

# Oracle® Process Manufacturing

Inventory API User's Guide

Release 11i

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Oracle Process Manufacturing Inventory API User's Guide, Release 11i

Part No. A82921-04

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# Contents

<b>Audience for This Guide</b> .....	ix
<b>How To Use This Guide</b> .....	ix
Documentation Accessibility .....	x
<b>Other Information Sources</b> .....	x
Online Documentation.....	x
Related User's Guides.....	xi
Guides Related to All Products .....	xi
User Guides Related to This Product .....	xi
Installation and System Administration .....	xvi
Other Implementation Documentation.....	xviii
Training and Support.....	xix
<b>Do Not Use Database Tools to Modify Oracle Applications Data</b> .....	xx
<b>About Oracle</b> .....	xxi
<b>Your Feedback</b> .....	xxi

## 1 OPM Inventory APIs

<b>Introducing the OPM Inventory APIs</b> .....	1-2
OPM Inventory API Features .....	1-3
OPM Inventory API Support Policy .....	1-3
Technical Requirements .....	1-3
Input Data Sources .....	1-4
Wrapper Function .....	1-4
Stored Procedure .....	1-5
<b>Basic Business Needs</b> .....	1-5
<b>Major Features</b> .....	1-6

Item Create API.....	1-6
Item Lot/Sublot Conversion API.....	1-6
OPM Inventory Quantities API.....	1-6
Lot Create API.....	1-7
API Architecture.....	1-8
API Package Details.....	1-8
<b>OPM Inventory API Bill of Materials.....</b>	<b>1-10</b>

## 2 OPM Inventory API Usage

<b>Item Create API Wrapper - Business Function.....</b>	<b>2-2</b>
Wrapper Function - Input Data Sources.....	2-2
Stored Procedures Overview.....	2-2
Stored Procedure Execution.....	2-3
<b>Calling the API Interface Code.....</b>	<b>2-4</b>
<b>Item Create API Wrapper - Input Structure.....</b>	<b>2-5</b>
<b>Item Create API Wrapper - ASCII Flat File Layout.....</b>	<b>2-5</b>
<b>Log Files.....</b>	<b>2-5</b>
<b>Calling the API Code - Example.....</b>	<b>2-5</b>
<b>Item Create API Wrapper - Code Example.....</b>	<b>2-6</b>

## 3 Technical Overview

<b>Item Create.....</b>	<b>3-2</b>
Structure for Item Create Public APIs.....	3-2
<b>Item Lot/Sublot Conversion.....</b>	<b>3-3</b>
Structure for Item Lot/Sublot Conversion Public APIs.....	3-3
<b>Inventory Quantities.....</b>	<b>3-4</b>
Structure for Inventory Quantities Public APIs.....	3-4
<b>Lot Create.....</b>	<b>3-5</b>
Structure for Lot Create Public APIs.....	3-5
<b>Standard Parameters.....</b>	<b>3-6</b>
Value-ID Conversion.....	3-7

## 4 Business Objects

<b>Item Create.....</b>	<b>4-2</b>
-------------------------	------------

Parameters and Interface.....	4-2
<b>Item Lot/Sublot Conversion .....</b>	<b>4-9</b>
Item Lot/Sublot Conversion API - Parameters.....	4-9
<b>Inventory Quantities .....</b>	<b>4-11</b>
Inventory Quantities - Parameters.....	4-11
<b>Lot Create.....</b>	<b>4-16</b>
Lot Create API - Parameters .....	4-16
<b>A Messages and Errors</b>	
Handling Messages .....	A-1
Interpreting Error Conditions .....	A-3
Understanding Error Messages.....	A-3
File Error Messages .....	A-8
<b>B How to Get Your OPM Inventory APIs Running</b>	
<b>C XML Transactions</b>	
<b>OPM Inventory XML Transactions.....</b>	<b>C-1</b>
Installation and Setup Procedures .....	C-2
DTDs.....	C-4
<b>Setup.....</b>	<b>C-6</b>
XML Gateway Prerequisites .....	C-6
Copy Prebuilt XML Message Maps .....	C-8
Workflow Business Event System Prerequisites.....	C-9
<b>Oracle Workflow Events and Subscriptions .....</b>	<b>C-9</b>
Events .....	C-9
Subscriptions .....	C-9
Workflow Error Notification .....	C-10
Confirmation Business Object Document.....	C-12
<b>Transaction Detail: Inbound OPM Inventory Create Item.....</b>	<b>C-14</b>
Workflow Troubleshooting.....	C-14
Message Map Detail: GMI_ITEM_OAG71_IN.....	C-14
<b>Transaction Detail: Inbound OPM Inventory Create Lot .....</b>	<b>C-35</b>
Workflow Troubleshooting.....	C-35

Message Map Detail: GMI_LOT_OAG71_IN .....	C-35
<b>Transaction Detail: Inbound OPM Inventory Item Lot Conversion</b> .....	C-50
Workflow Troubleshooting .....	C-50
Message Map Detail: GMI_LTCNV_OAG71_IN .....	C-50
<b>Transaction Detail: Inbound OPM Inventory Quantity</b> .....	C-59
Workflow Troubleshooting .....	C-59
Message Map Detail: GMI_QTY_OAG71_IN.....	C-59

## Glossary

## Index

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# Send Us Your Comments

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**Part No. A82921-04**

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

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



## Audience for This Guide

Welcome to Release 11i of the *Oracle Process Manufacturing Inventory API User's Guide*.

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

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

If you have never used *Oracle Process Manufacturing*, Oracle suggests you attend one or more of the *Oracle Process 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's 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 Process Manufacturing*.

- Chapter 1 describes how APIs are used, the basic business need of APIs, and the different OPM Inventory APIs offered.
- Chapter 2 describes how to use the OPM Inventory APIs.
- Chapter 3 describes the technical aspect of the APIs.
- Chapter 4 describes the business objects for each API.
- Appendix A describes messages and error codes.
- Appendix B provides a useful guide and examples for using the APIs.
- Appendix C describes the usage of the OPM Inventory XML Gateway APIs.

## Documentation Accessibility

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

### Accessibility of Code Examples in Documentation

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

## Other Information Sources

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

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

## Online Documentation

All Oracle Applications documentation is available online (HTML or PDF).

- **Online Help** - The new features section in the HTML help describes new features in 11i. This information is updated for each new release of *Oracle Process Manufacturing*. The new features section also includes information about any features that were not yet available when this guide was printed. For example, if your administrator has installed software from a mini-packs an upgrade, this document describes the new features. Online help patches are available on MetaLink.

- **11i Features Matrix** - This document lists new features available by patch and identifies any associated new documentation. The new features matrix document is available on MetaLink.
- **Readme File** - Refer to the readme file for patches that you have installed to learn about new documentation or documentation patches that you can download.

## Related User's Guides

*Oracle Process Manufacturing* shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other user's guides when you set up and use *Oracle Process 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>.

## Guides Related to All Products

### Oracle Applications User's Guide

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

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

## User Guides Related to This Product

### Accounting Setup User's Guide

The OPM Accounting Setup application is where users set up global accounting attributes about the way financial data will be collected by OPM. These attributes include such things as account keys, financial calendars, and account segments. Since OPM is closely integrated with Oracle General Ledger (GL), much of the

attributes are defined in the Oracle GL instead of OPM, and therefore, the windows are display only within OPM. The *Oracle Process Manufacturing Accounting Setup User's Guide* describes how to setup and use this application.

### **Cost Management User's Guide**

The OPM Cost Management application is used by cost accountants to capture and review the manufacturing costs incurred in their process manufacturing businesses. The *Oracle Process Manufacturing Cost Management User's Guide* describes how to setup and use this application.

### **Manufacturing Accounting Controller User's Guide**

The Manufacturing Accounting Controller application is where users define the impact of manufacturing events on financials. For example, event RCPT (Inventory Receipts) results in a debit to inventory, a credit to accrued accounts payable, a debit or a credit to purchase price variance, etc. These impacts are predefined in the Manufacturing Accounting Controller application so users may begin using OPM to collect financial data out-of-the-box, however, they may also be adjusted per your business needs. The *Oracle Process Manufacturing Manufacturing Accounting Controller User's Guide* describes how to setup and use this application.

### **Oracle Financials Integration User's Guide**

Since OPM is closely integrated with Oracle General Ledger, financial data that is collected about the manufacturing processes must be transferred to the Oracle Financials applications. The OPM Oracle Financials Integration application is where users define how that data is transferred. For example, users define whether data is transferred real time or batched and transferred at intervals. The *Oracle Process Manufacturing Oracle Financials Integration User's Guide* describes how to setup and use this application.

### **Inventory Management User's Guide**

The OPM Inventory Management application is where data about the items purchased for, consumed during, and created as a result of the manufacturing process are tracked. The *Oracle Process Manufacturing Inventory Management User's Guide* includes information to help you effectively work with the Oracle Process Manufacturing Inventory application.

## **Physical Inventory User's Guide**

Performing physical inventory count is the most accurate way to get an accounting of all material quantities purchased, manufactured, and sold, and update your onhand quantities accordingly. The OPM Physical Inventory application automates and enables the physical inventory process. The *Oracle Process Manufacturing Physical Inventory User's Guide* describes how to setup and use this application.

## **Order Fulfillment User's Guide**

The OPM Order Fulfillment application automates sales order entry to reduce order cycle time. Order Fulfillment enables order entry personnel to inform customers of scheduled delivery dates and pricing. The *Oracle Process Manufacturing Order Fulfillment User's Guide* describes how to setup and use this application.

## **Purchase Management User's Guide**

OPM Purchase Management and Oracle Purchasing combine to provide an integrated solution for Process Manufacturing. Purchase orders are entered in Oracle Purchasing and received in OPM. Then, the receipts entered in OPM are sent to Oracle Purchasing. The *Oracle Process Manufacturing Purchase Management User's Guide* describes how to setup and use this integrated solution.

## **Using Oracle Order Management with Process Inventory Guide**

Oracle Process Manufacturing and Oracle Order Management combine to provide an integrated solution for process manufacturers. The manufacturing process is tracked and handled within Oracle Process Manufacturing, while sales orders are taken and tracked in Oracle Order Management. Process attributes, such as dual UOM and lot control, are enabled depending on the inventory organization for the item on the sales order. Order Management accepts orders entered through Oracle Customer Relationship Management (CRM). Within CRM, orders can originate from TeleSales, Sales Online, and iStore, and are booked in Order Management, making the CRM suite of products available to Process customers, through Order Management. The *Oracle Order Management User's Guide* and *Using Oracle Order Management with Process Inventory Guide* describes how to setup and use this integrated solution.

## **Process Execution User's Guide**

The OPM Process Execution application lets you track firm planned orders and production batches from incoming materials through finished goods. Seamlessly integrated to the Product Development application, Process Execution lets you convert firm planned orders to single or multiple production batches, allocate

ingredients, record actual ingredient usage, and then complete and close production batches. Production inquiries and preformatted reports help you optimize inventory costs while maintaining a high level of customer satisfaction with on-time delivery of high quality products. The *OPM Process Execution User's Guide* presents overviews of the tasks and responsibilities for the Production Supervisor and the Production Operator. It provides prerequisite setup in other applications, and details the windows, features, and functionality of the OPM Process Execution application.

### **Integration with Advanced Planning and Scheduling User's Guide**

Oracle Process Manufacturing and Oracle Advanced Planning and Scheduling (APS) combine to provide an integrated solution for process manufacturers that can help increase planning efficiency. The integration provides for constraint-based planning, performance management, materials management by exception, mixed mode manufacturing that enables you to choose the best method to produce each of your products, and combine all of these methods within the same plant/company. The *Oracle Process Manufacturing Integration with Advanced Planning and Scheduling User's Guide* describes how to setup and use this application.

### **MPS/MRP and Forecasting User's Guide**

The Oracle Process Manufacturing Material Requirements Planning (MRP) application provides long-term "views" of material demands and projected supply actions to satisfy those demands. The Master Production Scheduling (MPS) application lets you shorten that view to a much narrower and immediate time horizon, and see the immediate effects of demand and supply actions. The *Oracle Process Manufacturing MPS/MRP and Forecasting User's Guide* describes how to setup and use this application.

### **Capacity Planning User's Guide**

The OPM Capacity Planning User's Guide describes the setup required to use OPM with the Oracle Applications Advanced Supply Chain Planning solutions. In addition, Resource setup, used by the OPM Production Execution and New Product Development applications, is also described.

### **Using Oracle Process Manufacturing with Oracle Manufacturing Scheduling**

Oracle Process Manufacturing integrates with Oracle Manufacturing Scheduling to manage and utilize resources and materials. Through the Process Manufacturing application, you set up manufacturing, inventory, procurement and sales order data. Through the Manufacturing Scheduling application, you can optimize the

schedule based on resource and component constraints and user predefined priorities. Using different optimization objectives, you can tailor Manufacturing Scheduling to meet your needs.

