure, Oracle Inventory issues the quantity you specify in this unit of measure. Oracle Inventory also converts the quantity to the primary unit of measure so that it can correctly update the on-hand quantity.
8. Enter the quantity of the inventory item to transfer, based on the unit of measure you specified.
9. Optionally, enter a reason code for the transaction. For example, you can use reason codes to allow you to mark exceptional charges to support a quality data collection and reporting system.
10. Optionally, enter up to 240 characters of free text that describes the transaction.
11. Select the Scheduled Payback Date.

◗◗ To enter lot or serial number information

- Choose the Lot/Serial button.

◗◗ To view quantity available and quantity on hand values

- Review the following fields:

  Available Displays the quantity available to transfer, based on the unit of measure you specified. The available quantity is the quantity on hand less all reservations for the item. The available quantity is specific to the revision level, lot number, From subinventory, and From locator you specify for the transfer.

On hand Displays the current on-hand quantity for the item, based on the unit of measure you specified. The on-hand quantity is specific to the revision, lot number, From subinventory, and From locator you specify for the transfer. On-hand includes quantities for pending transactions in the MTL-MATERIAL-TRANSACTIONS table.

◗◗ To process the transaction

- Save your work.

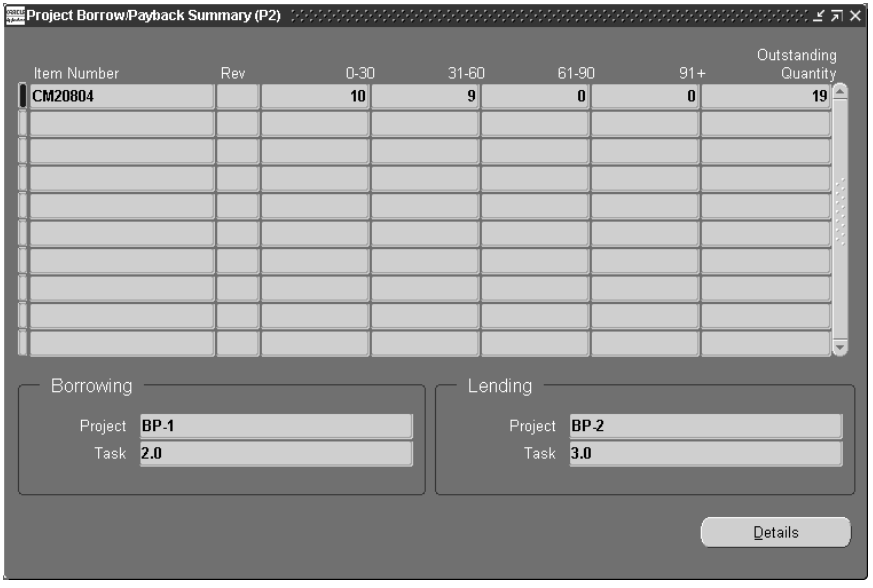
Project Inventory Inquiries

You can determine your project shortages and surpluses through inquiries such as:

- Inventory on-hand inquiry.
- Supply and demand view.
- Borrow / Payback inquiry for outstanding inter-project loan balances in Project Manufacturing.

◗◗To view Borrow/Payback/Transfer Status information

1. Navigate to the Borrow / Payback / Transfer Status window.



2. In the Find / Borrow / Payback Transactions window, select the borrowing / lending project and, optionally, task. You can also select the item number in this Find window. You can view the loan balances in varying aging buckets. The default is 30 days.

   The following information is displayed in the Project Borrow / Payback Summary window: Item Number, Rev, quantity in aging buckets, and total outstanding quantity.

3. Select an item to display its borrowing project and task and its lending project.

To drill down to view detailed information

- Select a row and choose the Details button to drill down to the Project BorrowPayback Details folder window.

  The number and name for the following information is displayed in the upper portion of the form: Borrowing Project, Borrowing task, Lending Project, Lending Task, and Item / Revision. Line details are shown for the following information: Transaction Type, Transaction ID, Borrow Txn ID, Transaction Date, Scheduled Date, Loan Quantity, Outstanding Qty, Payback Quantity, and Aging Days.

To drill down to the transaction detail

1. Select a row.
2. Choose the Transaction button to drill down to the transaction in the Material Transactions window.

To reschedule Payback

1. Select a row on the Project Borrow / Payback Details window.
2. Choose the Reschedule Payback button to drill to the Reschedule Payback window.

   You can view the scheduled payback date and can enter a new payback date in this window.

3. Select the Save button to save your transaction.

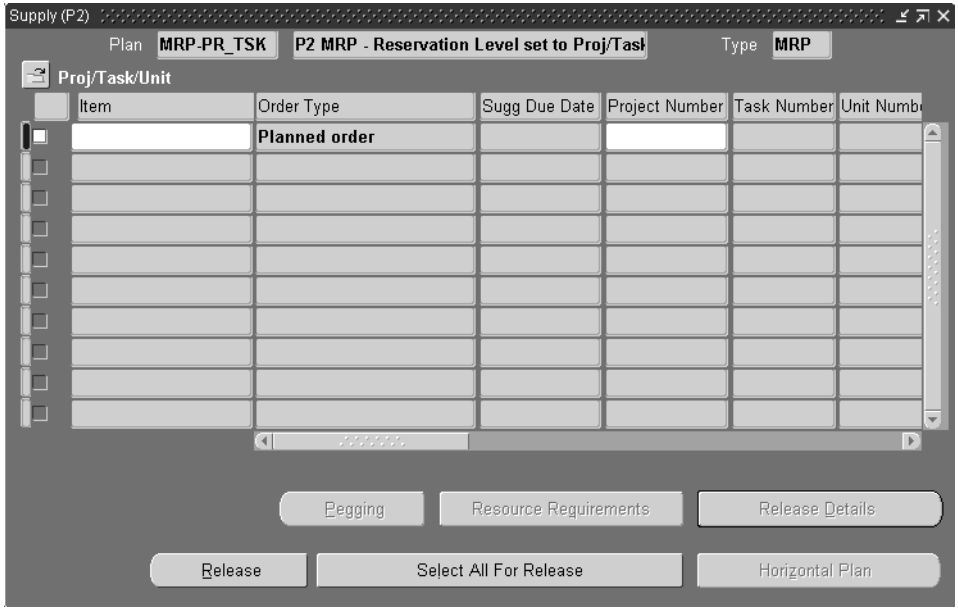
To cancel the reschedule action

- Choose Cancel to cancel your actions and return to the previous window.

Payback Supply and Demand

Two order types have been created in Project MRP to distinguish demand and supply resulting from a borrow / payback transaction in Project Manufacturing. Planning will recognize a scheduled project payback transaction as a supply for the lending project and a demand for the borrowing project. The scheduled payback date will be used as the supply date for the lending project and demand date for the borrowing project. The two order types are

1. Payback Demand, and
2. Payback Supply



Users can search for borrow / payback demand / supply using these order types. You can also see these order types on the planner workbench. The following example illustrates how payback demand and payback supply are treated in a plan.

You should check the Payback Demand and Payback Supply check boxes on the preferences for the Horizontal Material Plan tab if you want to see the payback demand and payback supply on the horizontal material plan.

Plan Options

Reservation Level: Project Task
Hard Pegging Level: Project Task

On performing the following borrow transactions for Item SB-1,

Item	Quantity	Lending Project	Borrowing Project	Payback Date
SB-1	60	P1,T1	P2,T2	Period 1
SB-1	50	P3,T3	P4,T4	Period 3

The results of running MRP with the above transactions along with some additional MDS demands is shown below. In the example below, the demand for 80 (P1,T1), 100(P1, T2) and 150 (P2,T2) are MDS demands. The example assumes a zero lead time for the item

SB-1 MRP Planned	Period 1	Period 2	Period 3
Demand	80 (P1,T1) 60 (P2,T2) Payback demand	100(P3,T3	150(P2,T2) 50(P4,T4) Payback demand
Scheduled Receipts	60 (P1,T1) Payback supply		50 (P3,T3) Payback supply
Planned Orders	20(P1,T1) 60 (P2,T2)	50 (P3,T3)	150(P2,T2) 50(P4,T4)

Since the borrowed quantity of 60 is scheduled to be paid back in period 1, a payback demand is created for project P2, T2. This also results in a corresponding payback supply for project P1, T1. Similarly the second borrow / payback transaction for item A7004 results in payback demand for 50(P4, T4) and payback supply for 50(P3, T3) in period 3.

Notice that the planned orders carry the project and task references of the borrowing project. Also, the payback supply is treated as firm and MRP does not suggest any reschedules or cancellations for the payback supply.

Costing of Borrow Transactions

Borrow transactions will be costed in the same manner as a regular transfer from the lending project to the borrowing project. If the lending project and the borrowing project belong to the same cost group, or if the borrow transaction is

between two tasks within the same project, no average cost recalculation will be performed as the transferred item remains in the same cost group.

Costing of Payback Transactions

For the borrowing project, the on-hand quantity will be decremented by the payback quantity and the borrowing cost group inventory valuation will be credited by the payback quantity extended by the current average cost of the payback item. Any difference between the current average cost and the original borrow transaction cost will be recorded as a variance.

For the lending project, the on-hand quantity will be increased by the payback quantity and the lending cost group inventory valuation will be debited by the payback quantity extended by the original borrowing cost. The average cost of the payback item will be re-averaged based on the new aggregate inventory valuation for the item and the current on-hand quantity.

In the example of a borrow / payback transaction shown in Table 7-1, Project B is the borrowing project and Project L is the lending project. If a payback transaction has been allocated to multiple borrow transactions, the increase in inventory valuation for the lending project will be the sum of the allocated payback quantity extended by the original borrowing cost for each borrow transaction.

Description	Quantity	Each ($)	Total ($)
Beginning Balance in Cost Groups for Item A			
Cost Group for Project B	0	0	0
Cost Group for Project L	5	10	50
Project B borrows Quantity 1 Item A			
Transaction Detail for Borrow Transaction			
Debit Project B Cost Group Inventory Account	1	10	10
Credit Project L Cost Group Inventory Account	(1)	(10)	(10)
Project B issues Item A to WIP			
Transaction Detail for WIP Issue			
Debit Project B WIP Job Accounting Class	1	10	10
Credit Project B Cost Group Inventory Account	(1)	(10)	(10)
Project B Receives Quantity 20 Item A @ $12			

Description	Quantity	Each ($)	Total ($)
Debit Project B Cost Group Inventory Account	20	12	240
Credit PO Receipt Accrual Account	20	12	240
Balance in Cost Groups for Item A			
Cost Group for Project B	20	12	240
Cost Group for Project L	4	10	40
Project B does Payback Transaction to Project L			
Transaction Detail for Payback Transaction			
Debit Project L Cost Group Inventory Account	1	10	10
Credit Project B Cost Group Inventory Account	(1)		
Debit Project B Cost Group Payback Variance Account		(12)	(12)2

If the borrowing project and the lending project belong to the same cost group or if the payback transaction is between two tasks within the same project, the average cost in the borrowing project will not be recalculated as the transfer item still remains in the same cost group. In addition, no variance will be recorded.

The example shown in Table 7-2 shows the effect of a Borrow / Payback between two tasks on the same project. It uses the same data as the example shown in Table 7-1

Description	Quantity	Each ($)	Total ($)
Beginning Balance in Cost Group for Item A			
Project Locator for Project B, Task 1	0	10	0
Project Locator for Project B, Task 2	5	10	50
Project B Task 1 borrows Quantity 1 Item A from Task 2			
Transaction Detail for Borrow Transaction			
Debit Project B Cost Group Inventory Account	1	10	10
Credit Project B Cost Group Inventory Account	(1)	(10)	(10)
Project B Task 1 issues Item A to WIP			

Description	Quantity	Each ($)	Total ($)
Transaction Detail for WIP Issue			
Debit Project B WIP Job Accounting Class	1	10	10
Credit Project B Cost Group Inventory Account	(1)	(10)	(10)
Project B Task 1Receives Quantity 20 Item A @ $12			
Debit Project B Cost Group Inventory Account	20	12	240
Credit PO Receipt Accrual Account	20	12	240
Balance in Cost Group for Item A			
Project Locator for Project B, Task 1	20	11.67	233.33
Project Locator for Project B, Task 2	4	11.67	46.67
Project B Task 1 does Payback Transaction to Task 2			
Transaction Detail for Payback Transaction			
Debit Project B Cost Group Inventory Account	1	10.00	10.00
Credit Project B Cost Group Inventory Account	(1)	(11.67)	(11.67)
Debit Project B Cost Group Payback Variance Account			1.67
Balance in Cost Group for Item A			
Project Locator for Project B, Task 1	19	11.60	220.40
Project Locator for Project B, Task 2	5	11.60	46.40

In summary, the payback transaction results in the reduction of the cost group cost of the item from $11.67 to $11.60. This reduction is caused by re-averaging at the borrow cost, with the difference of $1.67 (24 items @ $.07) charged to the payback variance account.

Posting of Borrow/Payback Variance to Projects

You can define a new Borrow / Payback variance account at the cost group level. The difference between the current average cost and the original borrowing cost will be posted to this new account for the borrowing project's cost group.

In addition, the variance amount will be posted to Oracle Projects against the borrowing project as a material expenditure.

8

Web Workbench

This chapter provides information on using the web workbench to review and analyze Oracle Project Manufacturing and Oracle Projects data. Topics include:

- Project Inquiry (with Projects)
- Project Inquiry (without Projects)
- Project Inquiry (Projects only)
- Project and Task Kiosks

Overview of the Web Workbench

You can use this workbench to analyze Oracle Projects and Oracle Project Manufacturing data. The Web Workbench provides three modes based on the Oracle applications available and includes a project kiosk and a task kiosk, and you can drill down to the project or project and task details from the two kiosks respectively. You can also drill down to the selected transactional details in this workbench. This inquiry provides you with access to all project information.

In the Web Workbench, you can search for a project using project number, project name, or project description. You can then drill to the details for a project from the list of projects that matched your search criteria. The following information is provided for each project: project number, project name, project description, project type, start date, project status, end date, category, and organization name.

In the Project Kiosk, you can view the project information and drill down to review additional details for the project including budgets, expenditures, project status, RFQ, quotation, requisitions, purchase orders, blanket POs, manufacturing plans, WIP jobs, onhand balances, sales orders, onhand values, and flow schedules. All inquiries in the project kiosk will display the project header information and includes project number, project name, project description, project type, start date, project status, end date, category, and organization name.

In the Task Kiosk, you can view the task information and then drill down to review details for your project or project and task. Available details include RFQ, quotation, requisitions, purchase orders, blanket POs, manufacturing plans, WIP jobs, onhand balances, sales orders, onhand values, and line schedules. All inquiries in the Task Kiosk will display the task header information including project number, project name, project description, task number, task name, manager, task start date, and task end date.

Viewing Project Details

Prerequisites

Items are based on Profiles defined in Oracle Projects because of the many-to-many relationship of Budget Types to Budget Amounts. Before you can use the Web Workbench, the following profile names must be defined in the System Administrator responsibility at the Site level:

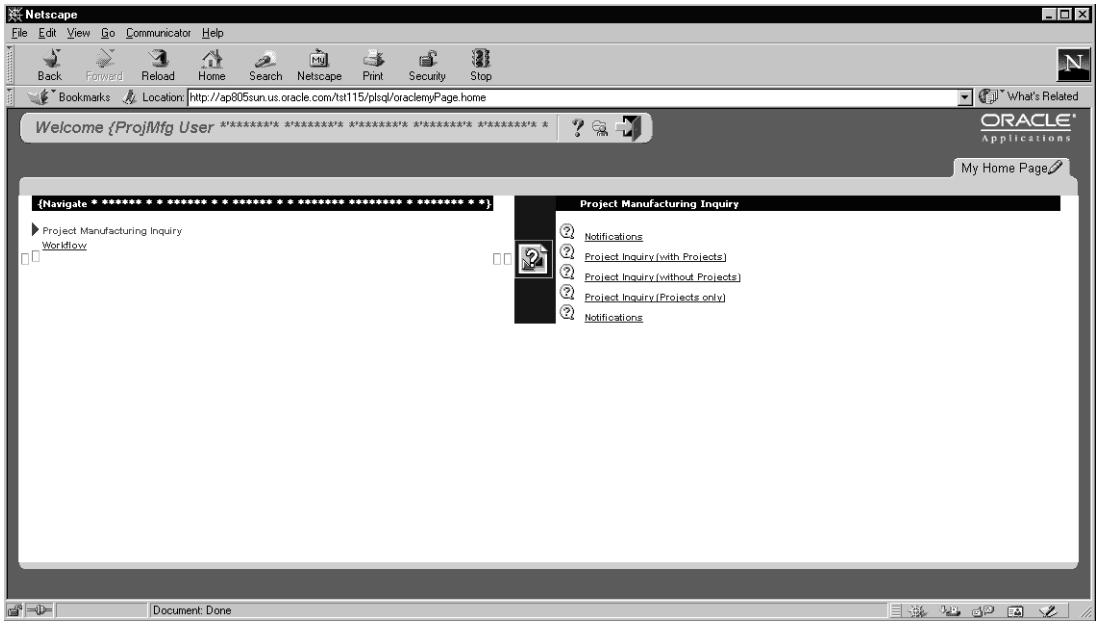
- PA: Reporting Budget 1 (Cost) *(Default: Approved Cost Budget)*
- PA: Reporting Budget 2 (Cost) *(Default: Forecasted Cost Budget)*

- PA: Reporting Budget 3 (Revenue) *(Default: Approved Revenue Budget)*
- PA: Reporting Budget 4 (Revenue) *(Default: Forecasted Revenue Budget)*

For more information on the profile options, see *Oracle Projects User's Guide.*

To launch the workbench

1. Select one of the following methods:
   - Navigate to the Web Workbench from the Navigator menu in Oracle Applications or



   - Use the web browser through the self service applications.

     If you enter through the web browser you will need to provide a user name and password to log into the system. Then select the Project Manufacturing Inquiry option.

2. Select the mode desired.
   - Project Inquiry (with Projects)

With this mode, you can drill down to all Oracle Projects and Oracle Project Manufacturing information for a particular project.

- Project Inquiry (without Projects)

  With this mode, you can drill down to all Oracle Project Manufacturing information for a particular Seiban number.

- Project Inquiry (Projects only)

  With this mode, you can drill down to all Oracle Projects and procurement information for a particular project. This mode is designed specifically for Project inquiry without Project Manufacturing.

3. Select the search criteria. The following search criteria are available by default for each mode.

- **Project Inquiry (with Projects)**
  - Project Number
  - Project Name
  - Project Description
  - Manager Name
  - Project Status
  - PM Product
  - PM Project Reference
  - Project Organization Name
- **Project Inquiry (without Projects)**
  - Project Number
  - Project Name
  - Operating Unit
- **Project Inquiry (Projects only)**
  - Project Number
  - Project Name
  - Project Description
  - Manager Name

- Project Status
- PM Product
- PM Project Reference
- Project Organization Name
- Project Type

Once you have selected a project from the list of projects that matched your search criteria you can drill down for details.

Inquiry Details for Project Inquiry (Projects Only)

By default, the following information is provided for each project: project number, project name, start date, completion date, manager name, project status, project organization name, project type, PTD revenue, PTD cost, PTD margin, YTD revenue, cost, YTD margin, YTD margin percentage, YTD revenue, YTD cost, YTD margin, YTD margin percentage, total revenue budget, backlog, backlog percentage, commitments, total cost.

The calculations for the displayed columns are as follows:

PTD Margin = PTD Revenue - PTD Burdened Cost

PTD Margin % = PTD Margin/ PTD Revenue

ITD Margin = ITD Revenue - ITD Burdened Cost

ITD Margin % = ITD Margin / ITD Revenue

YTD Margin = YTD Revenue - YTD Burdened Cost

YTD Margin % = YTD Margin/ YTD Revenue

Backlog = Primary Budgeted Revenue Amount - ITD Revenue (if ITD revenue is > Primary Budgeted revenue amount then backlog = 0)

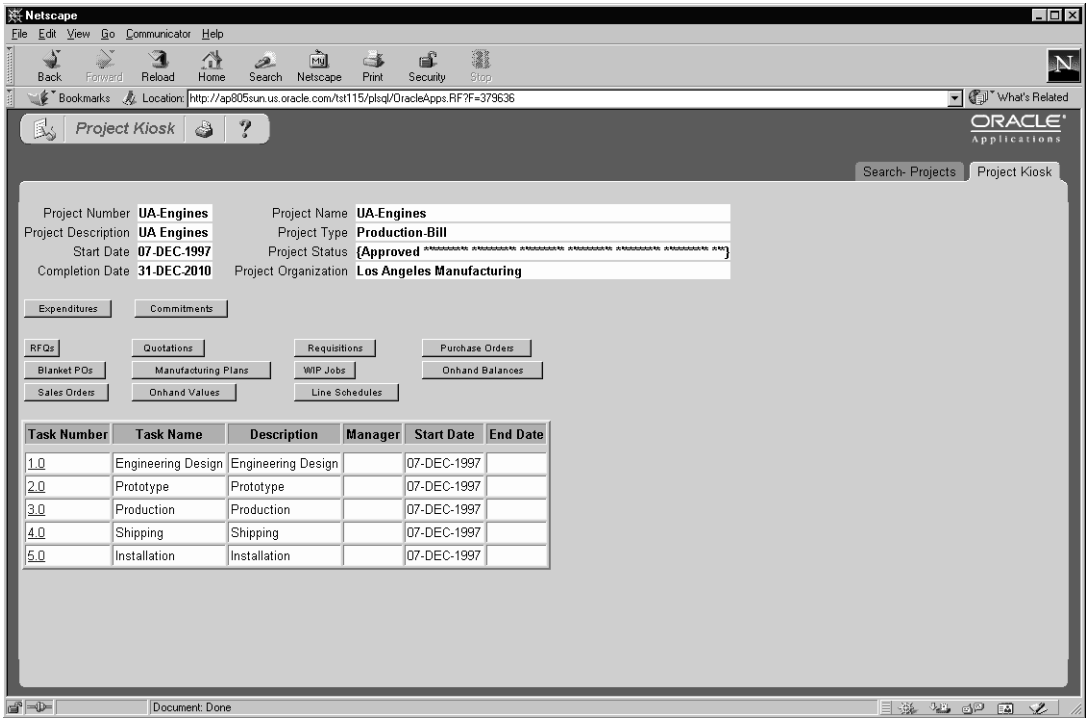
Backlog % = Backlog / Primary Budgeted Revenue Amount

Total Cost = Total Cost ITD + Committed Burden Amount

Each business can select columns to be shown in the Workbench by changing the display mode for the column in the PJM_PROJECT_PRJ_SUMMARY_V. *Please refer to the Project Manufacturing TRM for the complete listing and additional details.*

Project Kiosk in Project Inquiry (Projects only)

In the Project kiosk, you can view the project information and you can then choose to drill down to review additional details for the project including expenditures, commitments, RFQ, quotation, requisitions, purchase orders, and blanket POs. You can also choose to drill down to the task kiosk / task level details by selecting a task number in the task summary which includes a list of valid tasks for a project. The task summary contains details on the task number, task name, description, manager, start date and end date. All inquiries in the project kiosk will display the project header information and includes project number, project name, project description, project type, start date, project status, end date, category, and organization name.



Task Kiosk in Project Inquiry (Projects only)

In the task kiosk, you can view the task information and then choose to drill down to review details for your project / task including RFQ, quotation, requisitions, purchase orders, and blanket POs. All inquiries in the task kiosk will display the

task header information including project number, project name, project description, task number, task name, manager, task start date, and task end date.

Inquiry Details for Project Inquiry (with Projects)

By default, the following information is provided for each: project number, project name, start date, completion date, manager name, project status, project organization name, project type, PTD revenue, PTD cost, PTD margin, YTD revenue, cost, YTD margin, YTD margin percentage, YTD revenue, YTD cost, YTD margin, YTD margin percentage, total revenue budget, backlog, backlog percentage, commitments, total cost.

The calculations for the displayed columns are as follows:

PTD Margin = PTD Revenue - PTD Burdened Cost

PTD Margin % = PTD Margin/ PTD Revenue

ITD Margin = ITD Revenue - ITD Burdened Cost

ITD Margin % = ITD Margin / ITD Revenue

YTD Margin = YTD Revenue - YTD Burdened Cost

YTD Margin % = YTD Margin/ YTD Revenue

Backlog = Primary Budgeted Revenue Amount - ITD Revenue (if ITD revenue is > Primary Budgeted revenue amount then backlog = 0)

Backlog % = Backlog / Primary Budgeted Revenue Amount

Total Cost = Total Cost ITD + Committed Burden Amount

Each business can select columns to be shown in the Workbench by changing the display mode for the column in the PJM_PROJECT_PRJ_SUMMARY_V. *Please refer to the Project Manufacturing TRM for the complete listing and additional details.*

Project Kiosk in Project Inquiry (with Projects)

In the Project kiosk, you can view the project information and you can drill down to review additional details for the project including expenditures, commitments, RFQ, quotation, requisitions, purchase orders, blanket POs, manufacturing plans, WIP jobs, onhand balances, sales orders, onhand values, and line schedules.

You can also drill down to the task kiosk / task level details by selecting a task number in the task summary which includes a list of valid tasks for a project. The task summary contains details on the task number, task name, description, manager, start date and end date. All inquiries in the project kiosk will display the project

header information and includes project number, project name, project description, project type, start date, project status, end date, category, and organization name.

Task Kiosk in Project Inquiry (with Projects)

In the task kiosk, you can view the task information and then drill down to review details for your project/task including RFQ, quotation, requisitions, purchase orders, blanket POs, manufacturing plans, WIP jobs, onhand balances, sales orders, and line schedules. All inquiries in the task kiosk will display the task header information including project number, project name, project description, task number, task name, manager, task start date, and task end date.

Inquiry Details for Project Inquiry (without Projects)

The following information is provided for each project in the workbench: project number, project name, operating unit.

Seiban Kiosk in Project Inquiry (without Projects)

In the Seiban kiosk, you can view the project information and you can then choose to drill down to review additional details for the project including RFQ, quotation, requisitions, purchase orders, blanket POs, manufacturing plans, WIP jobs, onhand balances, sales orders, onhand values, and line schedules. All inquiries in the seiban kiosk will display the project header information and includes project number, project name, project description, project type, start date, project status, end date, category, and organization name.

Column Details on Drilldowns

The following paragraphs list the column details for each drilldown for a project or task in the Web Workbench.