Using Oracle Manufacturing Scheduling helps you improve productivity and efficiency on your shop floor. By optimally scheduling shop floor jobs, and being able to quickly react to unplanned constraints, you can lower manufacturing costs, increase resource utilization and efficiency, and increase customer satisfaction through improved on-time delivery. The *Using Oracle Process Manufacturing with Oracle Manufacturing Scheduling User's Guide* describes how to setup and use this integrated solution.

### **Product Development User's Guide**

The Oracle Process Manufacturing Product Development application provides features to manage formula and laboratory work within the process manufacturing operation. It lets you manage multiple laboratory organizations and support varying product lines throughout the organization. You can characterize and simulate the technical properties of ingredients and their effects on formulas. You can optimize formulations before beginning expensive laboratory test batches. Product Development coordinates each development function and enables a rapid, enterprise-wide implementation of new products in your plants. The *Oracle Process Manufacturing Product Development User's Guide* describes how to setup and use this application.

### **Quality Management User's Guide**

The Oracle Process Manufacturing Quality Management application provides features to test material sampled from inventory, production, or receipts from external suppliers. The application lets you enter specifications and control their use throughout the enterprise. Customized workflows and electronic record keeping automate plans for sampling, testing, and result processing. You can compare specifications to assist in regrading items, and match customer specifications. Aggregate test results and print statistical assessments on quality certificates. Several preformatted reports and inquiries help manage quality testing and reporting. The *Oracle Process Manufacturing Quality Management User's Guide* describes how to set up and use this application.

### **Regulatory Management User's Guide**

The Oracle Process Manufacturing Regulatory Management application generates the Material Safety Data Sheets (MSDSs) required by authorities to accompany hazardous materials during shipping. You can create MSDSs from OPM Formula

Management with Regulatory or Production effectivities. The *Oracle Process Manufacturing Regulatory Management User's Guide* describes how to setup and use this application.

## **Implementation Guide**

The *Oracle Process Manufacturing Implementation Guide* offers information on setup. That is, those tasks you must complete following the initial installation of the Oracle Process Manufacturing software. Any tasks that must be completed in order to use the system out-of-the-box are included in this manual.

## **System Administration User's Guide**

Much of the System Administration duties are performed at the Oracle Applications level, and are therefore described in the *Oracle Applications System Administrator's Guide*. The *Oracle Process Manufacturing System Administration User's Guide* provides information on the few tasks that are specific to OPM. It offers information on performing OPM file purge and archive, and maintaining such things as responsibilities, units of measure, and organizations.

## **API User's Guides**

Public Application Programming Interfaces (APIs) are available for use with different areas of the Oracle Process Manufacturing application. APIs make it possible to pass information into and out of the application, bypassing the user interface. Use of these APIs is documented in individual manuals such as the *Oracle Process Manufacturing Inventory API User's Guide*, *Oracle Process Manufacturing Process Execution API User's Guide*, *Oracle Process Manufacturing Product Development Formula API User's Guide*, *Oracle Process Manufacturing Product Development Recipe API User's Guide*, *Oracle Process Manufacturing Quality Management API User's Guide*, and the *Oracle Process Manufacturing Cost Management API User's Guide*. Additional API User's Guides are periodically added as additional public APIs are made available.

# **Installation and System Administration**

## **Oracle Applications Concepts**

This guide provides an introduction to the concepts, features, technology stack, architecture, and terminology for Oracle Applications Release 11i. It provides a useful first book to read before an installation of Oracle Applications. This guide

also introduces the concepts behind Applications-wide features such as Business Intelligence (BIS), languages and character sets, and Self-Service Web Applications.

## **Installing Oracle Applications**

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

## **Upgrading Oracle Applications**

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

## **Maintaining Oracle Applications**

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

## **Oracle Applications System Administrator's Guide**

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

## **Oracle Alert User's Guide**

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

## **Oracle Applications Developer's Guide**

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

## **Oracle Applications User Interface Standards for Forms-Based Products**

This guide contains the user interface (UI) standards followed by the Oracle Applications development staff. It describes the UI for the Oracle Applications products and how to apply this UI to the design of an application built by using Oracle Forms.

## **Other Implementation Documentation**

### **Oracle Applications Product Update Notes**

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

### **Multiple Reporting Currencies in Oracle Applications**

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

### **Multiple Organizations in Oracle Applications**

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

### **Oracle Workflow Guide**

This guide explains how to define new workflow business processes as well as customize existing Oracle Applications-embedded workflow processes. You also use

this guide to complete the setup steps necessary for any Oracle Applications product that includes workflow-enabled processes.

### **Oracle Applications Flexfields Guide**

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

### **Oracle eTechnical Reference Manuals**

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

### **Oracle Manufacturing APIs and Open Interfaces Manual**

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

### **Oracle Order Management Suite APIs and Open Interfaces Manual**

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

### **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.

## **Training and Support**

### **Training**

Oracle offers a complete set of training courses to help you and your staff master *Oracle Process Manufacturing* and reach full productivity quickly. These courses are

organized into functional learning paths, so you take only those courses appropriate to your job or area of responsibility.

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

## Support

From on-site support to central support, our team of experienced professionals provides the help and information you need to keep *Oracle Process 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<sup>®</sup> server, and your hardware and software environment.

## Do Not Use Database Tools to Modify Oracle Applications Data

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

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

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

When you use Oracle Applications to modify your data, Oracle Applications automatically checks that your changes are valid. Oracle Applications also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to

track who has changed your information because SQL\*Plus and other database tools do not keep a record of changes.

## About Oracle

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

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

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## OPM Inventory APIs

This document describes the Application Program Interfaces (APIs) that support external interfaces to the OPM Inventory tables. The topics discussed are:

- Introducing the OPM Inventory APIs
- Basic Business Needs
- Major Features
- OPM Inventory API Bill of Materials

## Introducing the OPM Inventory APIs

OPM is a key component to Enterprise Resource Planning (ERP) solutions. It is a key component to Consumer Packaged Goods (CPG) and Energy and Pharmaceutical industries. In addition, OPM is deployed within customer implementations integrated to legacy systems and other solution component products.

Within this environment, the need to converge, integrate, or interface to third party systems together with other Oracle Application suites is becoming more of a business requirement, and a needed development strategy.

With the use of application program interfaces, OPM integrates with touch points either as or within an ERP solution. APIs are a documented, supported method for communicating within or between applications. The APIs support external interfaces to OPM.

These APIs support the OPM Inventory application. These interfaces make use of the standard functionality and logic implemented in that application. The APIs provide hooks where customers can interface their own programs. This guide describes how the stored procedures are called, the parameters that are required and those that are optional, and the values that are returned to the calling program. This includes error conditions that can arise.

The APIs and related functions discussed in this document are:

- Item Create API
- Item Lot/Sublot Conversion API
- Inventory Quantities API
- Lot Create API

### What Is In This Document

This document describes the basic business needs, major features, architecture, and components for the insert, update, and delete features for the OPM Inventory APIs. Much of the application is divided into application-specific objects that let you link OPM functionality into your own programs. The interfaces can make use of the standard functionality and logic implemented in the OPM Inventory application.

OPM Inventory APIs are currently written in PL/SQL that are called by your own programs. To make use of these APIs, code your wrapper function that passes the appropriate parameters to the APIs. Your program is responsible for connecting to a database before calling an API function, and disconnecting from the database upon return. You can also write log files before calling and after returning from a

function. If there is a problem during execution of a call, then the APIs return one of the following status codes:

- S for success
- E for error
- U unknown or unexpected status

## OPM Inventory API Features

- Creating Updating and Deleting Information
- Proper Encapsulation
- Synchronous Processing Following the Business Hierarchy
- Detailed and Translatable Error Messages

## OPM Inventory API Support Policy

OPM Inventory APIs are supported by Oracle. This means:

- Oracle provides objects and libraries needed to use the APIs and the documentation for their use.
- Oracle ensures that the APIs function as designed.
- Oracle does not support customer generated programs that use the APIs.

## Technical Requirements

OPM Inventory APIs are designed to operate in an OPM 11i environment only.

The procedure makes use of the following standard Oracle Applications packages:

- FND\_API - the standard Oracle Applications API version checking function. This is used by the stored procedure to check for a valid API version number and also contains constant variables such as TRUE and FALSE.
- FND\_MESSAGE - the standard Oracle Applications messaging function. This is used by the stored procedure to report status and error handling.
- FND\_PUB\_MSG - the standard Oracle Applications message retrieval function, used to search the procedure messages.

These packages are part of the 11i Oracle Applications installation. Refer to the *Oracle Applications Coding Standards* guide for further details.

## Input Data Sources

### Flat File

Input data to the user wrapper function comes from a flat file source. This is processed by the wrapper and header information, passed as parameters, to the stored procedure in a synchronous mode. However, along with the standard parameters, the header information is passed as a PL/SQL table. In this mode, the calling function monitors the success or failure (return code) from the called procedure. It also provides an option to COMMIT work done by the procedure.

### Batch File

Input data to the user wrapper function comes from a batch file. This is processed by the wrapper and header information passed, as parameters, to the stored procedure in an asynchronous mode. In this mode, the calling function does not monitor the success or failure of each individual record. The Oracle Message FND\_PUB\_MSG functionality is used to audit the calls.

### Online User Interface (UI)

Input data to the user wrapper function comes from a window or other user interface. This is processed by the UI and the details passed, as parameters, to the stored procedure in a synchronous mode. In this mode, the UI calling function monitors the success or failure (return code) from the called procedure. It also provides an option to COMMIT work done by the procedure.

## Wrapper Function

Windows are generally used as wrapper functions. The wrapper function is responsible for collating the details required as input parameters to the stored procedure, forwarding these in the call, and monitoring the return code. The stored procedure returns three possible return code:

- S for success
- E for error
- U for unknown or unexpected status

Based on the return, the wrapper function searches the Oracle Messages File for the stored procedure to determine a COMMIT of the transaction or not.

## Stored Procedure

The stored procedure is called with the appropriate parameters forwarded in a PL/SQL table format. The procedure validates each record from this table and then processes the appropriate functional logic as required. The procedure writes appropriate messages to the Oracle Messages table. These are informational as determined by the logic. These are interrogated by the calling wrapper function through the GET MESSAGES functionality.

The stored procedure calls other validation procedures in the course of its execution; a modular approach has been adopted. Functions called by these procedures do not use IN/OUT parameters. These have been removed from the Oracle 8 coding standards.

On successful completion of the procedure, a success unit is in place that can be optionally COMMITTED. The decision as to whether a COMMIT is issued on successful completion is under the control of the calling code and deliberately outside the scope of the API procedures.

## Basic Business Needs

Following are some of the important characteristics that these APIs have:

### **Code Reuse**

You can maximize code reuse from all application development tools, including PL/SQL, Oracle Forms, and Oracle Reports.

### **Ease of Integration**

You can integrate APIs into other applications and enabling technology, such as Oracle Workflow Server, Oracle Internet Commerce & Oracle WebSystem, and Oracle EDI Gateway.

### **Insulation from Changes**

You can encapsulate the structure of schema to prevent changing schema structures from affecting other applications.

### **Consistent Behavior**

You can hide Object logic specific to an application from other applications, and to ensure that this logic is correctly invoked by other applications and customers.

### **Robust Validation**

You can fully validate all incoming information into Oracle Applications.

## **Major Features**

In order to support requirements mentioned in the “Basic Business Needs” topic, new APIs support the following functionality as business object - Item Create, Item Lot/Sublot Conversion, Inventory Quantities, and Lot Create:

### **Item Create API**

This stored procedure is concerned with creating an inventory item function within the OPM Inventory application. The procedure is intended as a create function only, used primarily to load item data from legacy systems on implementation. The API does not let Item Update or Unit of Measure Conversion maintenance.

### **Item Lot/Sublot Conversion API**

This stored procedure is concerned with the create an item lot/sublot unit of measure conversion function within the OPM Inventory application. The procedure is intended as a create function only. The create function is used primarily to load item data from legacy systems on implementation.

### **OPM Inventory Quantities API**

This stored procedure is concerned with the following functions within the OPM Inventory application:

- Create inventory immediate
- Adjust inventory immediate
- Move inventory immediate
- Change lot status immediate
- Change QC grade immediate
- Create inventory journal
- Adjust inventory journal
- Move inventory journal
- Change lot status journal

- Change QC grade journal

## **Lot Create API**

This stored procedure is concerned with the create a lot for an inventory item function within the OPM Inventory application.