Expenditures

◗◗ To view expenditures for a project

- Select the expenditures button in the Project kiosk.

  The following information is displayed: task number, expenditure type, expenditure category, revenue category code, expenditure organization, item date, quantity, burdened cost, accrued revenue, bill amount, non labor resource, non labor resource organization, UOM, employee name employee number, job name, and supplier name.

Commitments

To view project commitments

- Select the commitments button in the Project Kiosk for the selected project.

  The following information is displayed: task number, task name, commitment number, commitment line number, expenditure type, expenditure organization, commitment date, quantity, UOM, commitment amount, burdened cost, commitment type, requester, buyer, need bydate, promised date, approved?, approved date, description, supplier, transaction source, denom currency code, denom raw cost, denom burdened cost, acct currency code, acct raw cost, acct burdened cost, acct rate date, acct rate type, acct exchange rate, receipt currency code, receipt currency amt, receipt exchange rate, project currency code, project rate date, project rate type, project exchange rate, commitment rejection code.

Purchase Orders

To view project purchase orders

1. Select the purchase orders button in the Project / Task / Seiban kiosk.

   Purchase order summary includes the following information for each project purchase order: document type, revision number, revised date, order date, status, supplier, supplier site, ship-to location, currency, amount, ship via, freight term, FOB, buyer, bill-to location, payment term, item number, item description, end item model / unit number.

2. Select a purchase order to view line, receipt, and invoice details.

To view project purchase order details

1. Select the purchase order in the Project PO window.

   For each project purchase order, you can view the following details: item number, supplier item number, description, price, quantity ordered, quantity received, quantity invoiced, ship-to location, status, UOM, and promise date.

2. Select the appropriate button in the purchase order detail window to view the receipt or invoices for the purchase order. See: *Oracle Purchasing User's Guide*

To view matched invoices for a project purchase order (NON PJM)

- Select the invoices button in the purchase order detail window.

The following information is displayed: invoice number, invoice date, due date, amount due, payment number, and payment status. You can choose a specific invoice to drill to the invoice summary window. The information displayed includes: invoice number, date, due date, currency, gross amount, amount due, discount date, available discount, PO number, payment number, and description. You can review receipts for this purchase order by selecting the receipts button in the invoice window.

◗◗ To view project purchase order receipts (NON PJM)

1. Select the receipt button in the purchase order detail window.

   The following information is displayed for each receipt transaction: receipt number, receipt date, PO number, item number, description, supplier item number, supplier, quantity received, UOM, packing slip, and supplier lot.

2. You can view matched invoices for the purchase order by selecting the invoices button in the PO receipt transaction window.

Requisitions

◗◗ To view project requisitions

1. Select the requisitions button in the Project / Task / Seiban kiosk.

   The following information is displayed: requisition number, creation date, description, type, approval status, approver, closed flag, cancelled flag, preparer, currency, total, item number, item description, and end item model / unit number.

2. Select the attachments button to view any existing attachments for the project requisition.

3. You can drill down further to the line and distribution level details for each requisition in the workbench.

Quotations

◗◗ To view project quotations

- Select the quotations button in the Project / Task / Seiban kiosk.

  The following information is displayed: quotation number, quotation type, quotation class, quotation status, rfq number, effective date, expiration date, supplier and buyer.

RFQs

◗◗ To view project RFQs

1. Select the RFQ button in the Project / Task / Seiban kiosk.

   The following information is displayed: RFQ number, status, buyer, reply date, and close date.

2. Choose the desired options to drill down to view the details for each RFQ.

Blanket POs

◗◗ To view blanket POs for your project:

- Select the blanket POs button in the Project / Task / Seiban kiosk.

  The following information is displayed: PO number, release number, document type, revision number, revised date, order date, printed date, status, closure status, supplier, supplier contact, supplier site, ship-to, ship via, freight terms, FOB, buyer, bill-to, payment terms, currency, amount, item number, item description, and end item model / unit number.

Manufacturing Plans

◗◗ To view manufacturing plans for your project

1. Select the manufacturing plans button in the Project / Task / Seiban kiosk.

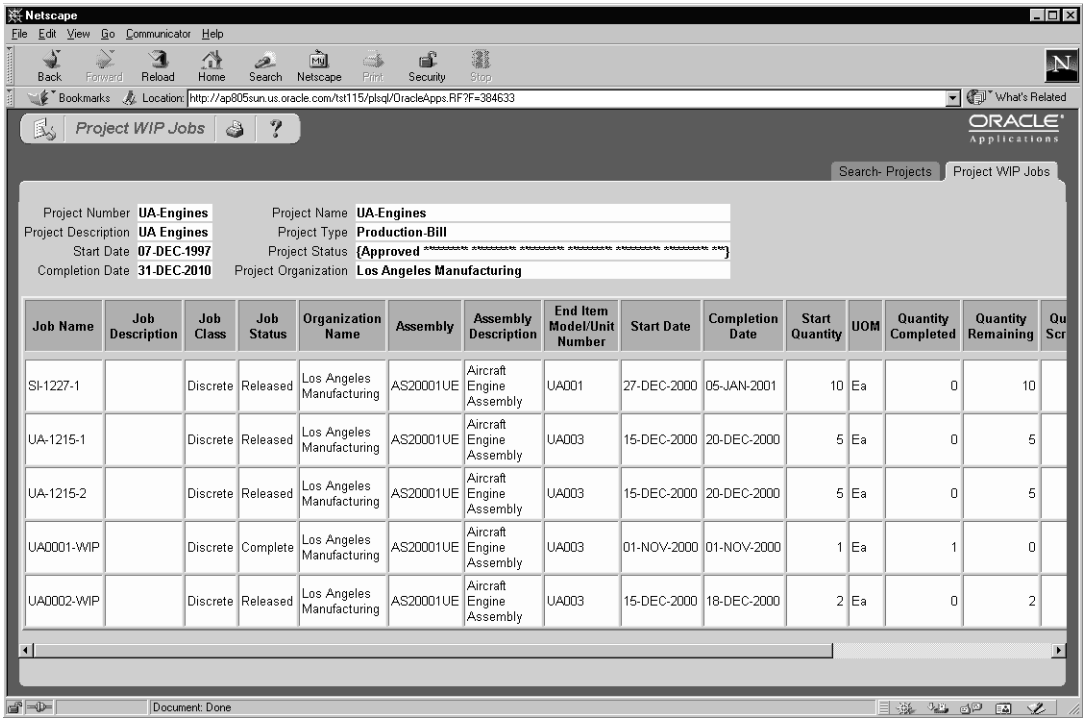
   The following information is displayed: plan name, plan description, plan type code, organization name, start date, completion date, and plan horizon.

1. Select a plan name to view additional details for each plan.

WIP Jobs

◗◗ To view WIP jobs for your project

1. Select the WIP jobs button in the Project / Task / Seiban kiosk.

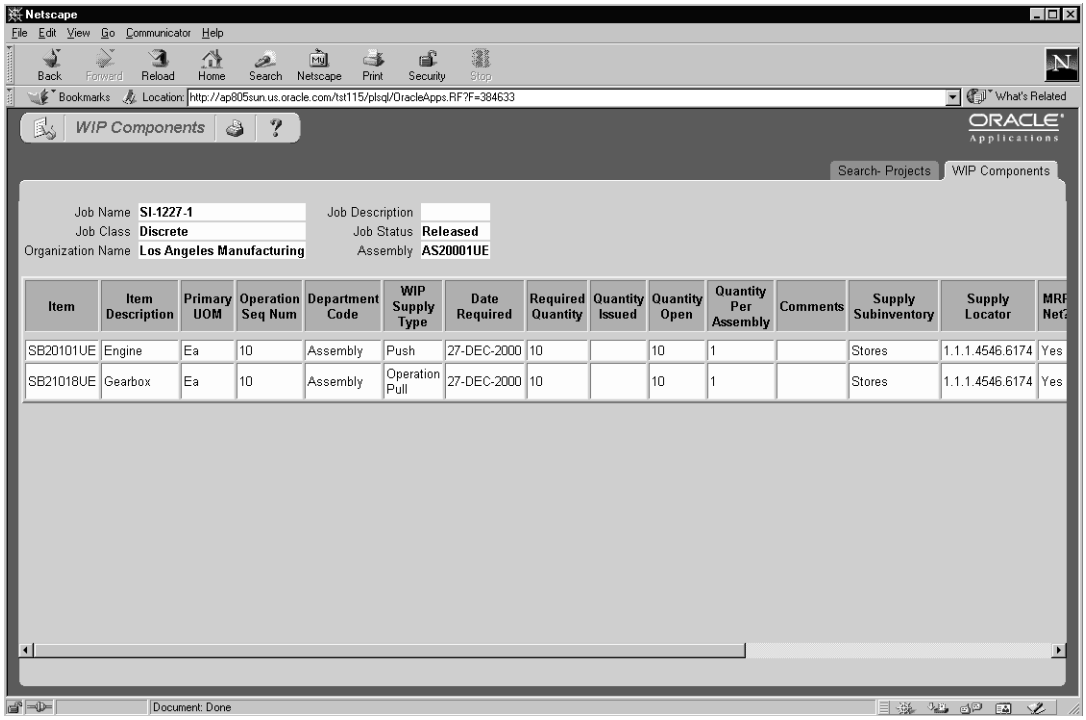


The following information is displayed: job name. Job description, job class, job status, assembly, assembly description, end item model / unit number, start date, completion date, start quantity, primary UOM, quantity completed, quantity remaining, quantity scrapped, and bom revision.

2. Choose the desired details for operations and components for each WIP job by selecting the appropriate buttons in this window.

◗◗ To view components for a project WIP job

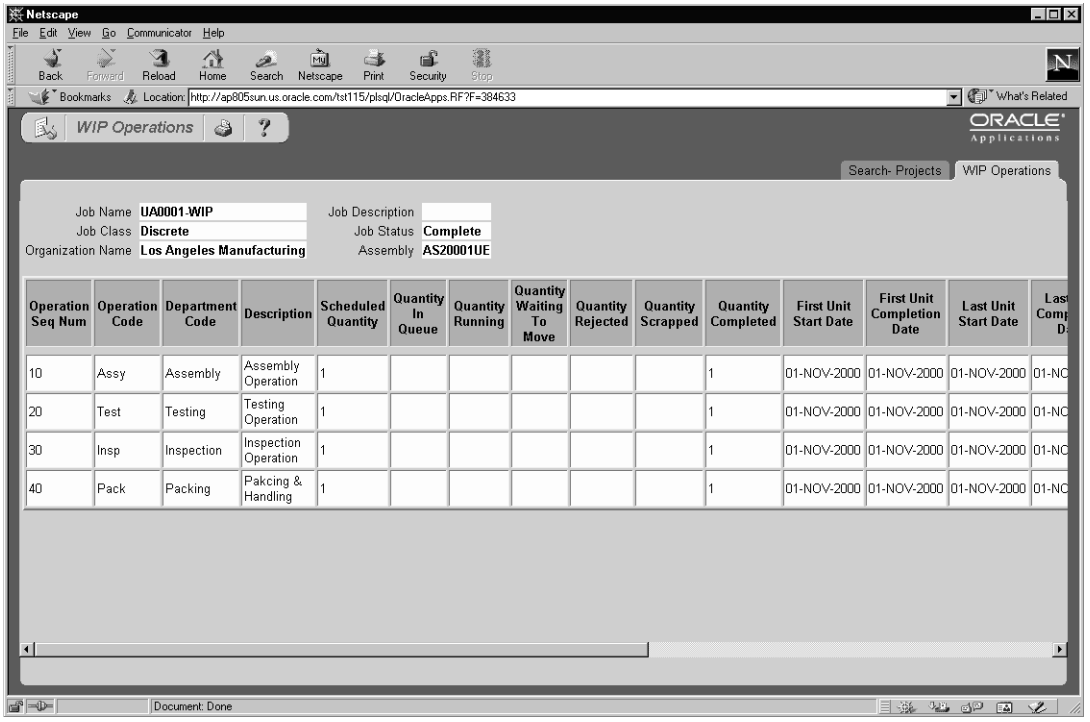
Select the Components button in the project WIP jobs window for a job.



The following information is displayed: item, description, primary UOM, inventory asset flag, location control code, restrict subinventories, restrict locators, operation sequence number, department, WIP supply type, date required, required quantity, quantity issued, quantity open, quantity per assembly, comments, supply subinventory, locator, MRP net flag, MPS required quantity, MPS date required, routing exists flag, first unit start date, first unit completion date, and last unit completion date.

To view operations for a project WIP job

1. Select the operations button in the project WIP jobs window for a job.



The following information is displayed: operation sequence number, operation code, department code, description, scheduled quantity, quantity in queue, quantity running, quantity waiting to move, quantity rejected, quantity scrapped, quantity completed, first unit start date, first unit completion date, last unit start date, last unit completion date, previous operation sequence number, next operation sequence number, count point, autocharge, backflush, minimum transfer quantity, date last moved.

2. Select the components button to view the list of components at the selected operation.

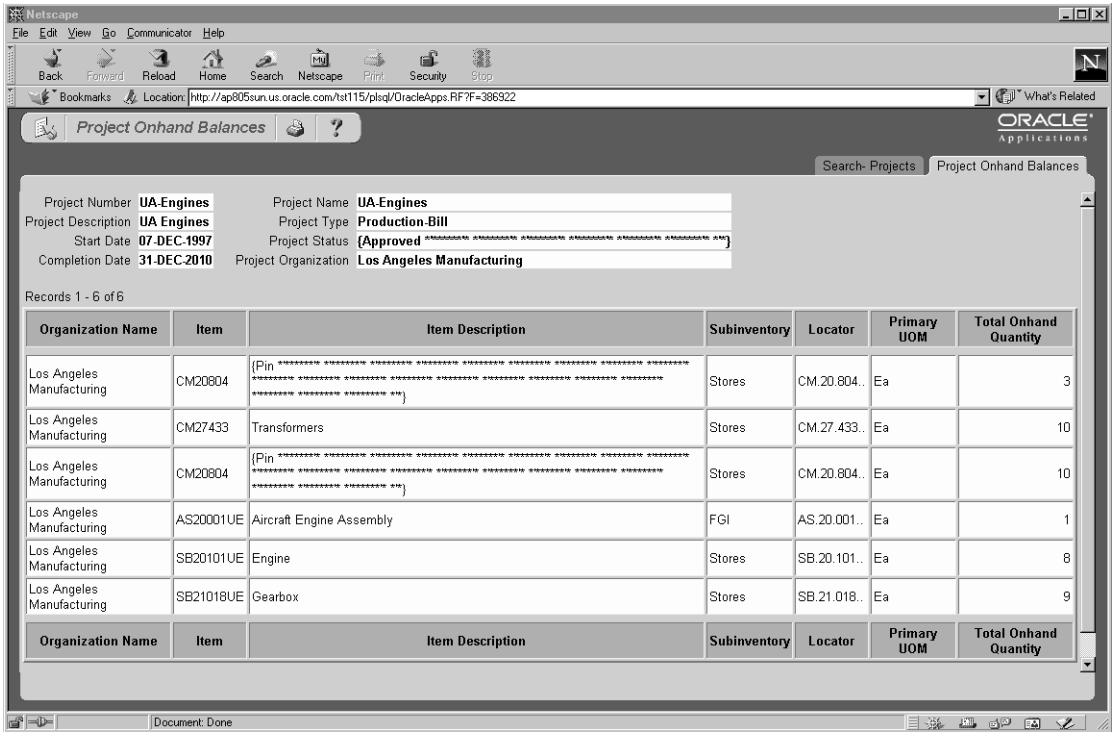
   The information displayed includes item, description, primary UOM, inventory asset flag, location control code, restrict subinventories, restrict locators, operation sequence number, department, WIP supply type, date required, required quantity, quantity issued, quantity open, quantity per

assembly, comments, supply subinventory, locator, MRP net flag, MPS required quantity, MPS date required, routing exists flag, first unit start date, first unit completion date, and last unit completion date.

Onhand Balances

◗◗ To view onhand balances for your project

Select the onhand balances button for your project in the Project / Task / Seiban kiosk.



Onhand balances are displayed by organization, by item, by subinventory and by locator for each project. The following information is displayed: organization name, item, item description, subinventory, locator, primary UOM, and total onhand quantity.

Sales Orders

To view project sales orders

Select the Sales Orders button in the Project / Task / Seiban kiosk.

The following information is displayed: order number, PO number, order category, order type, freight terms, payment terms, customer number, customer name, order date, request date, cancelled flag, ship to location, ship method, ship priority, allow partial ship, bill to location, order amount, order currency, tax exempt, item number, item description, and end item model / unit number.

You can drill down to the line and shipment details for each sales order.

Onhand Values

To view onhand values for your project

- Select the onhand values button in the Project / Task / Seiban kiosk.

  Onhand values are displayed based on item, organization and cost group. The following information is displayed: item number, organization name, cost group, cost group description, quantity onhand, unit cost, extended inventory value, extended material value, extended material overhead value, extended resource value, extended outside processing value, and extended overhead value.

Extended value is calculated as follows:

extended inventory value = quantity onhand * unit cost

You can see the extended value of each of the cost elements as extended material value, extended material overhead value, extended resource value, extended outside processing value, and extended overhead value.

You can drill down to the cost history details by selecting the item in the onhand balances window. In the cost history window, you can view the following details: transaction costed date, transaction date, prior costed quantity, primary quantity, new quantity, transaction type, actual cost, actual material, actual material overhead, actual resource, actual overhead, prior cost, prior material, prior material overhead, prior resource, prior overhead, new cost, new material, new material overhead, new resource, new overhead, change.

Line Schedules

◗◗ To view line schedules for your project

1. Select the line schedules button in the Project / Task / Seiban kiosk.

   The following information is displayed: line, planned quantity, quantity completed, variance quantity.

2. Select the line to view the item information which includes line, item number, planned quantity, quantity completed, variance quantity.

3. You can drill down to the schedule details, daily and weekly line schedules for each line in the schedule items window**.**

◗◗ To view details on the line schedule

- Select the detail button for the selected line schedule.

  The following information is displayed: line, project number, task number, source, schedule number, item number, start date, completion date, planned quantity, quantity completed, and variance quantity.

◗◗ To view daily schedule

- Select the daily button for the selected line schedule.

  The following information is displayed: line, item number, scheduled date, planned quantity, quantity completed, and variance quantity.

◗◗ To view weekly schedule

- Select the weekly button for the selected line schedule.

  The following information is displayed: line, item number, scheduled date, planned quantity, quantity completed, and variance quantity.

Attention:

- **Users can use AK Developer forms to customize the columns displayed on PJM Web Workbench. You can change/customize column prompts and display sequences also.**
- **The Web Inquiry utilizes the views which were designed for Oracle Projects Discoverer Workbooks. All amount columns are from the PA_RPT_PRJ_SUMMARY view. Project attributes are from the PA_PROJECTS_ALL table.**
- **All amounts are based on the current Projects reporting period. Although this period is not shown on the Web Inquiry, the amounts are based on the most recent summarization of the current reporting period.**
- **Note that the Expenditure Drill may not foot with the project summary amounts due to the fact that the Expenditure Drill contains all expenditure items, including those that may not be summarized.**

9

Transfer of Invoice Charges

This chapter provides information on transfering invoices charges such as Invoice Price Variances and Exchange Rate Variance. Topics include:

- Defining Expenditure Types
- Invoice Charge Transfer Procedure

Transfer of Invoice Charges

This process allows you to transfer Invoice Price Variances (IPV), Exchange Rate Variances (ERV) and other special charges including freight, tax and miscellaneous costs for invoices matched to project PO distributions or receipts with a destination of Inventory or Shop Floor. The amounts are transferred to Oracle Projects as project expenditures.

The invoice amount for a purchased inventory item may not match the purchase order cost because of a difference in item price, a change in the exchange rate for items purchased in a currency other than the functional currency of the Set of Books, or additional charges such as freight, tax, and other miscellaneous charges.

You can recognize actual paid invoice cost for your purchased inventory items in Oracle Projects. You can transfer any difference between the AP invoice amount and the PO amount for project and common project inventory items to Oracle Projects.

Define Expenditures Types for Invoice Charges

The process uses the different expenditure types (IPV, ERV, Freight, Tax and Miscellaneous Charges) held in the Project Parameters form for each project. Default expenditure types specified in the PJM Organization Parameters form are used for common project related invoices. If you do not check the Transfer to PA checkbox in the PJM Organization Parameters form for a particular invoice charge type, the transfer program will assume that you do not wish to transfer any invoice charges for that charge type.

Invoice Charge Transfer Procedure

In order to transfer the invoice charges to PA, the user must:

1. Match the invoice to project purchase orders or receipts.
2. You can allocate tax, freight, and miscellaneous charges to multiple projects if the purchase order has multiple distributions to more than one project.
3. Approve the invoice.
4. Post the invoice to the General Ledger using the Payables Accounting Process. The transfer to GL can be run as a separate process or as a part of the Payables Accounting Process.

   See *Oracle Payables User Guide* for more details on the pror three steps.
5. Once the invoice has been accounted, submit the concurrent program Transfer Project Invoice Charges. See: Transfer Project Invoice Charges Request.

6. If you have chosen not to submit the PA Transaction Import from the Transfer Project Invoice Charges program, submit the Transaction Import to PA concurrent program. For additional information, see *Oracle Projects User's Guide*.

   If you are submitting the PA transaction import as a separate process, run the request for the source = Inventory to import the invoice charges to PA.

   Use Review Transactions form to verify the data that has been transferred to Oracle Projects and resolved any problems that the Transaction Import program has reported.

7. Optionally, you can run a process that adds the invoice charges to the on-hand balance of items in the project cost group to balance your inventory cost to the cost held in Oracle Projects. For additional information, see *Oracle Cost Management User's Guide*.

Non-Recoverable Tax

Only non-recoverable(VAT) tax will be picked and transferred to PA. For additional information, see *Oracle Payables User's Guide.*

Receipt Adjustments

The invoice charge transfer process will not transfer any receipt adjustments made after the invoice has been matched to a receipt.

Transfer of Project Inventory Items

You can transfer an item from one project to another at the current average cost of the item in the sending project cost group. If you have previously transferred invoice charges to Oracle Projects for the sending project item prior to making the project cost transfer to another project, the additional invoice charges will not automatically transfer to the receiving project. You should run the Average Cost Update - Transfer Invoice Variance process to update the cost of the item in the sending project cost group prior to transferring the item to another project. An example appears below.

PO cost of Qty 1 of Item X in Project S Cost Group = $10

Invoice Cost of Item X for Project S = $12

User runs process to transfer Invoice Charge of $2 to Oracle Projects for Item X but does not run Average Cost Update - Transfer Invoice Variance

User transfers Qty 1 of Item X from Project S to Project R @ $10 (average cost in Project S cost group)

Project S in Oracle Projects has the following expenditures:

$10 - PO Cost of Item X

$2 - Invoice Charge for Item X

($10) - Project Cost Transfer of Item X to Project R

Result $2 Invoice Charge for Item X remains on Project S after item is transferred. If user had run Average Cost Update - Transfer Invoice Variance for Item X in Project S Cost Group prior to making project cost transfer, Item X would have been transferred at $12 and no cost would remain in Oracle Projects for Item X in Project S.

10

Reports and Processes

Project Schedule Exception Report - WIP

You can launch the exceptions report for a single project or range of projects. This will compare the project schedule dates with the dates on the WIP jobs. The report will list exceptions for all project WIP jobs that satisfy the following conditions:

- WIP Job is not complete or closed or cancelled.
- The Job start date is earlier than Task Start Date or the Job WIP Job is not complete or closed or cancelled.
- The Job start date is earlier than Task Start Date or the Job completion date is later than the task completion date after providing for the user defined tolerance. Create only one exception notification per WIP Job.
- Either the WIP Job start date or WIP job completion date lies within the user specified date range.

Report Submission

Navigate to the Project Schedule Exception window. Select the process Project Schedule Exception Report - WIP.

Report Parameters

Order by Select the sequence in which the output will be displayed. You can choose from organization / job name, organization / project number / task number, or organization / exception days. This is a required value with a default value of organization / job name.

Tolerance Days Enter a number that is positive or negative, if you do not want the default of 0. This is a required value. In the calculations, an exception will not be raised if the corresponding manufacturing activity date is on the tolerance date.

Item From/To To restrict the notifications for a range of items, enter the beginning and ending item numbers. This is an optional parameter.

Project Number From/To To restrict the notifications for a range of projects, enter the beginning and ending project numbers. This is an optional parameter.

Date From/To To restrict the notifications for a range of dates, enter the beginning and ending dates. This is an optional parameter.

Project Schedule Exception Report - Procurement Activities

You can launch the exceptions report for a single project or range of projects. This will compare the project schedule dates with the dates on the various procurement documents such as Purchase Orders, Purchase Requisitions, Blanket Release, RFQs, and Quotes. The report lists the procurement documents that violate the project schedule dates.

Report Submission

Navigate to the Project Schedule Exception window. Select the process Project Schedule Exception Report - Procurement.

Report Parameters

Order by Select the sequence in which the output will be displayed. You can choose from exception days, project number / task number, or document number. This is a required value, default value is document number.

Tolerance Days Enter a number that is positive or negative, if you do not want the default of 0. This is a required value. In the calculations, an exception will not be raised if the corresponding manufacturing activity date is on the tolerance date.

Select Yes to include exception data about the document type on the report.

Purchase Requisition Lists all project purchase requisitions that satisfy the following conditions:

- The requisition is not Cancelled, Rejected, or Closed.
- The requisition need by date lies outside the task start and end dates by more than the user defined tolerance days.
- The requisition need by date lies within the user specified date range.

RFQ Lists all project RFQs that satisfy the following conditions.

- The RFQ is not Closed.
- The RFQ due date is later than the task completion date.
- The RFQ due date lies within the user specified date range.

Quotations Lists all project quotations that satisfy the following conditions:

- The quotation is not Closed.
- The quote effectivity end date is earlier than the task end date by more than the user specified tolerance.
- The quote effectivity end date lies within the user specified date range.

Purchase Order Lists all project purchase order lines that satisfy the following conditions:

- The PO is not Closed, Rejected, or Cancelled.
- The need by date or promised date is outside the task start and end dates by more than the user specified tolerance.
- The need by date or promised date for the PO line lies within the user specified date range.

Blanket Release Lists all project blanket release lines that satisfy the following conditions:

- The Blanket Release is not Closed, Rejected, or Cancelled.
- The need by date or promised date is outside the task start and end dates by more than the user specified tolerance.
- The need by date or promised date for the Blanket Release line lies within the user specified date range.