The procedure is intended as a create function only, used primarily to load item lot data from legacy systems on implementation. The Lot Create API does not do Lot Update, or Delete.

## API Architecture

APIs use a layered architecture. From top to bottom these layers are:

- Wrappers and third party code - the top layer
- Public layer
- Group layer - callable from the private layer
- Private layer - where there are validation and database access layers

## API Package Details

Each functional area provided by the APIs has both a public and a private package. Each possesses a package specification and a package body.

The APIs use a layered architecture. Third party and Oracle-supplied wrapper code only access the functions, procedures, and variables that are contained in the public and group package specifications. Private packages are accessed from the group code.

API packages are named according to the function they provide. The names begin with GMI followed by:

- P (public)
- V (private)
- G (group)

The next three letters define the package use, and result in the following package names:

- GMIPAPI - for the top level public API routines. These routines take in raw data in the form of PL/SQL records and make all the required database calls to find surrogate keys.
- GMIGAPI - for the group level API routines. These are called by the routines in the GMIPAPI package and are callable by third party code, if the required data is available.
- GMIGUTL - for utility routines called by all layers of the API code. They are also callable from third party and wrapper programs.

These three packages are the only ones that are called from application code. In addition, the following packages exist to support them:

- GMIVITM - for all internal processing (for example, validation) to support item creation.
- GMIVLOT - for all internal processing to support lot creation.
- GMIVILC - for all internal processing for item/lot conversion.
- GMIVQTY - for all internal processing to support item quantity processing.
- GMIVXFR - for all internal processing to support transfer processing.
- GMIVDBL - for all simple database layer processing.

Several packages are available for the more complex database processing involving inventory transactions for the `ic_summ_inv`, `ic_loct_inv`, `ic_tran_pnd` and `ic_tran_cmp` tables as follows:

- GMIPTXN - Public transaction engine API routines. These are the only routines in the transaction processor that are called publicly.
- GMIVTXN - Private transaction engine processing routines.
- GMIVBUS - Business logic for `ic_summ_inv` manipulation.
- GMIVBUL - Business logic for `ic_loct_inv` manipulation.
- GMIVPND - Database routines for `ic_tran_pnd`.
- GMIVCMP - Database routines for `ic_tran_cmp`.
- GMIVSUM - Database routines for `ic_summ_inv`.
- GMIVLOC - Database routines for `ic_loct_inv`.

The API release also includes some wrappers that are used to process flat data files. They are included more as an example of how the public APIs are called rather than a supported product, since they have to be modified to suit a particular installation.

The wrappers are:

- GMIPITW - Wrapper for item creation.
- GMIPLOW - Wrapper for lot creation.
- GMIPILW - Wrapper for item/lot UOM conversion creation.
- GMIPQTW - Wrapper for quantity transactions.

When the intracompany transfer package is finalized, there is a wrapper (GMIPXFW).

The files that contain the packages take the previously stated names and add an S for the specification or B for the package body. The file type is .pls and it is written in lowercase letters.

## OPM Inventory API Bill of Materials

The following is a list of packages and files that are delivered with the OPM Inventory APIs. These must be on your system for your interface to compile and link properly.

Package Name	File Names	Description
Create_Item	GMIPAPIS.pls GMIPAPIB.pls	Public Inventory Management package that the user defined function calls. The business API is used for creating an item.
Create_Lot	GMIPAPIS.pls GMIPAPIB.pls	Public Inventory Management package that the user defined function calls. The business API is used for creating a lot.
Create_Item_Lot_UOM_Conv	GMIPAPIS.pls GMIPAPIB.pls	Public Inventory Management package that the user defined function calls. The business API is used for item, lot, and subplot conversion.
Inventory_posting	GMIPAPIS.pls GMIPAPIB.pls	Public Inventory Management package that the user defined function calls. The business API is used for inventory quantities.

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## OPM Inventory API Usage

The OPM Inventory APIs are written in PL/SQL. To make use of these APIs, code your interface or wrapper. Your program is responsible for connecting to a database before calling an API function. You can also write to log files before calling and after returning from an API function. Each function returns an error code in the parameter `x_return_status` that indicates whether the API was successful or failed. The values are as follows:

- S for success
- E for error
- U unknown or unexpected status

The topics discussed are:

- Item Create API Wrapper - Business Function
- Calling the API Interface Code
- Item Create API Wrapper - Input Structure
- Item Create API Wrapper - ASCII Flat File Layout
- Log Files
- Calling the API Code - Example
- Item Create API Wrapper - Code Example

## Item Create API Wrapper - Business Function

This stored procedure is designed to operate in conjunction with the item create API that is used to create an item in OPM. It can be required for use in both synchronous (online) and asynchronous (batch) modes. When used in synchronous mode, the calling program (for example, an Oracle window) calls the API directly.

This topic discusses using the API in asynchronous mode through a wrapper function. The source of data for the wrapper comes from an ASCII flat file.

This topic describes how the wrapper function is called and the parameters that are required and optional.

### Wrapper Function - Input Data Sources

The following are input data sources for the wrapper function.

#### **Flat File**

Input data to the user wrapper function can come from a flat file source. The flat file is read record by record. For each record, the wrapper builds the necessary parameters and calls the API. The wrapper assumes no interdependency between the records and therefore instructs the API to commit each successfully processed record.

#### **Temporary Table**

Input data to the user wrapper function can come from a temporary database table. The table is read row by row. For each row the wrapper builds the necessary parameters and calls the API. The wrapper assumes no interdependency between the rows and therefore instructs the API to commit each successfully processed row.

### Stored Procedures Overview

Stored procedures are held at the database level and consist of PL/SQL-based routines and functions. These are therefore application independent and are called from any privileged program function accessing the database. At the functional level, stored procedures manage both the business rules and the data.

A stored procedure has two parts:

- Specification - declares the procedure or function name with parameters.
- Body - defines the procedure to execute consisting of PL/SQL block statements.

Stored procedures offer a number of benefits:

### **Compiled Version of PL/SQL in the Database**

Stored procedures are compiled and held at the database level. Therefore, they occur once only and can be called by all privileged users. The code is compiled the first time the stored procedure is called.

When called, there is no parsing of the statement to interpret the PL/SQL. All dependencies and syntax of the procedure are already defined aiding in efficiency and performance.

### **Security Considerations**

Grant permissions can be controlled at the stored procedure level, above the individual database tables. This lets a global level of authorization against the procedure rather than a table by table grant discipline within an application that holds anomalies. If you have grant authority to the procedure, then it is assumed you have permissions at the database and application levels.

### **Platform Independence**

Stored procedure, unlike C coded functions, are platform independent with no need to recompile according to hardware and operating platform.

### **Reduced Network Traffic**

Stored procedures reduce network traffic since only the execute statement and parameter values need to be passed over the network.

### **Separation from User Interface (UI) Layer**

Stored procedures are defined at the database level, and are away from the UI layer of the application software.

## **Stored Procedure Execution**

The stored procedure can be called with the appropriate parameters forwarded in a PL/SQL RECORD format. The procedure validates the RECORD and then processes the appropriate functional logic as required. The procedure writes appropriate messages to the Oracle Messages table. These are informational (succeeded) or error as determined by the logic. These can be interrogated by the calling wrapper function using the GET MESSAGES functionality.

The stored procedure can call other validation procedures in the course of its execution (for example, validate UOM code).

On successful completion of the procedure, the COMMIT of the database updates is made. The procedure is viewed as one LOGICAL transaction. The COMMIT is used if the procedure executes successfully.

## Calling the API Interface Code

The following are part of a sample wrapper and are used to test the API code. Wrappers are written in PL/SQL Package. Wrappers can be written for each API and call the APIs. The source of data for the wrapper comes from an ASCII flat file. You can write a similar type of wrapper to call the API code.

These wrappers have the following parameters:

p\_dir IN VARCHAR2 - Working directory for input and output files.

p\_input\_file IN VARCHAR2 - Name of input file (for example, ASCII flat file with data).

p\_output\_file IN VARCHAR2 - Name of output file.

p\_delimiter IN VARCHAR2 - Delimiter character.

The ASCII flat file must be character delimited, typically with a comma.

## Item Create API Wrapper - Input Structure

The API wrapper consists of a PL/SQL procedure and PL/SQL function both named `Create_Item`.

## Item Create API Wrapper - ASCII Flat File Layout

The ASCII flat file must be character delimited, typically with a comma.

Omitting an optional field is achieved by leaving the column positions as spaces (for fixed format files) or using consecutive delimiters (for delimited files).

## Log Files

When an API is run, it generates a log file that describes what was generated during the API call or what went wrong. These log files must be placed in a specific directory on your system (determined by a parameter in your `init.ora` file) and that directory must have open permissions to write to that directory. To know where this directory is, run the following query.

```
SQL> select value from v$parameter where name like 'utl%';
```

This query can return multiple directories. Ensure that the directory you want the log files written to exists, and that the permissions are open to write to it. This directory is entered in your wrapper file where you also determine what the log file is called.

There is also a log file that is generated with the session number that can provide some additional information. The log file that is system generated is `wrapperxxxxx.log` where the `xxxxx` is the session number. These two log files have similar information, but if you encounter problems, then this can be another place to look for information.

## Calling the API Code - Example

This section details how to call the API code within the wrapper. The purpose of this is to explain how to call a standard OPM Inventory API.

## Item Create API Wrapper - Code Example

The following is an example of the PL/SQL code for the Item Create API wrapper.

```

WHENEVER SQLERROR EXIT FAILURE ROLLBACK;
CREATE OR REPLACE PACKAGE BODY GMI_ITEM_WRP AS
-- $Header: GMIPITWB.pls 115.6 2000/09/27 19:20:16 mpetrosi gmigapib.pls $
-- Body start of comments
-----+-----
--| PROCEDURE NAME
--|   Create_Item
--|
--| TYPE
--|   Public
--|
--| USAGE
--|   Create an Inventory Item
--|
--| DESCRIPTION
--|   This is a PL/SQL wrapper procedure to call the Create_Item
--|   API wrapper function
--|
--| PARAMETERS
--|   p_dir           IN VARCHAR2           - Working directory for input
--|                                     and output files.
--|   p_input_file    IN VARCHAR2           - Name of input file
--|   p_output_file   IN VARCHAR2           - Name of output file
--|   p_delimiter     IN VARCHAR2           - Delimiter character
--|
--| RETURNS
--|   None
--|
--| HISTORY
--|   16-AUG-1999    B965832(1) Set lot_status/qc_grade to NULL if
--|                                     they are read in as spaces
-----+-----
-- Api end of comments
PROCEDURE Create_Item
( p_dir           IN VARCHAR2
, p_input_file    IN VARCHAR2
, p_output_file   IN VARCHAR2
, p_delimiter     IN VARCHAR2
)
IS