Item From/To To restrict the notifications for a range of items, enter the beginning and ending item numbers. This is an optional parameter.

Project Number From/To To restrict the notifications for a range of projects, enter the beginning and ending project numbers. This is an optional parameter.

Date From/To To restrict the notifications for a range of dates, enter the beginning and ending dates. This is an optional parameter.

Project Schedule Exception Report - Sales Order

You can launch the exceptions report for a single project or range of projects. This will compare the project schedule dates with the dates on the sales order documents. The report will list all project sales order lines that satisfy the following conditions:

- The sales order line has not been ship Confirmed, Cancelled, or Closed.
- The Promised Date or the Need by Date for the Sales Order line lies outside the task start and end dates by more than the tolerance days specified by the user.
- The sales order promised date or the need by date lies within the user specified date range.

Report Submission

Navigate to the Project Schedule Exception window. Select the process Project Schedule Exception Report - Sales Orders.

Report Parameters

Order by Select the sequence in which the output will be displayed. You can choose from exception days, project number / task number, or document number. This is a required value, default value is document number.

Tolerance Days Enter a number that is positive or negative, if you do not want the default of 0. This is a required value. In the calculations, an exception will not be raised if the corresponding manufacturing activity date is on the tolerance date.

Item From/To To restrict the notifications for a range of items, enter the beginning and ending item numbers. This is an optional parameter.

Project Number From/To To restrict the notifications for a range of projects, enter the beginning and ending project numbers. This is an optional parameter.

Date From/To To restrict the notifications for a range of dates, enter the beginning and ending dates. This is an optional parameter.

Overdue Project WIP Jobs Report

This report lists all the open Project WIP jobs that have not been completed on or after the project schedule completion date. You can launch the exceptions report for a single project or range of projects. The report will list all project WIP jobs that satisfy the following conditions:

- WIP Job is not Complete, Closed, or Cancelled.
- List of all open jobs that have exceeded the respective project/task completion dates.
- Project/task completion date lies within the user specified date range.

Report Submission

Navigate to the Project Schedule Exception window. Select the process Overdue Project WIP Jobs Report.

Report Submission

Order by Select the sequence in which the output will be displayed. You can choose between organization/job name and organization/ project number/task number. This is a required value with a default value of organization/job name.

Assembly From/To To restrict the notifications for a range of items, enter the beginning and ending assembly item numbers. This is an optional parameter.

Project Number From/To To restrict the notifications for a range of projects, enter the beginning and ending project numbers. This is an optional parameter.

Date From/To To restrict the notifications for a range of dates, enter the beginning and ending dates. This is an optional parameter.

Overdue Project Procurement Activities Report

This report lists all the project procurement documents that have not been completed even after the Project / Task schedule completion date. You can launch the exceptions report for a single project or range of projects. The report will list all project procurement documents that satisfy the following conditions:

Purchase Orders

- The PO status should not be Closed, Rejected, or Cancelled.
- List of all Purchased order lines where receipts have not been booked by the scheduled completion date of the project / task.
- The Project / Task completion date lies within the user specified date range.

Blanket Releases

- The Blanket Release status should not be Closed, Rejected, or Cancelled.
- List of all Blanket Release lines where receipts have not been booked by the scheduled completion date of the project / task.
- The Project / Task completion date lies within the user specified date range.

Purchase Requisitions

- The Requisition status should not be Closed, Rejected, Returned, or Cancelled.
- No Purchase orders have been created from the Purchase Requisition.
- The Project / Task completion date lies within the user specified date range.

Request For Quotations

- The RFQ status should not be Closed.
- List of all RFQs that are not closed by the scheduled completion date of the project / task. That is, the status is either In Process, Active, or Printed. A Closed status means that all the suppliers have responded to the RFQ.
- The Project / Task completion date lies within the user specified date range.

Quotations

- The Quotation status should not be Closed
- List of all Quotations that are either In Process or Active and Not Approved by the scheduled completion date of the project / task.
- The Project / Task completion date lies within the user specified date range.

Report Submission

Navigate to the Project Schedule Exception window. Select the process Overdue Project Procurement Report.

Report Parameters

Order by Select the sequence in which the output will be displayed. You can choose between project number / task number and document number. This is a required value with a default value of document number.

Select Yes to include exception data about the document type on the report. The default value for Purchase orders is Yes. For the rest of the documents it is No. This is a required value.

Item From/To To restrict the notifications for a range of items, enter the beginning and ending item numbers. This is an optional parameter.

Project Number From/To To restrict the notifications for a range of projects, enter the beginning and ending project numbers. This is an optional parameter.

Date From/To To restrict the notifications for a range of dates, enter the beginning and ending dates. This is an optional parameter.

Overdue Undemanded Project Sales Orders Report

This report lists all the project sales orders that have not been demanded on or after the Project/Task scheduled start date. You can launch the exceptions report for a single project or range of projects. The report will list all undemanded project sales orders that satisfy the following conditions:

- Sales order lines should not be Cancelled or Closed.
- List of all sales order lines that have not been demanded by the project/task scheduled start date.
- Source Type is Internal.
- The Project/Task scheduled start date lies within the user specified date range.

Report Submission

Navigate to the Project Schedule Exception window. Select the process Overdue Undemanded Project Sales Orders.

Report Parameters

Order by Select the sequence in which the output will be displayed. You can choose between (sales) order number and project number/task number. This is a required value with a default value of order number.

Item From/To To restrict the notifications for a range of items, enter the beginning and ending item numbers. This is an optional parameter.

Project Number From/To To restrict the notifications for a range of projects, enter the beginning and ending project numbers. This is an optional parameter.

Date From/To To restrict the notifications for a range of dates, enter the beginning and ending dates. This is an optional parameter.

Project Schedule Exception Notification

You can launch the notifications request for a single project or range of projects. This is a workflow-based concurrent request that will compare the project schedule dates with the dates on the various project WIP Jobs, Purchase Orders, Purchase Requisitions, Blanket Release, RFQs, Quotes, Sales Orders, MDS, MPS and Forecast entries. The successful completion of the request will result in notifications being sent to the user about exception situations. Users can also choose to notify the Project/Task Manager by specifying the appropriate parameters in the request.The Project Schedule Exception Report is handled by Oracle Workflow technology.

For information on customizing this process, see Appendix B: Workflows

Report Submission

Navigate to the Project Schedule Exception window. Select the process Project Schedule Exception Notifications.

Report Parameters

Document Type (Optional) Select one of the following options:

Forecast Generate exceptions for all project forecast entries that satisfy the following conditions:

- The forecast date or forecast end date lies outside the task start and end dates by more than the tolerance days specified.
- The forecast date or the forecast end date lies within the user specified date range.
- The current forecast quantity is not zero.

MDS Generate notifications for all the project MDS entries that satisfy the following conditions:

- The MDS schedule date or the schedule end date lies outside the task start and end dates by more than the tolerance days specified.
- The MDS schedule date or the schedule end date lies within the user specified date range.
- The MDS current quantity is not zero.

MPS Generate notifications for all the project MPS entries that satisfy the following conditions:

- The MPS schedule date or the schedule end date lies outside the task start and end dates by more than the tolerance days specified.
- The MPS schedule date or the schedule end date lies within the user specified date range.
- The MPS current quantity is not zero.

Sales Order Generate exceptions for all project sales order lines that satisfy the following conditions:

- The sales order line has not been ship Confirmed, Cancelled, or Closed.
- The Promised Date or the Need by Date for the Sales Order line lies outside the task start and end dates by more than the tolerance days specified by the user.
- The sales order promised date or the need by date lies within the user specified date range.

Purchase Requisition Generate exceptions for all project purchase requisitions that satisfy the following conditions

- The requisition is not Cancelled, Rejected, or Closed.
- The requisition need by date lies outside the task start and end dates by more than the user defined tolerance days.
- The requisition need by date lies within the user specified date range.

RFQ Generate exceptions for all project RFQs that satisfy the following conditions:

- The RFQ is not Closed.
- The RFQ due date is later than the task completion date.
- The RFQ due date lies within the user specified date range.

Quotations Generate notifications for all project quotations that satisfy the following conditions:

- The quotation is not Closed.
- The quote effectivity end date is earlier than the task end date by more than the user specified tolerance.
- The quote effectivity end date lies within the user specified date range.

Purchase Order Generate notifications for all project purchase order lines that satisfy the following conditions:

- The PO is not Closed, Rejected, or Cancelled.
- The need by date or promised date is outside the task start and end dates by more than the user specified tolerance.
- The need by date or promised date for the PO line lies within the user specified date range.

Blanket Release Generate notifications for all project blanket release lines that satisfy the following conditions:

- The Blanket Release is not closed, rejected or cancelled
- The need by date or promised date is outside the task start and end dates by more than the user specified tolerance, and
- The need by date or promised date for the Blanket Release line lies within the user specified date range

WIP Generate exceptions for all project WIP jobs that satisfy the following conditions:

- WIP Job is not Complete, Closed, or Cancelled.
- The Job start date is earlier than Task Start Date or the Job WIP Job is not Complete, Closed, or Cancelled.
- The Job start date is earlier than Task Start Date or the Job completion date is later than the task completion date after providing for the user defined tolerance. Create only one exception notification per WIP Job.
- Either the WIP Job start date or WIP job completion date lies within the user specified date range.

Tolerance Days Enter a number that is positive or negative, if you do not want the default value of 0. This is a required value. In the calculations, an exception will not be raised if the corresponding manufacturing activity date is on the tolerance date.

Requestor Select the username where the notifications need to be sent. Default is the username from login.

Notify Project Manager Select Yes to have the notification sent to the project manager. Default value is No.

Notify Task Manager Select Yes to have the notification sent to the task manager. Default value is No

Item From/To To restrict the notifications for a range of items, enter the beginning and ending item numbers. This is an optional parameter.

Project Number From/To To restrict the notifications for a range of projects, enter the beginning and ending project numbers. This is an optional parameter.

Date From/To To restrict the notifications for a range of dates, enter the beginning and ending dates. This is an optional parameter.

Transfer Project Invoice Charges Request

This process allows you to transfer Invoice Price Variances(IPV), Exchange Rate Variances (ERV) and other special charges including freight, tax and miscellaneous costs for invoices matched to project PO distributions or receipts with a destination of Inventory or Shop Floor. The amounts are allocated to Oracle Projects as project expenditures.

Report Submission

Navigate to the Transfer Costs to Projects menu option. Select Invoice Charges as the option. This results in the selection of the process Transfer Project Invoice Charges.

Report Parameters

Project Number You can specify a single project to transfer or leave it null for all projects.

Expenditure Through Date You can specify the ending expenditure date or leave it null for all.

Run Report You can optionally run the execution report before submitting the Transaction Import program. Default is No.

Submit Transaction Import You can optionally submit PA Transaction Import program upon completion of the transfer program. Default is No.

A

Windows and Navigator Paths

This appendix shows you the standard navigator paths for each Oracle Project Manufacturing window. Refer to this appendix when you do not already know the navigator path for a window you want to use.

For windows described in other manuals:

Brackets ([ ]) indicate a button.

See...	Refer to this manual for a complete form description
BOM	*Oracle BIll of Materials User's Guide*
IN	*Oracle Inventory User's Guide*
MRP	*Oracle Master Scheduling/MRP User's Guide*
PA	*Oracle Projects User's Guide*
WIP	*Oracle Work in Process User's Guide*
SYS	*Oracle System Administrator's Guide*
User	*Oracle Applications User's Guide*

Although your system administrator may have customized your navigator, typical navigational paths include the following:

Note: Text in brackets ([ ]) indicates a button.

Window Name	Navigation Path
Projects	Projects > Project Definition > Projects
Agreements	Projects > Project Definition > Agreements
Budgets	Projects > Project Definition > Budgets
Project Parameters	Projects > Project Definition > Project Parameters
FlexSequence	Projects > Project Definition > Task Auto Assignment > FlexSequence
Rules	Projects > Project Definition > Task Auto Assignment > Rules
Seiban Number Wizard	Projects > Project Definition > Seiban Number Wizard
Manufacturing Costs	Projects > Control > Transfer Cost to Projects > Manufacturing Costs
Invoice Charges	Projects > Control > Transfer Cost to Projects > Invoice Charges
Project Transaction Import	Projects > Control > Project Transaction Import
Rejected Transactions	Projects > Control > Rejected Transactions
Update Project Summary	Projects > Control > Update Project Summary
Transaction	Projects > Control > Borrow, Payback, Transfer > Transaction
Status	Projects > Control > Borrow, Payback, Transfer > Status
Maintain Model / Unit Numbers	Projects > Model / Unit Effectivity > Maintain Model / Unit Numbers
Generate Model / Unit Numbers	Projects > Model / Unit Effectivity > Generate Model / Unit Numbers
With Projects	Projects > Inquiry > Web Workbenches > With Projects
Without Projects	Projects > Inquiry > Web Workbenches > Without Projects
Projects Only	Projects > Inquiry > Web Workbenches > Projects Only
Project Status Inquiry	Projects > Inquiry > Project Information > Project Status Inquiry
Percent Complete	Projects > Inquiry > Project Information > Percent Complete
Project	Projects > Inquiry > Project Information > Expenditure Inquiry > Project
All	Projects > Inquiry > Project Information > Expenditure Inquiry > All
Revenue Review	Projects > Inquiry > Project Information > Revenue Review
Sales Orders and Returns	Projects > Inquiry > Operation Information > Sales Orders and Returns
Requisitions	Projects > Inquiry > Operation Information > Purchases > Requisitions

Window Name	Navigation Path
Purchase Orders	Projects > Inquiry > Operation Information > Purchases > Purchase Orders
Purchase Item History	Projects > Inquiry > Operation Information > Purchases > Purchase Item History
On-hand Quantities	Projects > Inquiry > Operation Information > Material > On-hand Quantities
Item Information	Projects > Inquiry > Operation Information > Material > Item Information
Item Search	Projects > Inquiry > Operation Information > Material > Item Search
Serial Information	Projects > Inquiry > Operation Information > Material > Serial Information
Bills	Projects > Inquiry > Operation Information > Bills > Bills
Comparison	Projects > Inquiry > Operation Information > Bills > Comparison
Item Usage	Projects > Inquiry > Operation Information > Bills > Item Usage
Routings	Projects > Inquiry > Operation Information > Routings > Routings
Standard Operations	Projects > Inquiry > Operation Information > Routings > Standard Operations
Departments	Projects > Inquiry > Operation Information > Routings > Departments
Resource Usage	Projects > Inquiry > Operation Information > Routings > Resource Usage
Operations	Projects > Inquiry > Operation Information > Work in Process > Operations
Material Requirements	Projects > Inquiry > Operation Information > Work in Process > Material Requirements
Resource Requirements	Projects > Inquiry > Operation Information > Work in Process > Resource Requirements
Discrete Jobs	Projects > Inquiry > Operation Information > Work in Process > Discrete Jobs
Receiving Information	Projects > Inquiry > Transaction Information > Receiving Information
Material Transaction	Projects > Inquiry > Transaction Information > Material Transaction
Transaction Summary	Projects > Inquiry > Transaction Information > Transaction Summary
Move Transaction	Projects > Inquiry > Transaction Information > Move Transaction
Resource Transactions	Projects > Inquiry > Transaction Information > Resource Transactions
Material Distributions	Projects > Inquiry > Accounting Information > Material Distributions
WIP Distributions	Projects > Inquiry > Accounting Information > WIP Distributions
WIP Value Summary	Projects > Inquiry > Accounting Information > WIP Value Summary
Item Costs	Projects > Inquiry > Accounting Information > Item Costs

Window Name	Navigation Path
Item Cost for Cost Items	Projects > Inquiry > Accounting Information > Item Cost for Cost Items
Cost Indented Bills	Projects > Inquiry > Accounting Information > Cost Indented Bills
Project Status Inquiry	Projects > Inquiry > Accounting Information > Project Status Inquiry
Project	Projects > Inquiry > Accounting Information > Expenditure Inquiry > Project
All	Projects > Inquiry > Accounting Information > Expenditure Inquiry > All
Revenue Review	Projects > Inquiry > Accounting Information > Revenue Review
Invoice Review	Projects > Inquiry > Accounting Information > Invoice Review
Funding Inquiry	Projects > Inquiry > Accounting Information > Funding Inquiry
PJM Organization Parameters	Projects > Setup > PJM Organization Parameters
Organizations	Projects > Setup > Manufacturing > Organizations
Organization Hierarchy	Projects > Setup > Manufacturing > Organization Hierarchy
Organization Parameters	Projects > Setup > Manufacturing > Organization Parameters
Subinventories	Projects > Setup > Manufacturing > Subinventories
Stock Locators	Projects > Setup > Manufacturing > Stock Locators
Planning Groups	Projects > Setup > Manufacturing > Planning Groups
WIP Accounting Class	Projects > Setup > Financial Accounting > WIP Accounting Class
Cost Groups	Projects > Setup > Financial Accounting > Cost Groups
Departments	Projects > Setup > Financial Accounting > Departments
Expenditure Types	Projects > Setup > Financial Accounting > Expenditure Types
Exp Types for Cost Elements	Projects > Setup > Financial Accounting > Exp Types for Cost Elements
Material	Projects > Setup > Financial Accounting > Sub Elements > Material
Resources	Projects > Setup > Financial Accounting > Sub Elements > Resources
Overheads	Projects > Setup > Financial Accounting > Sub Elements > Overheads
Defaults	Projects > Setup > Financial Accounting > Sub Elements > Defaults
Types	Projects > Setup > Financial Accounting > Financials > Accounting Calendar > Types
Accounting	Projects > Setup > Financial Accounting > Financials > Accounting Calendar > Accounting

Window Name	Navigation Path
Transaction	Projects > Setup > Financial Accounting > Financials > Accounting Calendar > Transaction
Books	Projects > Setup > Financial Accounting > Financials > Books
Daily Rates	Projects > Setup > Financial Accounting > Financials > Currencies > Daily Rates
Period Rates	Projects > Setup > Financial Accounting > Financials > Currencies > Period Rates
Currencies	Projects > Setup > Financial Accounting > Financials > Currencies > Currencies
Segments	Projects > Setup > Financial Accounting > Flexfields > Key > Segments
Values	Projects > Setup > Financial Accounting > Flexfields > Key > Values
Aliases	Projects > Setup > Financial Accounting > Flexfields > Key > Aliases
Rules	Projects > Setup > Financial Accounting > Flexfields > Key > Rules
Groups	Projects > Setup > Financial Accounting > Financials > Flexfields > Key > Groups
Define	Projects > Setup > Financial Accounting > Flexfields > Key > Security > Define
Assign	Projects > Setup > Financial Accounting > Flexfields > Key > Security > Assign
Accounts	Projects > Setup > Financial Accounting > Flexfields > Key > Accounts
Segments	Projects > Setup > Financial Accounting > Flexfields > Descriptive > Segments
Values	Projects > Setup > Financial Accounting > Flexfields > Descriptive > Values
Define	Projects > Setup > Financial Accounting > Flexfields > Descriptive > Security > Define
Assign	Projects > Setup > Financial Accounting > Flexfields > Descriptive > Security > Assign
Sets	Projects > Setup > Financial Accounting > Flexfields > Validation > Sets
Values	Projects > Setup > Financial Accounting > Flexfields > Validation > Values
Define	Projects > Setup > Financial Accounting > Flexfields > Validation > Security > Define
Assign	Projects > Setup > Financial Accounting > Flexfields > Validation > Security > Assign

Window Name	Navigation Path
Project Information	Projects > Reports > Project Information
Transaction Information	Projects > Reports > Transaction Information
Accounting Information	Projects > Reports > Accounting Information
Scheduling Exceptions	Projects > Reports > Scheduling Exceptions
View	Projects > Reports > View
Set	Projects > Reports > Set
Notifications	Projects > Notifications
Request	Projects > Other > Request
Profile	Projects > Other > Profile
Change Organization	Projects > Other > Change Organization

B

Workflows

Overview of Project Manufacturing Workflows

Oracle Project Manufacturing uses Oracle Workflow technology to provide guided walk-throughs of all steps required to define project manufacturing contract and indirect projects and to generate notifications for scheduling exceptions.

Oracle Workflow is a complete workflow management system that supports business process definition and automation. Its technology enables automation and continuous improvement to business processes, routing information of any type according to user-defined business rules. Oracle Workflow contains a graphical user interface that enables you to modify workflow processes to suit your business needs.

Oracle Project Manufacturing comes with the following workflows:

- Project Manufacturing Project Definition [Contract] workflow guides the user through the setup steps required to define a project manufacturing contract project. This workflow is seeded with one processes, the PJM Contract Type Project Definition process.
- Project Manufacturing Project Definition [Indirect / Capital] workflow guides the user through the setup steps required to define a project manufacturing indirect or capital project. This workflow is seeded with one processes, the PJM Indirect Type Project Definition process.
- Project Manufacturing Project Schedule Exception Notification workflow allows the user to define the notifications sent for schedule exceptions. This workflow is seeded with one process, the Project Manufacturing Integration Exception Process.

PJM Contract Type Project Definition Process

The PJM Contract Type Project Definition process provides a workflow-based approach to organize and launch the application forms needed to setup a project manufacturing contract project. The process provides sequential access to the needed forms from Oracle Projects, Oracle Master Scheduling, Oracle Work in Process, Oracle Cost Management, and Oracle Project Manufacturing.

The PJM Contract Type Project Definition process can be accessed through Oracle applications and through Workflow Builder. Use the Workflow Builder to customize the process.

◗◗ To access the PJM Contract Type Project Definition Process

1. Choose the Process tab on the navigator. The processes you can access are displayed on the upper left.
2. Select the PJM Contract Type Project Definition Process.

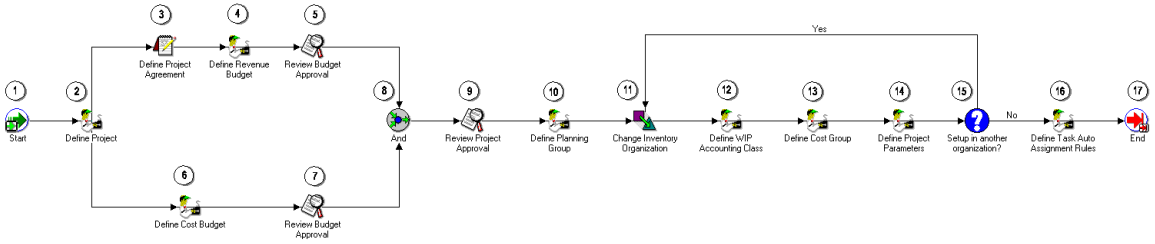
Customizing the PJM Contract Type Project Definition Process

Processes can be customized using the Oracle Workflow Builder. When you customize the PJM Contract Type Project Definition process, only projects defined after you customize it are affected.

◗◗ To display the process in the Oracle Workflow Builder

1. Choose Open from the File menu, and connect to the database.
2. Select Project Manufacturing Project Definition [Contract] to open it.
3. Expand the data source, then expand the item type Project Manufacturing Project Definition [Contract].
4. Expand the Processes branch within the item type.
5. Double-click on the PJM Contract Type Project Definition Process to the display the diagram in a process window.

Figure B–1 PJM Contract Type Project Definition Process



Required Modifications

There are no required modifications for this workflow process.

Customization Example

You can customize the PJM Contract Type Project Definition process by adding or deleting steps to the process, by changing process names and descriptions, and by changing step icons. For example, you might choose to remove Task Auto Assignment from this process if your organization is at a project control level of task.

Customizations That Are Not Supported

Each type of customization is supported for the PJM Contract Type Project Definition. However, the order of steps must take prerequisites for each form opened into account for the process to operate smoothly.

Creating a New Custom Process

You can use the PJM Contract Type Project Definition process as a basis for developing your own project definition processes.

The Project Manufacturing Project Definitions [Contract] Item Type

The PJM Contract Type Project Definition process is associated with an item type called Project Manufacturing Project Definition [Contract]. All the available processes associated with an item type are listed under that item type in the Workflow Builder. Currently, the only available process for this item type is the PJM Contract Type Project Definition process.

The Project Manufacturing Project Definition [Contract] item type has two attributes associated with it. These attributes reference information in the demonstration application tables. The attributes are used and maintained by function activities throughout the process.

Table B–1 Workflow Project Manufacturing Project Definition [Contract] Item Type Attributes

Display Name	Description	Type	Length/Format/ Lookup Type
User Name	Name of user defining project	Text	
Project Number	Number of project being defined	Text	

Summary of the PJM Contract Type Project Definition Process

To view the properties of the PJM Contract Type Project Definition process, select the process in the navigation tree and choose Properties from the Edit menu. This process has a result type of None, indicating that when the process completes, it does not end with any particular result, such as End (Approved) or End (Rejected). Instead, its subprocesses end with specific results.

This process is runnable, indicating that it can be initiated as a top level process to run by making calls to the Workflow Engine *CreateProcess and StartProcess* APIs.

The PJM Contract Type Project Definition process is designed to provide maximum flexibility for the user. Hence, no step in the process is required in order to complete additional steps. The user can select a project for which prerequisite steps have been completed to go on to further steps.

In order to provide this flexibility, the PJM Contract Type Project Definition process does not send message attributes from one step to the next.

The process contains 17 activities, each represented by a node on Figure B-1. The workflow begins at node 1.

PJM Contract Type Project Definition Process Activities

The following is a description of each activity listed by the activity's display name.

Start (Node 1)

This is a Standard function activity that marks the start of the process.

- Function - WF_STANDARD.NOOP
- Result Type - None
- Prerequisite activities - None
- Item Attributes Set by Function - None

Define Project (Node 2)

This step opens the Oracle Project forms required to define a project.

- Message - Define Project
- Respond Message Attributes - Form PA_PAXPREPR_PROJECT

Define Project Agreement (Node 3)

This step opens the Oracle Project forms required to define a project agreement.

- Prerequisite Activities - Previous step
- Message - Define Project Agreement
- Respond Message Attributes -Form PA_PAXINEAG_AGREEMENT

Define Revenue Budget (Node 4)

This step opens the Oracle Project forms required to define a revenue budget.

- Message - Define Project Revenue Budget
- Respond Message Attributes - Form PA_PAXBUEBU

Review Budget Approval (Nodes 5 and 7)

This step opens the Oracle Project forms required to review budget status for a project.

- Message - Review Budget Status
- Respond Message Attributes- Form PA_PAXBUEBU

Define Cost Budget (Node 6)

This step opens the Oracle Project forms required to define cost budget for a project.