```

```
l_return_status VARCHAR2(1);

BEGIN

l_return_status :=Create_item( p_dir
                             , p_input_file
                             , p_output_file
                             , p_delimiter
                             );

End Create_Item;
```

```
--+=====+
--| FUNCTION NAME
--|   Create_Item
--|
--| TYPE
--|   Public
--|
--| USAGE
--|   Create an inventory item
--|
--| DESCRIPTION
--|   This is a PL/SQL wrapper function to call the FND
--|   Inventory Create Item API.
--|   It reads item data from a flat file and outputs any error
--|   messages to a second flat file. It also generates a Status
--|   called wrapper<session_id>.log in the /tmp directory.
--|
--| PARAMETERS
--|   p_dir           IN VARCHAR2           - Working directory for input
--|                                     and output files.
--|   p_input_file    IN VARCHAR2           - Name of input file
--|   p_output_file   IN VARCHAR2           - Name of output file
--|   p_delimiter     IN VARCHAR2           - Delimiter character
--|
--| RETURNS
--|   VARCHAR2 - 'S' All records processed successfully
--|             'E' 1 or more records errored
--|             'U' 1 or more record unexpected error
--|
--| HISTORY
--|
--+=====+
```

```
-- Api end of comments
FUNCTION Create_Item
( p_dir          IN VARCHAR2
, p_input_file   IN VARCHAR2
, p_output_file  IN VARCHAR2
, p_delimiter    IN VARCHAR2
)
RETURN VARCHAR2
IS

--
-- Local variables
--

l_status          VARCHAR2(1);
l_return_status   VARCHAR2(1) :=FND_API.G_RET_STS_SUCCESS;
l_count           NUMBER   ;
l_record_count    NUMBER   :=0;
l_loop_cnt        NUMBER   :=0;
l_dummy_cnt       NUMBER   :=0;
l_data            VARCHAR2(2000);
item_rec          GMIGAPI.item_rec_typ;
l_ic_item_mst_row ic_item_mst%ROWTYPE;
l_ic_item_cpg_row ic_item_cpg%ROWTYPE;
l_p_dir           VARCHAR2(50);
l_output_file     VARCHAR2(20);
l_outfile_handle  UTL_FILE.FILE_TYPE;
l_input_file      VARCHAR2(20);
l_infile_handle   UTL_FILE.FILE_TYPE;
l_line            VARCHAR2(800);
l_delimiter       VARCHAR(1);
l_log_dir         VARCHAR2(50);
l_log_name        VARCHAR2(20) :='wrapper';
l_log_handle      UTL_FILE.FILE_TYPE;
l_global_file     VARCHAR2(20);

l_session_id      VARCHAR2(10);

BEGIN

-- Enable The Buffer
DBMS_OUTPUT.ENABLE(1000000);

l_p_dir           :=p_dir;
l_input_file      :=p_input_file;
```

```
l_output_file      :=p_output_file;
l_delimiter        :=p_delimiter;
l_global_file      :=l_input_file;

--
-- Obtain The SessionId To Append To wrapper File Name.
--

l_session_id := USERENV('sessionid');

l_log_name := CONCAT(l_log_name,l_session_id);
l_log_name := CONCAT(l_log_name, '.log');

--
-- Directory is now the same same as for the out file
--
l_log_dir := p_dir;

--
-- Open The Wrapper File For Output And The Input File for Input.
--

l_log_handle      :=UTL_FILE.FOPEN(l_log_dir, l_log_name, 'w');
l_infile_handle   :=UTL_FILE.FOPEN(l_p_dir, l_input_file, 'r');

--
-- Loop thru flat file and call Inventory Quantities API
--

dms_output.put_line('Start Processing');
UTL_FILE.PUT_LINE(l_log_handle, 'Process Started at '
|| to_char(SYSDATE, 'DD-MON-YY HH24:MI:SS'));

UTL_FILE.NEW_LINE(l_log_handle);
UTL_FILE.PUT_LINE(l_log_handle, 'Input Directory ' || l_p_dir );
UTL_FILE.PUT_LINE(l_log_handle, 'Input File      ' || l_input_file );
UTL_FILE.PUT_LINE(l_log_handle, 'Record Type   ' || l_delimiter );
UTL_FILE.PUT_LINE(l_log_handle, 'Output File    ' || l_output_file );

l_outfile_handle :=UTL_FILE.FOPEN(l_p_dir, l_output_file, 'w');

LOOP
l_record_count :=l_record_count+1;
```

```

BEGIN
  UTL_FILE.GET_LINE(l_infile_handle, l_line);
EXCEPTION
  WHEN NO_DATA_FOUND THEN
EXIT;
  END;

  UTL_FILE.NEW_LINE(l_log_handle);
  UTL_FILE.PUT_LINE(l_log_handle, 'Reading Record ' || l_record_count );

  item_rec.item_no          :=Get_Field(l_line,l_delimiter,1);
  item_rec.item_desc1      :=Get_Field(l_line,l_delimiter,2);
  item_rec.item_desc2      :=Get_Field(l_line,l_delimiter,3);
  item_rec.alt_itema       :=Get_Field(l_line,l_delimiter,4);
  item_rec.alt_itemb       :=Get_Field(l_line,l_delimiter,5);
  item_rec.item_um         :=Get_Field(l_line,l_delimiter,6);
  item_rec.dualum_ind      :=
  TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,7),' '), ' ', '0'));
  item_rec.item_um2        :=Get_Field(l_line,l_delimiter,8);
  item_rec.deviation_lo    :=
  TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,9),' '), ' ', '0'));
  item_rec.deviation_hi    :=
  TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,10),' '), ' ', '0'));
  item_rec.level_code      :=TO_NUMBER(Get_Field(l_line,l_delimiter,11));
  item_rec.lot_ctl         :=
  TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,12),' '), ' ', '0'));
  item_rec.lot_indivisible :=
  TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,13),' '), ' ', '0'));
  item_rec.sublot_ctl      :=
  TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,14),' '), ' ', '0'));
  item_rec.loct_ctl        :=
  TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,15),' '), ' ', '0'));
  item_rec.noninv_ind      :=
  TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,16),' '), ' ', '0'));
  item_rec.match_type      :=
  TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,17),' '), ' ', '0'));
  item_rec.inactive_ind    :=
  TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,18),' '), ' ', '0'));
  item_rec.inv_type        :=Get_Field(l_line,l_delimiter,19);
  item_rec.shelf_life      :=
  TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,20),' '), ' ', '0'));
  item_rec.retest_interval :=
  TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,21),' '), ' ', '0'));
  item_rec.item_abccode    :=Get_Field(l_line,l_delimiter,22);

```

```

item_rec.gl_class      :=Get_Field(l_line,l_delimiter,23);
item_rec.inv_class     :=Get_Field(l_line,l_delimiter,24);
item_rec.sales_class  :=Get_Field(l_line,l_delimiter,25);
item_rec.ship_class   :=Get_Field(l_line,l_delimiter,26);
item_rec.frt_class    :=Get_Field(l_line,l_delimiter,27);
item_rec.price_class  :=Get_Field(l_line,l_delimiter,28);
item_rec.storage_class :=Get_Field(l_line,l_delimiter,29);
item_rec.purch_class  :=Get_Field(l_line,l_delimiter,30);
item_rec.tax_class    :=Get_Field(l_line,l_delimiter,31);
item_rec.customs_class :=Get_Field(l_line,l_delimiter,32);
item_rec.alloc_class  :=Get_Field(l_line,l_delimiter,33);
item_rec.planning_class :=Get_Field(l_line,l_delimiter,34);
item_rec.itemcost_class :=Get_Field(l_line,l_delimiter,35);
item_rec.cost_mthd_code :=Get_Field(l_line,l_delimiter,36);
item_rec.upc_code     :=Get_Field(l_line,l_delimiter,37);
item_rec.grade_ctl    :=
TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,38),' '), ' ', '0'));
item_rec.status_ctl   :=
TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,39),' '), ' ', '0'));
item_rec.qc_grade     :=Get_Field(l_line,l_delimiter,40);
--B965832(1) Check for spaces
IF item_rec.qc_grade = ' '
THEN
item_rec.qc_grade := '';
END IF;
--B965832(1) End
item_rec.lot_status   :=Get_Field(l_line,l_delimiter,41);
--B965832(1) Check for spaces
IF item_rec.lot_status = ' '
THEN
item_rec.lot_status := '';
END IF;
--B965832(1) End
item_rec.bulk_id     :=TO_NUMBER(Get_Field(l_line,l_delimiter,42));
item_rec.pkg_id      :=TO_NUMBER(Get_Field(l_line,l_delimiter,43));
item_rec.qcitem_no   :=Get_Field(l_line,l_delimiter,44);
item_rec.qchold_res_code :=Get_Field(l_line,l_delimiter,45);
item_rec.expaction_code :=Get_Field(l_line,l_delimiter,46);
item_rec.fill_qty    :=
TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,47),' '), ' ', '0'));
item_rec.fill_um     :=Get_Field(l_line,l_delimiter,48);
item_rec.expaction_interval :=
TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,49),' '), ' ', '0'));
item_rec.phantom_type :=
TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,50),' '), ' ', '0'));

```

```
item_rec.whse_item_no      :=Get_Field(l_line,l_delimiter,51);
item_rec.experimental_ind:=
TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,52),' '), ' ', '0'));
IF (Get_Field(l_line,l_line,53) IS NULL)
THEN
    item_rec.exported_date :=TO_DATE('02011970','DDMMYYYY');
ELSE
    item_rec.exported_date :=TO_DATE(
        Get_Field(l_line,l_delimiter,53),'DDMMYYYY');
END IF;
item_rec.seq_dpnd_class   :=Get_Field(l_line,l_delimiter,54);
item_rec.commodity_code  :=Get_Field(l_line,l_delimiter,55);
item_rec.ic_matr_days    :=
TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,56),' '), ' ', '0'));
item_rec.ic_hold_days   :=
TO_NUMBER(TRANSLATE(NVL(Get_Field(l_line,l_delimiter,57),' '), ' ', '0'));
IF ((Get_Field(l_line,l_delimiter,58)) IS NULL)
THEN
    item_rec.user_name    :='OPM';
ELSE
    item_rec.user_name    :=Get_Field(l_line,l_delimiter,58);
END IF;
item_rec.attribute1      :=Get_Field(l_line,l_delimiter,59);
item_rec.attribute2      :=Get_Field(l_line,l_delimiter,60);
item_rec.attribute3      :=Get_Field(l_line,l_delimiter,61);
item_rec.attribute4      :=Get_Field(l_line,l_delimiter,62);
item_rec.attribute5      :=Get_Field(l_line,l_delimiter,63);
item_rec.attribute6      :=Get_Field(l_line,l_delimiter,64);
item_rec.attribute7      :=Get_Field(l_line,l_delimiter,65);
item_rec.attribute8      :=Get_Field(l_line,l_delimiter,66);
item_rec.attribute9      :=Get_Field(l_line,l_delimiter,67);
item_rec.attribute10     :=Get_Field(l_line,l_delimiter,68);
item_rec.attribute11     :=Get_Field(l_line,l_delimiter,69);
item_rec.attribute12     :=Get_Field(l_line,l_delimiter,70);
item_rec.attribute13     :=Get_Field(l_line,l_delimiter,71);
item_rec.attribute14     :=Get_Field(l_line,l_delimiter,72);
item_rec.attribute15     :=Get_Field(l_line,l_delimiter,73);
item_rec.attribute16     :=Get_Field(l_line,l_delimiter,74);
item_rec.attribute17     :=Get_Field(l_line,l_delimiter,75);
item_rec.attribute18     :=Get_Field(l_line,l_delimiter,76);
item_rec.attribute19     :=Get_Field(l_line,l_delimiter,77);
item_rec.attribute20     :=Get_Field(l_line,l_delimiter,78);
item_rec.attribute21     :=Get_Field(l_line,l_delimiter,79);
item_rec.attribute22     :=Get_Field(l_line,l_delimiter,80);
item_rec.attribute23     :=Get_Field(l_line,l_delimiter,81);
```

```

item_rec.attribute24      :=Get_Field(l_line,l_delimiter,82);
item_rec.attribute25      :=Get_Field(l_line,l_delimiter,83);
item_rec.attribute26      :=Get_Field(l_line,l_delimiter,84);
item_rec.attribute27      :=Get_Field(l_line,l_delimiter,85);
item_rec.attribute28      :=Get_Field(l_line,l_delimiter,86);
item_rec.attribute29      :=Get_Field(l_line,l_delimiter,87);
item_rec.attribute30      :=Get_Field(l_line,l_delimiter,88);
item_rec.attribute_category :=Get_Field(l_line,l_delimiter,89);

UTL_FILE.PUT_LINE(l_log_handle,'item_no           = '||item_rec.item_no);
UTL_FILE.PUT_LINE(l_log_handle,'item_desc1        = '||item_rec.item_desc1);
UTL_FILE.PUT_LINE(l_log_handle,'item_desc2        = '||item_rec.item_desc2);
UTL_FILE.PUT_LINE(l_log_handle,'alt_itema         = '||item_rec.alt_itema);
UTL_FILE.PUT_LINE(l_log_handle,'alt_itemb         = '||item_rec.alt_itemb);
UTL_FILE.PUT_LINE(l_log_handle,'item_um           = '||item_rec.item_um);
UTL_FILE.PUT_LINE(l_log_handle,'dualum_ind        = '||item_rec.dualum_ind);
UTL_FILE.PUT_LINE(l_log_handle,'item_um2          = '||item_rec.item_um2);
UTL_FILE.PUT_LINE(l_log_handle,'deviation_lo      = '||item_rec.deviation_lo);
UTL_FILE.PUT_LINE(l_log_handle,'deviation_hi      = '||item_rec.deviation_hi);
UTL_FILE.PUT_LINE(l_log_handle,'level_code        = '||item_rec.level_code);
UTL_FILE.PUT_LINE(l_log_handle,'lot_ctl           = '||item_rec.lot_ctl);
UTL_FILE.PUT_LINE(l_log_handle,'lot_indivisible= '||item_rec.lot_indivisible);
UTL_FILE.PUT_LINE(l_log_handle,'sublot_ctl        = '||item_rec.sublot_ctl);
UTL_FILE.PUT_LINE(l_log_handle,'loct_ctl          = '||item_rec.loct_ctl);
UTL_FILE.PUT_LINE(l_log_handle,'noninv_ind        = '||item_rec.noninv_ind);
UTL_FILE.PUT_LINE(l_log_handle,'match_type        = '||item_rec.match_type);
UTL_FILE.PUT_LINE(l_log_handle,'inactive_ind      = '||item_rec.inactive_ind);
UTL_FILE.PUT_LINE(l_log_handle,'inv_type          = '||item_rec.inv_type);
UTL_FILE.PUT_LINE(l_log_handle,'shelf_life        = '||item_rec.shelf_life);
UTL_FILE.PUT_LINE(l_log_handle,'retest_interval= '||item_rec.retest_interval);
UTL_FILE.PUT_LINE(l_log_handle,'item_abccode      = '||item_rec.item_abccode);
UTL_FILE.PUT_LINE(l_log_handle,'gl_class          = '||item_rec.gl_class);
UTL_FILE.PUT_LINE(l_log_handle,'inv_class         = '||item_rec.inv_class);
UTL_FILE.PUT_LINE(l_log_handle,'sales_class       = '||item_rec.sales_class);
UTL_FILE.PUT_LINE(l_log_handle,'ship_class        = '||item_rec.ship_class);
UTL_FILE.PUT_LINE(l_log_handle,'frt_class         = '||item_rec.frt_class);
UTL_FILE.PUT_LINE(l_log_handle,'price_class       = '||item_rec.price_class);
UTL_FILE.PUT_LINE(l_log_handle,'storage_class     = '||item_rec.storage_class);
UTL_FILE.PUT_LINE(l_log_handle,'purch_class       = '||item_rec.purch_class);
UTL_FILE.PUT_LINE(l_log_handle,'tax_class         = '||item_rec.tax_class);
UTL_FILE.PUT_LINE(l_log_handle,'customs_class     = '||item_rec.customs_class);
UTL_FILE.PUT_LINE(l_log_handle,'alloc_class       = '||item_rec.alloc_class);
UTL_FILE.PUT_LINE(l_log_handle,'planning_class    = '||item_rec.planning_class);
UTL_FILE.PUT_LINE(l_log_handle,'itemcost_class    = '||item_rec.itemcost_class);
UTL_FILE.PUT_LINE(l_log_handle,'cost_mthd_code    = '||item_rec.cost_mthd_code);