- Message - Define Project Cost Budget
- Respond Message Attributes -Form PA_PAXBUEBU

Review Project Approval (Node 9)

This step opens the Oracle Project forms required to review project approval.

- Message - Review Project Status
- Respond Message Attributes -Form PA_PAXPREPR_PROJECT

Define Planning Group (Node 10)

This step opens the Oracle Master Scheduling / MRP forms required to define a planning group.

- Message - Define Planning Group
- Respond Message Attributes -Form MRP_FNDLVMUL_PLANNING_GROUP

Change Inventory Organization (Node 11)

This step opens the Oracle Master Scheduling / MRP forms required to change the Inventory organization.

- Message - Change Organization
- Respond Message Attributes - Form MRPCHORG

Define WIP Accounting Class (Node 12)

This step opens the Oracle Work in Process forms required to define the WIP accounting class.

- Message - Define WIP Accounting Class
- Respond Message Attributes -Form WIP_WIPSUMCL

Define Cost Group (Node 13)

This step opens the Oracle Cost Management forms required to define the cost group.

- Message - Define Cost Group
- Respond Message Attributes - Form CST_CSTFDCGA

Define Project Parameters (Node 14)

This step opens the Oracle Project Manufacturing form required to define the project parameters.

- Message - Define Project Parameters
- Respond Message Attributes -Form PJMFDPJP

Setup in Another Organization (Node 15)

This step refers the user back to Node 11 if additional organizations are desired for the project.

- Message - Continue Setup in Another Inventory Org?

Define Task Auto Assignment Rules (Node 16)

This step opens the Oracle Project Manufacturing form required to define the task auto assignment rules.

- Message - Define Task Auto Assignment Rules
- Respond Message Attributes -Form PJMFTAAR

PJM Indirect Type Project Definition Process

The PJM Indirect Type Project Definition process provides a workflow-based approach to organize and launch the application forms needed to setup a project manufacturing contract project. The process provides sequential access to the needed forms from Oracle Projects, Oracle Master Scheduling / MRP, Oracle Work in Process, Oracle Cost Management, and Oracle Project Manufacturing.

The PJM Indirect Type Project Definition process can be accessed through Oracle applications and through Workflow Builder. Use the Workflow Builder to customize the process.

◗◗ To access the PJM Indirect Type Project Definition Process

1. Choose the Process tab on the navigator. The processes you can access are displayed on the upper left.
2. Select the PJM Indirect Type Project Definition Process.

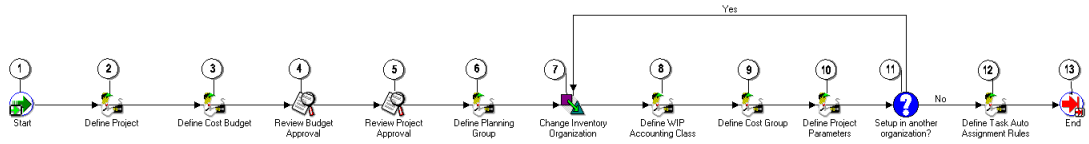
Customizing the PJM Indirect Type Project Definition Process

Processes can be customized using the Oracle Workflow Builder. When you customize the PJM Contract Type Project Definition process, only projects defined after you customize it are affected.

◗◗ To display the process in the Oracle Workflow Builder

1. Choose Open from the File menu, and connect to the database.
2. Select Project Manufacturing Project Definition [Indirect / Capital] to open it.
3. Expand the data source, then expand the item type Project Manufacturing Project Definition [Indirect / Capital].
4. Expand the Processes branch within the item type.
5. Double-click on the PJM Indirect Type Project Definition Process to the display the diagram in a process window.

Figure B–2 PJM Indirect Type Project Definition Process



Required Modifications

There are no required modifications for this workflow process.

Customization Example

You can customize the PJM Indirect Type Project Definition process by adding or deleting steps to the process, by changing process names and descriptions, and by changing step icons. For example, you might choose to remove Task Auto Assignment from this process if your organization is at a project control level of task.

Customizations That Are Not Supported

Each type of customization is supported for the PJM Indirect Type Project Definition. However, the order of steps must take prerequisites for each form opened into account for the process to operate smoothly.

Creating a New Custom Process

You can use the PJM Indirect Type Project Definition process as a basis for developing your own project definition processes.

The Project Manufacturing Project Definitions [Indirect/Capital] Item Type

The PJM Indirect Type Project Definition process is associated with an item type called Project Manufacturing Project Definition [Indirect / Capital]. All the available processes associated with an item type are listed under that item type in the Workflow Builder. Currently, the only available process for this item type is the PJM Indirect Type Project Definition process.

The Project Manufacturing Project Definition [Indirect / Capital] item type has two attributes associated with it. These attributes reference information in the demonstration application tables. The attributes are used and maintained by function activities throughout the process.

Table B–2 Workflow Project Manufacturing Project Definition [Indirect/Capital] Item Type Attributes

Display Name	Description	Type
User Name	Name of user defining project	Text
Project Number	Number of project being defined	Text

Summary of the PJM Indirect Type Project Definition Process

To view the properties of the PJM Indirect Type Project Definition Process, select the process in the navigation tree and choose Properties from the Edit menu. This process has a result type of None, indicating that when the process completes, it does not end with any particular result, such as End (Approved) or End (Rejected). Instead, its subprocesses end with specific results.

This process is runnable, indicating that it can be initiated as a top level process to run by making calls to the Workflow Engine *CreateProcess and StartProcess* APIs.

The PJM Contract Type Project Definition process is designed to provide maximum flexibility for the user. Hence, no step in the process is required in order to complete additional steps. The user can select a project for which prerequisite steps have been completed to go on to further steps.

In order to provide this flexibility, the PJM Contract Type Project Definition process does not send message attributes from one step to the next.

The process contains 13 activities, each represented by a node on Figure B-2. The workflow begins at node 1.

PJM Indirect Type Project Definition Process Activities

The following is a description of each activity listed by the activity's display name.
Start (Node 1)

This is a Standard function activity that marks the start of the process.

- Function - WF_STANDARD.NOOP
- Result Type - None
- Required - Yes
- Prerequisite activities - None
- Item Attributes Set by Function - None
- Item Attributes Retrieved by Function - None

Define Project (Node 2)

This step opens the Oracle Project forms required to define a project.

- Message - Define Project
- Respond Message Attributes - Form PA_PAXPREPR_PROJECT
- Send Message Attributes

Define Cost Budget (Node 3)

This step opens the Oracle Project forms required to define the cost budget.

- Message - Define Cost Budget
- Respond Message Attributes -Form PA_PAXIBUEBU

Review Budget Approval (Node 4)

This step opens the Oracle Project forms required to review budget status for a project.

- Message - Review Budget Status
- Respond Message Attributes - Form PA_PAXBUEBU

Review Project Approval (Node 5)

This step opens the Oracle Project forms required to review project approval.

- Message - Review Project Status
- Respond Message Attributes -Form PA_PAXPREPR_PROJECT

Define Planning Group (Node 6)

This step opens the Oracle Master Scheduling / MRP forms required to define a planning group.

- Message - Define Planning Group
- Respond Message Attributes -Form MRP_FNDLVMUL_PLANNING_GROUP

Change Inventory Organization (Node 7)

This step opens the Oracle Master Scheduling / MRP forms required to change the Inventory organization.

- Message - Change Organization
- Respond Message Attributes - Form MRPCHORG

Define WIP Accounting Class (Node 8)

This step opens the Oracle Work in Process forms required to define the WIP accounting class.

- Message - Define WIP Accounting Class
- Respond Message Attributes - Form WIP_WIPSUMCL

Define Cost Group (Node 9)

This step opens the Oracle Cost Management forms required to define the cost group.

- Message - Define Cost Group
- Respond Message Attributes - Form CST_CSTFDCGA

Define Project Parameters (Node 10)

This step opens the Oracle Project Manufacturing form required to define the project parameters.

- Message - Define Project Parameters
- Respond Message Attributes - Form PJMFDPJP

Setup in Another Organization (Node 11)

This step refers the user back to Node 11 if additional organizations are desired for the project.

- Message - Continue Setup in Another Inventory Org?

Define Task Auto Assignment Rules (Node 12)

This step opens the Oracle Project Manufacturing form required to define the task auto assignment rules.

- Message - Define Task Auto Assignment Rules
- Respond Message Attributes -Form PJMFTAAR

Project Manufacturing Integration Exception Process

When you submit a Project Schedule Exception Notification request, Oracle Project Manufacturing uses Oracle Workflow technology in the background to handle the notification process. Oracle Workflow defines the approval notification options hierarchy available in the request parameters. You can use the Workflow Builder interface to modify your notification process.

The project manufacturing project schedule exception notification workflow consists of a single process, which is viewable in the Workflow Builder as a diagram. You can modify the objects and properties.

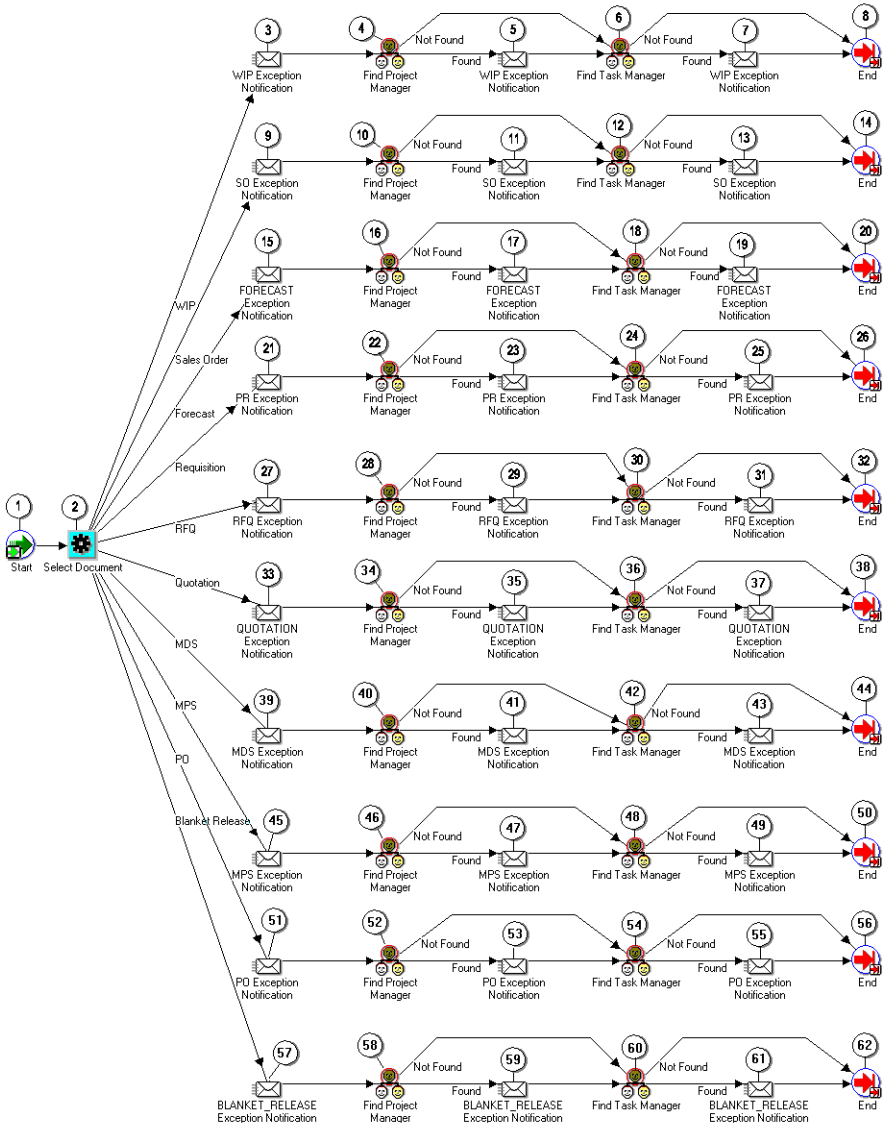
Customizing the Project Manufacturing Integration Exception Process

Processes can be customized using the Oracle Workflow Builder. When you customize the Project Manufacturing Project Schedule Exception Notification workflow, only those schedule exception notification requests that are submitted after you have customized it are affected. You can add or remove document types or alter the responsibilities to be notified for a given document type.

◗◗ To display the workflow in the Oracle Workflow Builder:

1. Choose Open from the File menu, and connect to the database.
2. Select PJM Project Schedule Exception Notification to open it.
3. Expand the data source, then expand the item type PJM Project Schedule Exception Notification.
4. Expand the Processes branch within the item type.
5. Double-click on the PJM Integration Exception Process to the display the diagram in a process window.

Figure B–3 PJM Integration Exception Process Diagram



Required Modifications

There are no required modifications for this workflow process.

You can customize the PJM Integration Exception process by adding or deleting steps to the process, by changing process names and descriptions, and by changing step icons.

Customization Example

You might choose to customize this process by adding planners or buyers to the notification cycle.

Customizations That Are Not Supported

Each type of customization is supported for the PJM Integration Exception Process. However, the order of steps must take prerequisites for each form opened into account for the process to operate smoothly.

Creating a New Custom Process

You can use the PJM Integration Exception Process as a basis for developing your own project definition processes.

The Project Manufacturing Project Schedule Exceptions Notifications Item Type

The Project Manufacturing Integration Exception process is associated with an item type called Project Manufacturing Project Schedule Notifications. All the available processes associated with the item type are listed under that item type in the Workflow Builder. Currently, the only available process for this item type is the Project Manufacturing Integration Exception process.