```

```
UTL_FILE.PUT_LINE(l_log_handle, 'upc_code           = ' || item_rec.upc_code);
UTL_FILE.PUT_LINE(l_log_handle, 'grade_ctl        = ' || item_rec.grade_ctl);
UTL_FILE.PUT_LINE(l_log_handle, 'status_ctl       = ' || item_rec.status_ctl);
UTL_FILE.PUT_LINE(l_log_handle, 'qc_grade        = ' || item_rec.qc_grade);
UTL_FILE.PUT_LINE(l_log_handle, 'lot_status       = ' || item_rec.lot_status);
UTL_FILE.PUT_LINE(l_log_handle, 'bulk_id         = ' || item_rec.bulk_id);
UTL_FILE.PUT_LINE(l_log_handle, 'pkg_id         = ' || item_rec.pkg_id);
UTL_FILE.PUT_LINE(l_log_handle, 'qcitem_no      = ' || item_rec.qcitem_no);
UTL_FILE.PUT_LINE(l_log_handle, 'qchold_res_code= ' || item_rec.qchold_res_code);
UTL_FILE.PUT_LINE(l_log_handle, 'expaction_code = ' || item_rec.expaction_code);
UTL_FILE.PUT_LINE(l_log_handle, 'fill_qty       = ' || item_rec.fill_qty);
UTL_FILE.PUT_LINE(l_log_handle, 'fill_um       = ' || item_rec.fill_um);
UTL_FILE.PUT_LINE(
    l_log_handle, 'expaction_interval = ' || item_rec.expaction_interval);
UTL_FILE.PUT_LINE(l_log_handle, 'phantom_type    = ' || item_rec.phantom_type);
UTL_FILE.PUT_LINE(l_log_handle, 'whse_item_no   = ' || item_rec.whse_item_no);
UTL_FILE.PUT_LINE(
    l_log_handle, 'experimental_ind = ' || item_rec.experimental_ind);
UTL_FILE.PUT_LINE(l_log_handle, 'exported_date = ' || item_rec.exported_date);
UTL_FILE.PUT_LINE(l_log_handle, 'seq_dpnd_class = ' || item_rec.seq_dpnd_class);
UTL_FILE.PUT_LINE(l_log_handle, 'commodity_code = ' || item_rec.commodity_code);
UTL_FILE.PUT_LINE(l_log_handle, 'ic_matr_days  = ' || item_rec.ic_matr_days);
UTL_FILE.PUT_LINE(l_log_handle, 'ic_hold_days  = ' || item_rec.ic_hold_days);
UTL_FILE.PUT_LINE(l_log_handle, 'user_name    = ' || item_rec.user_name);
UTL_FILE.PUT_LINE(l_log_handle, 'Attribute1   = ' ||
item_rec.attribute1 );
UTL_FILE.PUT_LINE(l_log_handle, 'Attribute2   = ' ||
item_rec.attribute2 );
UTL_FILE.PUT_LINE(l_log_handle, 'Attribute3   = ' ||
item_rec.attribute3 );
UTL_FILE.PUT_LINE(l_log_handle, 'Attribute4   = ' ||
item_rec.attribute4 );
UTL_FILE.PUT_LINE(l_log_handle, 'Attribute5   = ' ||
item_rec.attribute5 );
UTL_FILE.PUT_LINE(l_log_handle, 'Attribute6   = ' ||
item_rec.attribute6 );
UTL_FILE.PUT_LINE(l_log_handle, 'Attribute7   = ' ||
item_rec.attribute7 );
UTL_FILE.PUT_LINE(l_log_handle, 'Attribute8   = ' ||
item_rec.attribute8 );
UTL_FILE.PUT_LINE(l_log_handle, 'Attribute9   = ' ||
item_rec.attribute9 );
UTL_FILE.PUT_LINE(l_log_handle, 'Attribute10  = ' ||
item_rec.attribute10 );
UTL_FILE.PUT_LINE(l_log_handle, 'Attribute11  = ' ||
```

```
item_rec.attribute11 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute12 = '||
item_rec.attribute12 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute13 = '||
item_rec.attribute13 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute14 = '||
item_rec.attribute14 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute15 = '||
item_rec.attribute15 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute16 = '||
item_rec.attribute16 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute17 = '||
item_rec.attribute17 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute18 = '||
item_rec.attribute18 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute19 = '||
item_rec.attribute19 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute20 = '||
item_rec.attribute20 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute21 = '||
item_rec.attribute21 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute22 = '||
item_rec.attribute22 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute23 = '||
item_rec.attribute23 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute24 = '||
item_rec.attribute24 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute25 = '||
item_rec.attribute25 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute26 = '||
item_rec.attribute26 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute27 = '||
item_rec.attribute27 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute28 = '||
item_rec.attribute28 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute29 = '||
item_rec.attribute29 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute30 = '||
item_rec.attribute30 );
UTL_FILE.PUT_LINE(l_log_handle,'Attribute_Category = '||
item_rec.attribute_category );

GMIPAPI.Create_Item
( p_api_version      => 3.0
, p_init_msg_list   => FND_API.G_TRUE
```

```
, p_commit          => FND_API.G_TRUE
, p_validation_level => FND_API.G_VALID_LEVEL_FULL
, p_item_rec        => item_rec
, x_ic_item_mst_row => l_ic_item_mst_row
, x_ic_item_cpg_row => l_ic_item_cpg_row
, x_return_status   => l_status
, x_msg_count       => l_count
, x_msg_data        => l_data
);

IF l_count > 0
THEN
  l_loop_cnt :=1;
  LOOP

    FND_MSG_PUB.Get(
      p_msg_index    => l_loop_cnt,
      p_data         => l_data,
      p_encoded      => FND_API.G_FALSE,
      p_msg_index_out => l_dummy_cnt);

    -- dbms_output.put_line('Message ' || l_data );

    UTL_FILE.PUT_LINE(l_outfile_handle, 'Record = ' || l_record_count );
    UTL_FILE.PUT_LINE(l_outfile_handle, l_data);
    UTL_FILE.NEW_LINE(l_outfile_handle);

    IF l_status = 'E' OR
       l_status = 'U'
    THEN
      l_data := CONCAT('ERROR ',l_data);
    END IF;

    UTL_FILE.PUT_LINE(l_log_handle, l_data);

    -- Update error status
    IF (l_status = 'U')
    THEN
      l_return_status :=l_status;
    ELSIF (l_status = 'E' and l_return_status <> 'U')
    THEN
      l_return_status :=l_status;
    ELSE
      l_return_status :=l_status;
    END IF;
```

```
l_loop_cnt := l_loop_cnt + 1;
IF l_loop_cnt > l_count
THEN
    EXIT;
END IF;

END LOOP;

END IF;

END LOOP;
    UTL_FILE.NEW_LINE(l_log_handle);
    UTL_FILE.PUT_LINE(l_log_handle, 'Process Completed at '
        || to_char(SYSDATE, 'DD-MON-YY HH24:MI:SS'));
--
-- Check if any messages generated. If so then decode and
-- output to error message flat file
--

UTL_FILE.FCLOSE_ALL;

RETURN l_return_status;

EXCEPTION
WHEN UTL_FILE.INVALID_OPERATION THEN
    dbms_output.put_line('Invalid Operation For ' || l_global_file);
    UTL_FILE.FCLOSE_ALL;
    RETURN l_return_status;

WHEN UTL_FILE.INVALID_PATH THEN
    dbms_output.put_line('Invalid Path For ' || l_global_file);
    UTL_FILE.FCLOSE_ALL;
    RETURN l_return_status;

WHEN UTL_FILE.INVALID_MODE THEN
    dbms_output.put_line('Invalid Mode For ' || l_global_file);
    UTL_FILE.FCLOSE_ALL;
    RETURN l_return_status;

WHEN UTL_FILE.INVALID_FILEHANDLE THEN
    dbms_output.put_line('Invalid File Handle ' || l_global_file);
    UTL_FILE.FCLOSE_ALL;
    RETURN l_return_status;
```

```

WHEN UTL_FILE.WRITE_ERROR THEN
    dbms_output.put_line('Invalid Write Error   ' || l_global_file);
    UTL_FILE.FCLOSE_ALL;
    RETURN l_return_status;

WHEN UTL_FILE.READ_ERROR THEN
    dbms_output.put_line('Invalid Read  Error   ' || l_global_file);
    UTL_FILE.FCLOSE_ALL;
    RETURN l_return_status;

WHEN UTL_FILE.INTERNAL_ERROR THEN
    dbms_output.put_line('Internal Error');
    UTL_FILE.FCLOSE_ALL;
    RETURN l_return_status;

WHEN OTHERS THEN
    dbms_output.put_line('Other Error');
    UTL_FILE.FCLOSE_ALL;
    RETURN l_return_status;

END Create_Item;

-----+-----
--| FUNCTION NAME
--|   Get_Field
--|
--| TYPE
--|   Public
--|
--| USAGE
--|   Get value of field n from a delimited line of ASCII data
--|
--| DESCRIPTION
--|   This utility function will return the value of a field from
--|   a delimited line of ASCII text
--|
--| PARAMETERS
--|   p_line           IN VARCHAR2       - line of data
--|   p_delimiter      IN VARCHAR2       - Delimiter character
--|   p_field_no       IN NUMBER         - Field occurrence to be
--|                                       returned
--|
--| RETURNS
--|   VARCHAR2         - Value of field
--|
-----+-----

```

```

--| HISTORY |
--| |
--+-----+
-- Api end of comments
FUNCTION Get_Field
( p_line      IN VARCHAR2
, p_delimiter IN VARCHAR2
, p_field_no  IN NUMBER
)
RETURN VARCHAR2
IS
--
-- Local variables
--
l_start      NUMBER :=0;
l_end        NUMBER :=0;

BEGIN

-- Determine start position
IF p_field_no = 1
THEN
    l_start      :=0;
ELSE
    l_start      :=INSTR(p_line,p_delimiter,1,(p_field_no - 1));
    IF l_start    = 0
    THEN
        RETURN NULL;
    END IF;
END IF;

-- Determine end position
l_end        :=INSTR(p_line,p_delimiter,1,p_field_no);
IF l_end      = 0
THEN
    l_end        := LENGTH(p_line) + 1;
END IF;

-- Extract the field data
IF (l_end - l_start) = 1
THEN
    RETURN NULL;
ELSE
    RETURN SUBSTR(p_line,(l_start + 1),((l_end - l_start) - 1));
END IF;

```

```

EXCEPTION
  WHEN OTHERS
  THEN
    RETURN NULL;

END Get_Field;

--+=====+
--| FUNCTION NAME
--|   Get_Substring
--|
--| TYPE
--|   Public
--|
--| USAGE
--|   Get value of Sub-string from formatted ASCII data file record
--|
--| DESCRIPTION
--|   This utility function will return the value of a passed sub-string
--|   of a formatted ASCII data file record
--|
--| PARAMETERS
--|   p_substring          IN VARCHAR2          - substring data
--|
--| RETURNS
--|   VARCHAR2            - Value of field
--|
--| HISTORY
--|
--+=====+
-- Api end of comments
FUNCTION Get_Substring
( p_substring    IN VARCHAR2
)
RETURN VARCHAR2
IS
--
-- Local variables
--
l_string_value  VARCHAR2(200) := ' ';

BEGIN

-- Determine start position

```

```
l_string_value :=NVL(RTRIM(LTRIM(p_substring)),' ');

RETURN l_string_value;
EXCEPTION
  WHEN OTHERS
  THEN
    RETURN ' ';

END Get_Substring;

END GMI_ITEM_WRP;
/
-- show errors;
COMMIT;
EXIT;
```



---

---

## Technical Overview

This section describes the technical information associated to an API, such as the structure and files included.

The topics discussed are:

- Item Create
- Item Lot/Sublot Conversion
- Inventory Quantities
- Lot Create
- Standard Parameters

## Item Create

The Item Create stored procedure is intended to be used by a user wrapper calling function with item attributes passed to the procedure using a RECORD format. The wrapper function is responsible for connecting to the database as an appropriate user with the necessary privileges. It passes the appropriate parameters into the stored procedure and is responsible for handling the return code from the procedure.

According to API standards, the following are the names of files, packages, and procedures for Public APIs:

### Structure for Item Create Public APIs

<b>Object Type</b>	<b>Name</b>
Package Specification File	GMIPAPIS.pls
Package Body File	GMIPAPIB.pls
Package	GMIPAPI
Procedure - Item Create	Create_Item

## Item Lot/Sublot Conversion

The Item Lot Conversion stored procedure is intended to be used by a user wrapper calling function with item attributes passed to the procedure through a RECORD format. The wrapper function is responsible for connecting to the database as an appropriate user with the necessary privileges. It passes the appropriate parameters into the stored procedure and is responsible for handling the return code from the procedure.

### Structure for Item Lot/Sublot Conversion Public APIs

Object Type	Name
Package Specification File	GMIPAPIS.pls
Package Body File	GMIPAPIB.pls
Package	GMIPAPI
Procedure - Lot/Sublot Conversion	Create_Item_Lot_UOM_Conv

## Inventory Quantities

The Inventory Quantities stored procedure is intended to be used by a user wrapper calling function with item attributes passed to the procedure through a RECORD format. The wrapper function is responsible for connecting to the database as an appropriate user with the necessary privileges. It passes the appropriate parameters into the stored procedure and is responsible for handling the return code from the procedure.

### Structure for Inventory Quantities Public APIs

Object Type	Name
Package Specification File	GMIPAPIS.pls
Package Body File	GMIPAPIB.pls
Package	GMIPAPI
Procedure - Inventory Quantities	Inventory_posting

## Lot Create

The Lot Create stored procedure is intended to be used by a user wrapper calling function with lot attributes passed to the procedure using a RECORD format. The wrapper function passes the appropriate parameters into the stored procedure and is responsible for handling the return code from the procedure.

### Structure for Lot Create Public APIs

Object Type	Name
Package Specification File	GMIPAPIS.pls
Package Body File	GMIPAPIB.pls
Package	GMIPAPI
Procedure - Lot Create	Create_lot

## Standard Parameters

API standard parameters are a collection of parameters that are common to most APIs. The following paragraphs explain the standard parameters that are used in APIs and their interpretation.

Some of the standard parameters apply to all APIs regardless of the nature of the business function they perform. For example, `p_api_version` and `x_return_status` are included in all APIs.

On the other hand, some parameters are applicable for certain types of APIs and not applicable for other types. For example, `p_commit` is applicable for APIs that change the database state, and not applicable for read APIs.

Standard parameters are included in all APIs whenever applicable.

Standard IN parameters:

- `p_api_version`
- `p_init_msg_list`
- `p_commit`
- `p_validation_level`

Standard OUT parameters:

- `x_return_status`
- `x_msg_count`
- `x_msg_data`

Parameter	Type	IN/OUT	Required	Validation
<code>p_api_version</code>	<code>varchar2</code>	IN	Y	Validates version compatibility. The version sent by the calling function is compared to the internal version of the API and an unexpected error (U) is generated if these do not match.
<code>p_init_msg_list</code>	<code>varchar2</code>	IN	N	Used to specify whether the message list can be initialized on entry to the API. It is an optional parameter, and if not supplied, then it defaults to <code>FND_API.G_FALSE</code> , and the API does not initialize the message list.

Parameter	Type	IN/OUT	Required	Validation
p_commit	varchar2	IN	N	Used to specify whether the API can commit its work before returning to the calling function. If not supplied, then it defaults to FND_API.G_FALSE.
x_return_status	varchar2	OUT	-	Specifies whether the API was successful or failed. Valid values are S=successful, E=failed due to expected error, U=failed due to unexpected error.
x_msg_count	number	OUT	-	Specifies number of messages added to message list.
x_msg_data	varchar2	OUT	-	Returns the messages in an encoded format. These messages can then be processed by the standard message functions as defined in Business Object API Coding Standards document.

## Value-ID Conversion

IDs are usually used to represent primary and foreign entity keys, and for internal processing of attributes. They are not meaningful and are hidden. Besides IDs, attributes have values that represent them. Those values are meaningful and are used for display purposes. In general, APIs operate only on IDs.

For example, an item is represented by an ID, the number column `item_id`. This ID is its primary key and is used for all internal processing of the item. Besides this ID, an item is represented by a value, the `varchar2` column `item_no`. This value is displayed when you choose an item. Therefore, an item can be identified by either its ID or value, in this case `item_no`.

The following set of rules are for the conversion process:

- Either ID or value, or both can be passed to an API. But, when both values are passed, ID based parameters take precedence over value based parameters. For example, if both parameters are passed, the value based parameter is ignored and the ID based parameter is used.
- When both the value and ID of an attribute are passed to an API, a message informs the API caller that some of the input has been ignored.

- This message is not an error message. The API continues with its regular processing.
- Each value has to resolve into one ID. Failure to resolve a value into an ID is an error and is associated with an error message. The API aborts processing and returns with a return status of error.

---

---

## Business Objects

This topic describes the parameters needed for each API, as well as the table structure and the associated details. The topics discussed are:

- Item Create
- Item Lot/Sublot Conversion
- Inventory Quantities
- Lot Create

## Item Create

This API is intended as a create function only, used primarily to load item data from legacy systems on implementation. The API does not let item update or unit of measure conversion maintenance. These are handled through additional stored procedures, part of the Item Lot/Sublot Conversion API.

### Parameters and Interface

The public Item Create API has the following call interface:

```
GMIPAPI.Create_Item
( p_api_version      IN  NUMBER
, p_init_msg_list    IN  VARCHAR2 := FND_API.G_FALSE
, p_commit           IN  VARCHAR2 := FND_API.G_FALSE
, p_validation_level IN  NUMBER   := FND_API.G_VALID_LEVEL_FULL
, p_item_rec         IN  GMIGAPI.item_rec_typ
, x_ic_item_mst_row  OUT ic_item_mst%ROWTYPE
, x_ic_item_cpg_row  OUT ic_item_cpg%ROWTYPE
, x_return_status    OUT VARCHAR2
, x_msg_count        OUT NUMBER
, x_msg_data         OUT VARCHAR2
);
```

If the creation was successful, then the `x_ic_item_mst_row` and `x_ic_item_cpg_row` parameters are returned with the data set up in two tables, regardless of whether it was committed by the procedure.

The contents of the `x_ic_item_cpg_row` are undefined if the system constant `SYSCPG_INSTALL` is set to zero, and nothing is written to the `ic_item_cpg` table.

`x_return_status` is returned as `FND_API.G_RET_STS_SUCCESS`, `FND_API.G_RET_STS_UNEXP_ERR`, or `FND_API.G_RET_STS_EXP_ERR`.

The final two parameters returned contain the message count and message stack.

The `p_item_rec` parameter is used to pass the item-specific data required to create an inventory item as described in the following. Refer to the "Item Create API Wrapper" topic for an example of how to populate this parameter and call the stored procedure.

Column	Column Long Name	Len	Default	Req'd	Validation
item_no	item number	32	NULL	Y	Duplicates not allowed on ic_item_mst

Column	Column Long Name	Len	Default	Req'd	Validation
item_desc1	item description 1	70	NULL	Y	Non-blank
item_desc2	item description 2	70	NULL	N	blank
alt_itema	alternative name for item	32	NULL	N	blank
alt_itemb	second alternative name for item	32	NULL	N	blank
item_um	unit of measure	4	NULL	Y	Must exist on sy_uoms_mst
dualum_ind	dual unit of measure indicator	5	NULL	Y	0 = Single UOM control, 1 = Fixed relationship dual UOM control, 2 = Variable relationship dual UOM with default conversion, 3 = Variable relationship dual UOM control
item_um2	secondary unit of measure	4	NULL	N	Mandatory if dual UOM > 0. If non-blank, then must exist on sy_uoms_mst
deviation_lo	factor defining the allowable deviation below the standard conversion for type 2/3	variable	0	N	Must not be negative value. Must be 0 if dualum_ind = 0 or 1
deviation_hi	factor defining the allowable deviation above the standard conversion for type 2/3	variable	0	N	Must not be negative value. Must be 0 if dualum_ind = 0 or 1
level_code	level code	5	0	N	Not currently used
lot_ctl	lot controlled item indicator	5	NULL	Y	0 = Not lot controlled, 1 = Lot controlled
lot_indivisible	item is lot indivisible indicator	5	0	N	0 = Lots are not indivisible, can be split, 1 = Lots are indivisible, cannot be split. Must be 0 if lot_ctl = 0
sublot_ctl	sublot controlled item indicator	5	0	N	0 = Not sub lot controlled, 1 = Sub lot controlled. Must be 0 if lot_ctl = 0

Column	Column Long Name	Len	Default	Req'd	Validation
loct_ctl	location controlled item indicator	5	0	N	0 = Not location controlled, 1 = Location controlled with validation of location, 2 = Location controlled with no validation of location
noninv_ind	non-inventory item indicator	5	0	N	0 = Not a non inventory item - inventory balances maintained, 1 = Non inventory item, inventory balances not maintained. Must be 0 if lot_ctl = 0
match_type	match type	5	3	N	Type of invoice matching done. Blank is no matching, 1 = Invoice only, 2 = Two way matching, 3 = Three way matching
inactive_ind	inactive item indicator	5	0	N	0 = Active, 1 = Inactive
inv_type	inventory type	4	NULL	N	Must exist on ic_invn_typ if non-blank
shelf_life	shelf life	variable	0	N	Must not be negative. Must be 0 if grade_ctl = 0
retest_interval	retest interval	variable	0	N	Must not be negative. Must be 0 if grade_ctl = 0
item_abccode	item ABC code	4	NULL	N	Item ABC code.
gl_class	gl class	8	NULL	N	Must exist on ic_gled_cls if supplied
inv_class	inventory class	8	NULL	N	Must exist on ic_invn_cls if supplied
sales_class	sales class	8	NULL	N	Must exist on ic_sale_cls if supplied
ship_class	ship class	8	NULL	N	Must exist on ic_ship_cls if supplied
frt_class	freight class	8	NULL	N	Must exist on ic_frgt_cls if supplied
price_class	price class	8	NULL	N	Must exist on ic_prce_cls if supplied

Column	Column Long Name	Len	Default	Req'd	Validation
storage_class	storage class	8	NULL	N	Must exist on ic_stor_cls if supplied
purch_class	purchase class	8	NULL	N	Must exist on ic_prch_cls if supplied
tax_class	tax class	8	NULL	N	Must exist on ic_taxn_cls if supplied
customs_class	customs class	8	NULL	N	Must exist on ic_ctms_cls if supplied
alloc_class	allocation class	8	NULL	N	Must exist on ic_allc_cls if supplied
planning_class	planning class	8	NULL	N	Must exist on ps_plng_cls if supplied
itemcost_class	cost class	8	NULL	N	Must exist on ic_cost_cls if supplied
cost_mthd_code	cost method code (not currently used)	4	NULL	N	Must exist on cm_mthd_mst if supplied
upc_code	UPC code (The field is active but not required. It is not validated.)	16	NULL	N	The field is active but not required. It is not validated.
grade_ctl	QC grade controlled item indicator	5	0	N	0 = Not grade controlled, 1 = Grade controlled, Must be 0 if lot_ctl = 0
status_ctl	lot status controlled item indicator	5	0	N	0 = Not status controlled, 1 = Status controlled. Must be 0 if lot_ctl = 0
qc_grade	default QC grade	4	NULL	N	Must exist on qc_grad_mst if non-blank. Must be non-blank if grade_ctl = 1
lot_status	default lot status	4	NULL	N	Must exist on ic_lots_sts if non-blank. Must be non-blank if status_ctl = 1
bulk_id	bulk id (not currently used)	10	0	N	Not currently used
pkg_id	pkg id (not currently used)	10	NULL	N	Not currently used