The Project Manufacturing Project Schedule Notifications item type also has numerous attributes associated with it. These attributes reference information in the demonstration application tables. The attributes are used and maintained by function activities as well as notification activities throughout the process.

Table B–3 Workflow Project Manufacturing Project Schedule Exceptions Notifications Item Type Attributes

Display Name	Type
Organization Name	Text
Document Type	Text

Table B–3 Workflow Project Manufacturing Project Schedule Exceptions Notifications Item Type Attributes

Display Name	Type
Date Type	Text
Tolerance Days	Number
Project Start Date	Date
Project End Date	Date
Task Start Date	Date
Task End Date	Date
Project Name	Text
Task Name	Text
Wip Job Name	Text
Job Start Date	Date
Job End Date	Date
Item Number	Text
Requestor	Text
Exception Subject	Text
Exception Body	Text
SO Number	Text
SO Requested Date	Date
SO Promised Date	Date
Forecast Name	Text
Forecast Start Date	Date
Forecast End Date	Date
Requisition Number	Text
Need by Date	Date
RFQ Number	Text
Due Date	Date
Quotation Number	Text

Table B–3 Workflow Project Manufacturing Project Schedule Exceptions Notifications Item Type Attributes

Display Name	Type
Effectivity Start Date	Date
Effectivity End Date	Date
MDS Name	Text
PO Number	Text
Requested Date	Date
Promised Date	Date
Release Date	Date
Project Number	Text
Task Number	Text
Status	Text
Quantity	Number
Job Type	Text
Start Quantity	Number
Quantity Completed	Number
Warehouse	Text
Ship to Location	Text
Ordered Quantity	Number
Delivered Quantity	Number
Forecast Set	Text
Project Manager	Role
Task Manager	Role
Open Form	Form
Item Description	Text
Line Number	Text

Summary of the Project Manufacturing Integration Exception Process

To view the properties of the Project Manufacturing Integration Exception Process, select the process in the navigation tree and choose Properties from the Edit menu. This process has a result type of None, indicating that when the process completes, it does not end with any particular result, such as End (Approved) or End (Rejected). Instead, its subprocesses end with specific results.

This process is runnable, indicating that it can be initiated as a top level process to run by making calls to the Workflow Engine *CreateProcess* and *StartProcess* APIs.

The process contains 62 activities, each represented by a node on Figure B-3. The workflow begins at node 1.

At node 2, this workflow branches depending on whether the document is a WIP, SO, Forecast, PR, RFQ, quotation, MDS, MPS, purchase order, or blanket release exception notification. If a choice is not made, the process is initiated for all options.

At nodes 3, 9, 15, 21, 27, 33, 39, 45, 51, and 57 the workflow notifies the requestor. locates the appropriate project manager for notification.

At nodes 4, 10, 16, 22, 28, 34, 40, 46, 52, and 58 the workflow locates the appropriate project manager for notification.

At nodes 5, 11, 17, 23, 29, 35, 41, 47, 53, and 59 the workflow sends notification to the appropriate project manager.

At nodes 6, 12, 17, 24, 30, 36, 42, 48, 54, and 60 the workflow locates the appropriate task manager for notification.

At nodes 7, 13, 18, 25, 31, 37, 43, 49, 55, and 61 the workflow sends notification to the appropriate task manager.

Project Manufacturing Integration Exception Process Activities

The following is a description of each activity listed by the activity's display name. You can create all the components for an activity in the graphical Workflow Builder except for the PL/SQL stored procedures that the function activities call. All function activities execute PL/SQL stored procedures which you must create and store in the Oracle RDBMS. The naming convention for the PL/SQL stored procedures is:

<PACKAGE>.<PROCEDURE>

<PACKAGE> is the name of the package that groups all of the procedures. <PROCEDURE> represents the name of the procedure.

To view the package and procedure names used by the Project Manufacturing Integration Exception process, view the Properties page for each function activity. For example, the function activity Set Document Type uses the <PACKAGE>.<PROCEDURE> name PO_APPROVAL_REMINDER_SV.SET_DOC_TYPE.

Start (Node 1)

This is a Standard function activity that simply marks the start of the process.

Select Document (Node 2)

This function activity determines the document type: WIP, SO, Forecast, PR, RFQ, quotation, MDS, MPS, purchase order, or blanket release exception notification.

Exception Notification to Requestor (Nodes 3, 9, 15, 21, 27, 33, 39, 45, 51, and 57)

This activity sends schedule exception notification to the requestor.

Find Project Manager (Node 4, 10, 16, 22, 28, 34, 40, 46, 52, and 58)

This activity locates the appropriate project manager(s) for notification.

Exception Notification to Project Manager (Node 5, 11, 17, 23, 29, 35, 41, 47, 53, and 59)

This activity sends schedule exception notification to the project manager(s).

Find Task Manager (Node 6, 12, 17, 24, 30, 36, 42, 48, 54, and 60)

This activity locates the appropriate task manager(s) for notification.

Exception Notification to Task Manager (Node 7, 13, 18, 25, 31, 37, 43, 49, 55, and 61)

This activity sends schedule exception notification to the task manager(s).

Glossary

borrow payback

Transfer of material between projects where applicable unit cost is moved from the lending project to the borrowing project. The transaction is recorded, and repayment is made to the lending project when a replenishment order is received by the borrowing project. The original cost of the material is transferred to the lending project and the borrowing project absorbs the difference in cost.

common locator

A locator flexfield without project or task segment values. A common locator represents a physical location.

common project

A project, defined in Oracle Projects, that will hold the costs for the common (non-project) items. Every common costed transaction will be processed through the cost collector and receive the “common project” destination.

cost element

A classification for the cost of an item, including material, material overhead, resource, outside processing, and overhead.

cost group

An attribute of a project which allows the system to hold item unit costs at a level below the inventory organization. Within an organization, an item may have more than one cost if it belongs to different cost groups. Item costing can be specific to a single project if each project has a distinct cost group, or specific to a group of projects if all projects in that group are assigned to the same cost group.

cost sub–element

A subdivision of cost element. You can define unlimited cost sub–elements for each cost element.

date effectivity

Method to control the configuration of an assembly by assigning date ranges for the parent/component relationships. Component selection by MPS and MRP is based upon which components are valid for the date the components are required.

default material task

Task to which project material costs are allocated if no matching rules are found for material task assignment. It is a rule with no material task assignment criteria specified.

default resource task

Task to which project resource costs are allocated if no matching rules are found for resource task assignment. It is a rule with no resource task assignment criteria specified.

effectivity

Effectivity is used to control the addition or removal of a component or an operation from a bill of material or an assembly process. Effectivity control may be managed by model/unit number (also known as serial number effectivity) or by date.

end item unit number

End Item Unit Number, sometimes abbreviated as Unit Number, uniquely identifies which bill of material to be used for building a specific Model/Unit Number Effectivity controlled item.

Exchange Rate Variance (ERV)

The difference between the exchange rate for a foreign-currency invoice and its matched purchase order.

expenditure organization

For timecards and expense reports, the organization to which the incurring employee is assigned, unless overridden by organization overrides. For usage, supplier invoices, and purchasing commitments, the incurring organization entered on the expenditure.

expenditure type

An implementation–defined classification of cost that you assign to each expenditure item. Expenditure types are grouped into cost groups (expenditure categories) and revenue groups (revenue categories). Expenditure types include: IPV, ERV, Tax, Freight, and Miscellaneous.

invoice charges

Includes Invoice Price Variance (IPV), Exchange Rate Variance (ERV), Freight, Tax, and Miscellaneous Charges. In Release 11i the invoice charges are transferred from Oracle Payables to Oracle Projects for each project using the invoice charge transfer process.

Invoice Price Variance (IPV)

Difference between the purchase price and the invoice price paid for a purchase order receipt. Upon invoice approval, Oracle Payable automatically records Invoice Price Variance to invoice price variance account.

lot type seiban

Also known as Mass production seiban. Project represents a model, task represents a lot for that model; Project+Task represent the Seiban Number; all costs for all lots are collected into a project for analysis purposes.

/model/unit number effectivity

A method of controlling what components go into making an end-item based on an assigned end item model / unit number. An end item model / unit number field is an alphanumeric field that is usually concatenated with a model prefix and a sequential unit number, e.g. FAN-0001. Unique configurations are specific by defining parent-component relationships for a particular end item model / unit number. Multiple unique configurations can be established for a single end-item part by assigning different model / unit number effectivities.

A Model is a control element that identifies a particular configuration of an end item and associates it with one or more contracts (e.g. Boeing 747). However, this information is embedded as a prefix in naming the unique end item model / unit number identifier, there is no link to ATO / PTO model items. A unit is a specific end item (e.g. a tail number) within the model designation.

Subassemblies or components at levels beyond major assembly can be under date effectivity control if there is no need to identify its configuration by end item unit number. You need to decide how deep in your bill structure that you are planning to use Model / Unit Number Effectivity into the inventory so that you can

distinguish your various configuration. Once you identify a part to be under model/unit number effectivity control, all its parent assemblies has to be under model/unit number effectivity control.

Component selection by MPS and MRP is based upon which components are valid for the specific end item model/unit numbers.

permanent transfers

See **project transfers**

planning group

A grouping mechanism that allows you to group multiple projects for planning and netting purposes. Projects within the same planning group can share supply.

project

A unit of work that can be broken down into one or more tasks. A project is the unit of work for which you specify revenue and billing methods, invoice formats, a managing organization and project manager, and bill rate schedules.

You can charge costs to a project, and you can generate and maintain revenue, invoice, unbilled receivable, and unearned revenue information for a project.

project blanket release

An actual order of goods and services with a project and task reference against a blanket purchase agreement.

project drop shipment

A process of having the supplier provide the items directly to your customer for a project or task. The sales order is linked to a project and task. The purchase requisition is linked to the same project and task. The procurement cost is collected in Oracle Projects.

project flow schedule

Flow schedule with project and task references.

project inventory

Inventory owned by a project and task. You can segregate inventory by project using project locators.

project job

A standard or non–standard WIP discrete job with a project and task reference.

project kiosk

Kiosk to view information related to a project for manufacturing and/or project costing activities. The manufacturing information viewed could be, WIP jobs, line schedules, procurement activities, manufacturing plans and so on. Project costing information such as expenditures, commitments can also be viewed here.

project locator

A locator with project and task segment values. A project locator is a logical partition of a physical location by project and task.

project manufacturing

A type of manufacturing environment where production requirements are driven by large projects. You can plan, schedule, process, and cost against a specific project or a group of projects. If Oracle Project Manufacturing is installed and the Project References Enabled and Project Control Level parameters are set in the Organization Parameters window, you can assign project and, if required, task references to sales orders, planned orders, jobs, requisitions, purchase orders, and other entities within Oracle Manufacturing. If the Project Cost Collection Enabled parameter is also set, you can collect and transfer manufacturing cost to Oracle Projects.

project manufacturing costing

A series of features in Project Manufacturing designed to support manufacturing costing in a project manufacturing environment. Project Manufacturing Costing allows you to track item cost by project or a group of projects, and transfer project related manufacturing transaction costs to Oracle Projects.

project manufacturing organization

A new organization classification added in Release 11i. Allows the organization to be setup for Project manufacturing activities. Also see project manufacturing.

project move orders

Manage project material movement between subinventories by creating (manually or automatically), approving, and transacting material(project) move orders.

Project MRP

A series of features in Project Manufacturing designed to support manufacturing planning processes in a project manufacturing environment. Project MRP allows you to segment all sources of supply and demand by project and task. This allows the planning process to net and plan supply by project and task.

project purchase order

A purchase order with a project or project and task reference.

project requisition

A requisition with a project or project and task reference.

project sales order

A sales order with a project or project and task reference.

project transfers

Transfer of material between projects where the cost is moved with the material and there is no repayment required.

project work order-less completion

A WIP transaction that you can complete assemblies for a project and task without referencing a job or repetitive schedule. Project work order-less completion automatically backflushes all operation pull, assembly pull, and push components from project locators for hard pegged components and from common locators for non-hard pegged components.

seiban kiosk

Kiosk to view data related to manufacturing activities for a seiban number. The manufacturing information viewed could be WIP jobs, line schedules, procurement activities, manufacturing plans and so on.

seiban manufacturing

A type of manufacturing environment where demand and supply are identified by Seiban numbers to peg supply to demand. This numbering system is widely used in Japan and Korea.

seiban number

An abbreviation for a manufacturing number in Japan and Korea. It is the key production control number for all manufacturing entities including sales order, planned order, requisition, purchase order, and discrete job.

serial effectivity

See **model/unit number effectivity**

serial number control

An Oracle Manufacturing technique for enforcing use of serial numbers during a material transaction thus enabling the tracking of serialized items throughout their movement in and out of inventory.

soft pegging

A pegging item attribute value. You can peg supply to demand for items with soft pegging.

task

A subdivision of project work. Each project can have a set of top level tasks and a hierarchy of subtasks below each top level task. *See also* **work breakdown structure.**

task kiosk

Kiosk to view manufacturing information related to a project-task. The manufacturing information viewed could be WIP jobs, line schedules, procurement activities, manufacturing plans and so on.

temporary transfers

See **borrow payback**

unit number

See **end item unit number**

unit number effectivity

See **model/unit number effectivity**

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