Column	Column Long Name	Len	Default	Req'd	Validation
qcitem_no	QC reference item	32	NULL	N	Must exist on ic_item_mst if non-blank
qchold_res_code	QC hold reason code	4	NULL	N	Must exist on qc_hrec_mst if non-blank
expaction_code	action code when a lot expires	4	NULL	N	Must exist on qc_actn_mst if non-blank
fill_qty	fill qty (not currently used)	variable	0	N	Not currently used
fill_um	fill um (not currently used)	4	NULL	N	Not currently used
expaction_interval	interval in days between when a lot expires and when the expiry action can be taken	variable	0	N	Must not be negative value
phantom_type	phantom type (not currently used)	5	0	N	Phantom type
whse_item_no	warehouse item number	32	NULL	N	Must exist on ic_item_mst if non-blank
experimental_ind	experimental item indicator	5	NULL	N	0 = Non experimental item, 1 = Experimental item
exported_date	date item was exported to Oracle Financials	variable	01-Jan-1970 + 1 day	N	Exported date
seq_dpnd_class	sequence dependent class	8	NULL	N	Must exist on cr_sqdt_cls if non-blank
commodity_code	commodity code	9	NULL	N	Must exist on ic_comd_cds if non-blank. Must be non-blank if GMI:Intrastat= "1"
ic_matr_days	lot maturity days	variable	0	N	Must not be negative value
ic_hold_days	lot hold days	variable	0	N	Must not be negative value
user_name	user name	100	OPM	N	Ignored, but retained for backward compatibility.
attribute1	attribute1	240	NULL	N	Descriptive flexfield segment
attribute2	attribute2	240	NULL	N	Descriptive flexfield segment
attribute3	attribute3	240	NULL	N	Descriptive flexfield segment

Column	Column Long Name	Len	Default	Req'd	Validation
attribute4	attribute4	240	NULL	N	Descriptive flexfield segment
attribute5	attribute5	240	NULL	N	Descriptive flexfield segment
attribute6	attribute6	240	NULL	N	Descriptive flexfield segment
attribute7	attribute7	240	NULL	N	Descriptive flexfield segment
attribute8	attribute8	240	NULL	N	Descriptive flexfield segment
attribute9	attribute9	240	NULL	N	Descriptive flexfield segment
attribute10	attribute10	240	NULL	N	Descriptive flexfield segment
attribute11	attribute11	240	NULL	N	Descriptive flexfield segment
attribute12	attribute12	240	NULL	N	Descriptive flexfield segment
attribute13	attribute13	240	NULL	N	Descriptive flexfield segment
attribute14	attribute14	240	NULL	N	Descriptive flexfield segment
attribute15	attribute15	240	NULL	N	Descriptive flexfield segment
attribute16	attribute16	240	NULL	N	Descriptive flexfield segment
attribute17	attribute17	240	NULL	N	Descriptive flexfield segment
attribute18	attribute18	240	NULL	N	Descriptive flexfield segment
attribute19	attribute19	240	NULL	N	Descriptive flexfield segment
attribute20	attribute20	240	NULL	N	Descriptive flexfield segment
attribute21	attribute21	240	NULL	N	Descriptive flexfield segment
attribute22	attribute22	240	NULL	N	Descriptive flexfield segment
attribute23	attribute23	240	NULL	N	Descriptive flexfield segment
attribute24	attribute24	240	NULL	N	Descriptive flexfield segment
attribute25	attribute25	240	NULL	N	Descriptive flexfield segment
attribute26	attribute26	240	NULL	N	Descriptive flexfield segment
attribute27	attribute27	240	NULL	N	Descriptive flexfield segment
attribute28	attribute28	240	NULL	N	Descriptive flexfield segment
attribute29	attribute29	240	NULL	N	Descriptive flexfield segment
attribute30	attribute30	240	NULL	N	Descriptive flexfield segment

<b>Column</b>	<b>Column Long Name</b>	<b>Len</b>	<b>Default</b>	<b>Req'd</b>	<b>Validation</b>
attribute_ category	attribute category	30	NULL	N	Descriptive flexfield structure defining column
ont_pricing_qty_ source	number	5	NULL	Y	OPM/OM integration pricing by quantity 2 indicator. Populated with 0 (zero) to indicate pricing by order quantity or 1 to indicate pricing by secondary quantity.

## Item Lot/Sublot Conversion

This API is intended as a create function only. The create function is used primarily to load item data from legacy systems on implementation.

### Item Lot/Sublot Conversion API - Parameters

There are two variants of this procedure that have the same name, but reside in different packages and have different signatures.

The public procedure has the following call interface:

#### **GMIPAPI.Create\_Item\_Lot\_Conv**

```
(
  p_api_version      IN  NUMBER
, p_init_msg_list    IN  VARCHAR2 := FND_API.G_FALSE
, p_commit           IN  VARCHAR2 := FND_API.G_FALSE
, p_validation_level IN  NUMBER    := FND_API.G_VALID_LEVEL_FULL
, p_conv_rec         IN  GMIGAPI.conv_rec_typ
, x_ic_item_cnv_row  OUT  ic_lots_mst%ROWTYPE
, x_return_status    OUT  VARCHAR2
, x_msg_count        OUT  NUMBER
, x_msg_data         OUT  VARCHAR2
);
```

The first four, and last three parameters are standard across all of the API calls and are identical to the Create Item API. If the creation is successful, then the `x_ic_item_cnv_row` parameter is returned with the data set up in the table, regardless of whether it was committed by the procedure.

The group procedure has the following call interface:

#### **GMIGAPI.Create\_Item\_Lot\_Conv**

```
(
  p_api_version      IN  NUMBER
, p_init_msg_list    IN  VARCHAR2 := FND_API.G_FALSE
, p_commit           IN  VARCHAR2 := FND_API.G_FALSE
, p_validation_level IN  NUMBER    := FND_API.G_VALID_LEVEL_FULL
, p_conv_rec         IN  GMIGAPI.conv_rec_typ
, p_ic_item_mst_row  IN  ic_item_mst%ROWTYPE
, p_ic_lots_mst_row  IN  ic_lots_mst%ROWTYPE
, x_ic_item_cnv_row  OUT  ic_lots_mst%ROWTYPE
, x_return_status    OUT  VARCHAR2
```

```

, x_msg_count      OUT NUMBER
, x_msg_data       OUT VARCHAR2
);

```

This procedure takes two additional parameters compared to the P variant for use when item and lot data are already known. Then p\_ic\_item\_mst\_row and p\_ic\_lots\_mst\_row are passed with the appropriate data. This can be found by calling the GMIGUTL.Get\_Item and GMIGUTL.Get\_Lot procedures. All other IN and OUT parameters are identical to the public API.

Column	Column Long Name	Type	Len	Default	Req'd	Validation
item_no	item number	varchar2	32	NULL	Y	Must exist on ic_item_mst, must not be deleted, and must be active
lot_no	lot number	varchar2	32	NULL	N	Must be blank if ic_item_mst.lot_ctl = 0. If ic_item_mst.sublot_ctl = 0, then item_no+lot_no must exist in ic_lots_mst
sublot_no	sublot number	varchar2	32	NULL	N	Must be blank if ic_item_mst.sublot_ctl = 0. Must be blank if lot_no is blank. If supplied, then item_no+lot_no+sublot_no must exist on ic_lots_mst
from_uom	from unit of measure	varchar2	4	NULL	Y	Must exist on sy_uoms_mst. Must be of same UOM type as ic_item_mst.item_um
to_uom	to unit of measure	varchar2	4	NULL	Y	Must exist on sy_uoms_mst. Must be of different UOM type to ic_item_mst.item_um
type_factor	conversion factor	number		NULL	Y	Conversion factor. 1 from-uom equals this number of to_uom
user_name	user name	varchar2	100	OPM	N	Ignored but retained for backward compatibility

## Inventory Quantities

This API deals with the following functions within the OPM Inventory application:

- Create inventory immediate
- Adjust inventory immediate
- Move inventory immediate
- Change lot status immediate
- Change QC grade immediate
- Create inventory journal
- Adjust inventory journal
- Move inventory journal
- Change lot status journal
- Change QC grade journal

You must enter charge accounting unit and account number with the segment delimiter as defined in the GL policy master.

If you want to enter more than one line for journal transactions, and the journal numbering is defined to be automatic, then all the lines for the same journal must be consecutive in the input (normally.csv) file. Except for the first line of the journal, the journal numbers for all other lines must be entered as Previous (not case sensitive). For manual journal numbering, this is not required, as journal number is already known.

Note that you need to use the Post Journals window to post the journals.

## Inventory Quantities - Parameters

There are two variants of this procedure-public and group. They have the same name, but are distinguished by residing in separate packages, and have different signatures. The public call interface is:

### GMIPAPI.Inventory\_Posting

```
(
  p_api_version      IN  NUMBER
, p_init_msg_list    IN  VARCHAR2 := FND_API.G_FALSE
, p_commit           IN  VARCHAR2 := FND_API.G_FALSE
, p_validation_level IN  NUMBER     := FND_API.G_VALID_LEVEL_FULL
```

```
, p_qty_rec          IN  GMIGAPI.qty_rec_typ
, x_ic_jrnl_mst_row  OUT ic_jrnl_mst%ROWTYPE
, x_ic_adjs_jnl_row1 OUT ic_adjs_jnl%ROWTYPE
, x_ic_adjs_jnl_row2 OUT ic_adjs_jnl%ROWTYPE
, x_return_status    OUT VARCHAR2
, x_msg_count        OUT NUMBER
, x_msg_data         OUT VARCHAR2
);
```

The first four, and last three parameters are standard across all of the API calls and are identical to the Create Item API. If the posting is successful, then the `x_ic_jrnl_mst_row` and `x_ic_adjs_jnl_row` parameters are returned with the data set up in the tables, regardless of whether it was committed by the procedure. For inventory movements, grade, and status changes `x_ic_adjs_jnl_row1` contains the from and `x_ic_adjs_jnl_row2` contains the to. For all other calls, the `x_ic_adjs_jnl_row2` returns undefined.

The group level call interface is:

### **GMIGAPI.Inventory\_Posting**

```
(
  p_api_version      IN  NUMBER
, p_init_msg_list    IN  VARCHAR2 := FND_API.G_FALSE
, p_commit           IN  VARCHAR2 := FND_API.G_FALSE
, p_validation_level IN  NUMBER   := FND_API.G_VALID_LEVEL_FULL
, p_qty_rec          IN  GMIGAPI.qty_rec_typ
, p_ic_item_mst_row  IN  ic_item_mst%ROWTYPE
, p_ic_item_cpg_row  IN  ic_item_cpg%ROWTYPE
, p_ic_lots_mst_row  IN  ic_lots_mst%ROWTYPE
, p_oc_lots_cpg_row  IN  ic_lots_cpg%ROWTYPE
, x_ic_jrnl_mst_row  OUT ic_jrnl_mst%ROWTYPE
, x_ic_adjs_jnl_row1 OUT ic_adjs_jnl%ROWTYPE
, x_ic_adjs_jnl_row2 OUT ic_adjs_jnl%ROWTYPE
, x_return_status    OUT VARCHAR2
, x_msg_count        OUT NUMBER
, x_msg_data         OUT VARCHAR2
);
```

This version takes in extra parameters for use when the appropriate data is known in the calling program in the same way as above.

Column	Column Long Name	Type	Len	Default	Req'd	Validation
trans_type	transaction type	number	2	NULL	Y	Valid values are: 1 - create inventory immediate, 2 - adjust inventory immediate, 3 - move inventory immediate, 4 - change lot status immediate, 5 - change QC grade immediate, 6 - create inventory journal, 7 - adjust inventory journal, 8 - move inventory journal, 9 - change lot status journal, 10 - change QC grade journal. No other values allowed
item_no	item number	varchar2	32	NULL	Y	Must exist on ic_item_mst. Must not be deleted. Can be inactive if the ICSALLOW_INACTIVE flag is set to 1, must not be non inventory
journal_no	journal number	varchar2	32	NULL	N	Must be blank if automatic document sequencing. Must not exist in ic_jrnl_mst if manual document sequencing
from_whse_code	from warehouse code	varchar2	4	NULL	Y	May be blank if trans_type = 5. Must exist on ic_whse_mst for all other transaction types
to_whse_code	to warehouse code	varchar2	4	NULL	N	Must exist on ic_whse_mst if trans_type = 3
item_um	primary unit of measure	varchar2	4	NULL	Y	Must exist on sy_uoms_mst. Must be of same UOM type as primary UOM of item
item_um2	secondary unit of measure	varchar2	4	NULL	Y	Must exist on sy_uoms_mst. Must be of same UOM type as secondary UOM of item
lot_no	lot number	varchar2	32	blank	N	Must be blank if ic_item_mst.lot_ctl = 0. Must not equal GMI:Default Lot
sublot_no	sublot number	varchar2	32	blank	N	Must be blank if ic_item_mst.sublot_ctl = 0

Column	Column Long Name	Type	Len	Default	Req'd	Validation
from_location	from location	varchar2	16	NULL	N	From location
to_location	to location	varchar2	16	NULL	N	To location
trans_qty	primary transaction quantity	number	variable	NULL	N	Transaction quantity
trans_qty2	secondary transaction quantity	number		NULL	N	Transaction quantity 2
qc_grade	QC grade	varchar2	4	NULL	N	Must exist on qc_grad_mst if supplied
lot_status	lot status	varchar2	4	NULL	N	Must exist on ic_lots_mst if supplied
co_code	company code	varchar2	4	NULL	Y	Must exist in sy_orgn_mst
orgn_code	organization code	varchar2	4	NULL	N	Must exist in sy_orgn_mst and sy_orgn_mst.co_code must be co_code above
trans_date	transaction date	date		NULL	Y	Must be in an open inventory calendar
reason_code	reason code	varchar2	4	NULL	Y	Must exist in sy_reas_cds
user_name	user name	varchar2	100	'OPM'	N	Ignored but retained for backward compatibility
attribute1	attribute1	varchar2	240	NULL	N	Descriptive flexfield segment
attribute2	attribute2	varchar2	240	NULL	N	Descriptive flexfield segment
attribute3	attribute3	varchar2	240	NULL	N	Descriptive flexfield segment
attribute4	attribute4	varchar2	240	NULL	N	Descriptive flexfield segment
attribute5	attribute5	varchar2	240	NULL	N	Descriptive flexfield segment
attribute6	attribute6	varchar2	240	NULL	N	Descriptive flexfield segment
attribute7	attribute7	varchar2	240	NULL	N	Descriptive flexfield segment
attribute8	attribute8	varchar2	240	NULL	N	Descriptive flexfield segment
attribute9	attribute9	varchar2	240	NULL	N	Descriptive flexfield segment
attribute10	attribute10	varchar2	240	NULL	N	Descriptive flexfield segment
attribute11	attribute11	varchar2	240	NULL	N	Descriptive flexfield segment
attribute12	attribute12	varchar2	240	NULL	N	Descriptive flexfield segment

Column	Column Long Name	Type	Len	Default	Req'd	Validation
attribute13	attribute13	varchar2	240	NULL	N	Descriptive flexfield segment
attribute14	attribute14	varchar2	240	NULL	N	Descriptive flexfield segment
attribute15	attribute15	varchar2	240	NULL	N	Descriptive flexfield segment
attribute16	attribute16	varchar2	240	NULL	N	Descriptive flexfield segment
attribute17	attribute17	varchar2	240	NULL	N	Descriptive flexfield segment
attribute18	attribute18	varchar2	240	NULL	N	Descriptive flexfield segment
attribute19	attribute19	varchar2	240	NULL	N	Descriptive flexfield segment
attribute20	attribute20	varchar2	240	NULL	N	Descriptive flexfield segment
attribute21	attribute21	varchar2	240	NULL	N	Descriptive flexfield segment
attribute22	attribute22	varchar2	240	NULL	N	Descriptive flexfield segment
attribute23	attribute23	varchar2	240	NULL	N	Descriptive flexfield segment
attribute24	attribute24	varchar2	240	NULL	N	Descriptive flexfield segment
attribute25	attribute25	varchar2	240	NULL	N	Descriptive flexfield segment
attribute26	attribute26	varchar2	240	NULL	N	Descriptive flexfield segment
attribute27	attribute27	varchar2	240	NULL	N	Descriptive flexfield segment
attribute28	attribute28	varchar2	240	NULL	N	Descriptive flexfield segment
attribute29	attribute29	varchar2	240	NULL	N	Descriptive flexfield segment
attribute30	attribute30	varchar2	240	NULL	N	Descriptive flexfield segment
attribute_category	attribute_category	varchar2	240	NULL	N	Descriptive flexfield structure definition
charge_accounting_unit_number	charge accounting unit number	varchar2	240	NULL	N	Charge (IVA) accounting unit number. This field can only be used for create and adjust transaction, immediate and journal.
charge_account_number	charge account number	varchar2	240	NULL	N	Charge (IVA) account number. This field can only be used for create and adjust transaction, immediate and journal.

## Lot Create

This API is intended as a create function only. The create function is used primarily to load item data from legacy systems on implementation. The Lot Create API does not let lot update, or delete.

### Lot Create API - Parameters

There are two variants of this procedure-public and group. They have the same name but reside in separate packages and have different signatures:

The public call interface is:

#### GMIPAPI.Create\_Lot

```
( p_api_version      IN  NUMBER
, p_init_msg_list    IN  VARCHAR2 := FND_API.G_FALSE
, p_commit           IN  VARCHAR2 := FND_API.G_FALSE
, p_validation_level IN  NUMBER    := FND_API.G_VALID_LEVEL_FULL
, p_lot_rec          IN  GMIGAPI.lot_rec_tpy
, x_ic_lots_mst_rec  OUT  ic_lots_mst%ROWTYPE
, x_ic_lots_cpg_rec  OUT  ic_lots_cpg%ROWTYPE
, x_return_status    OUT  VARCHAR2
, x_msg_count        OUT  NUMBER
, x_msg_data         OUT  VARCHAR2
);
```

The first four, and last three parameters are standard across all of the API calls and are identical to the Create Item API. If the lot creation is successful, then `x_ic_lots_mst_row` and `x_ic_lots_cpg_row` parameters are returned with the data set up in the two tables, regardless of whether it was committed by the procedure.

If the `SYSCPG_INSTALL` flag is set to zero, then the contents of the row returned in `x_ic_lots_cpg` are undefined and nothing is written to the `ic_lots_cpg` table.

The group version is as follows:

#### GMIGAPI.Create\_Lot

```
( p_api_version      IN  NUMBER
, p_init_msg_list    IN  VARCHAR2 := FND_API.G_FALSE
, p_commit           IN  VARCHAR2 := FND_API.G_FALSE
, p_validation_level IN  NUMBER    := FND_API.G_VALID_LEVEL_FULL
, p_lot_rec          IN  GMIGAPI.lot_rec_tpy
, p_ic_item_mst_row  IN  ic_item_mst%ROWTYPE
, p_ic_item_cpg_row  IN  ic_item_cpg%ROWTYPE
, x_ic_lots_mst_rec  OUT  ic_lots_mst%ROWTYPE
```

```

, x_ic_lots_cpg_rec  OUT ic_lots_cpg%ROWTYPE
, x_return_status   OUT VARCHAR2
, x_msg_count       OUT NUMBER
, x_msg_data        OUT VARCHAR2
);

```

This procedure takes two additional parameters compared to the P variant for use when item data is already known. If this is the case, then `p_ic_item_mst_row` and `p_ic_item_mst_cpg` are passed with the appropriate data. This can be found by calling the `GMIGUTL.Get_Item` procedure. All other IN and OUT parameters are identical to the public API, and the `GMA:CPG INSTALL` flag are treated in the same way.

Column	Column Long Name	Type	Len	Default	Req'd	Validation
item_no	item number	varchar1	32	NULL	Y	Must exist ic_item_mst. Must not be deleted. Must be active. Must be lot-controlled
lot_no	lot number	varchar2	32	NULL	Y	Non-blank
sublot_no	sublot number	varchar2	32	NULL	Y	Must be blank if ic_item_mst.sublot_ctl = 0. The item_no/lot_no/sublot_no must not already exist on ic_lots_mst
lot_desc	lot description	varchar2	32	NULL	N	Lot description
qc_grade	p_init_msg_list	varchar2	40	NULL	N	Must be blank if ic_item_mst.grade_ctl = 0. Must not be blank if ic_item_mst.grade_ctl = 1. Must exist on qc_grad_mst if non-blank
expaction_code	expiry action code	varchar2	4	ic_item_mst.qc_grade	N	Must exist on qc_actn_mst if non-blank
expaction_date	expiry action date	varchar2	4	ic_item_mst.expaction_code	N	Must not be less than lot_created date. Must not be less than expire_date

Column	Column Long Name	Type	Len	Default	Req'd	Validation
lot_created	lot created date	date	variable	IF ic_item_mst.grade_ctl = 1 AND ic_item_mst.expectation_interval > 0 THEN expire_date + ic_item_mst.expectation_interval ELSE  31-Dec-2010 00:00:00 (SYSMAX_DATE)	N	Lot created
expire_date	lot expire date	date	variable	System Date	N	Must not be less than lot_created date
retest_date	retest date	date	variable	IF ic_item_mst.grade_ctl = 1 AND ic_item_mst.shelf_life > 0 THEN lot_created + ic_item_mst.shelf_life ELSE  31-Dec-2010 00:00:00 (SYSMAX_DATE)	N	Must not be less than lot_created date

Column	Column Long Name	Type	Len	Default	Req'd	Validation
strength	strength	date	variable	IF ic_item_mst.grade_ctl = 1 AND ic_item_mst.retest_interval > 0 THEN lot_created + ic_item_mst.retest_interval ELSE 31-Dec-2010 00:00:00 (SYSMAX_DATE)	N	Must be zero or positive value
inactive_ind	inactive indicator	number	variable	100	N	Must be 0 or 1
origination_type	origination type	number	5	0	N	Must exist on sy_type_mst where table_name = ic_lots_mst and field_name = 'origination_type'
shipvendor_no	shipping vendor number	number	5	0	N	Must exist on po_vend_mst if non-blank
vendor_lot_no	vendor lot number	vchar2	32	NULL	N	Vendor lot number.
ic_matr_date	item maturity date	vchar2	32	NULL	N	Item maturity date.
ic_hold_date	item hold date	date	variable	lot_created + ic_item_mst.ic_matr_days	N	Item hold date.
user_name	user name	vchar2	100	OPM	Y	Any valid user name.
attribute1	attribute1	vchar2	240	NULL	N	Descriptive flexfield segment
attribute2	attribute2	vchar2	240	NULL	N	Descriptive flexfield segment
attribute3	attribute3	vchar2	240	NULL	N	Descriptive flexfield segment

---

Column	Column Long Name	Type	Len	Default	Req'd	Validation
attribute4	attribute4	varchar2	240	NULL	N	Descriptive flexfield segment
attribute5	attribute5	varchar2	240	NULL	N	Descriptive flexfield segment
attribute6	attribute6	varchar2	240	NULL	N	Descriptive flexfield segment
attribute7	attribute7	varchar2	240	NULL	N	Descriptive flexfield segment
attribute8	attribute8	varchar2	240	NULL	N	Descriptive flexfield segment
attribute9	attribute9	varchar2	240	NULL	N	Descriptive flexfield segment
attribute10	attribute10	varchar2	240	NULL	N	Descriptive flexfield segment
attribute11	attribute11	varchar2	240	NULL	N	Descriptive flexfield segment
attribute12	attribute12	varchar2	240	NULL	N	Descriptive flexfield segment
attribute13	attribute13	varchar2	240	NULL	N	Descriptive flexfield segment
attribute14	attribute14	varchar2	240	NULL	N	Descriptive flexfield segment
attribute15	attribute15	varchar2	240	NULL	N	Descriptive flexfield segment
attribute16	attribute16	varchar2	240	NULL	N	Descriptive flexfield segment
attribute17	attribute17	varchar2	240	NULL	N	Descriptive flexfield segment
attribute18	attribute18	varchar2	240	NULL	N	Descriptive flexfield segment
attribute19	attribute19	varchar2	240	NULL	N	Descriptive flexfield segment
attribute20	attribute20	varchar2	240	NULL	N	Descriptive flexfield segment

Column	Column Long Name	Type	Len	Default	Req'd	Validation
attribute21	attribute21	varchar2	240	NULL	N	Descriptive flexfield segment
attribute22	attribute22	varchar2	240	NULL	N	Descriptive flexfield segment
attribute23	attribute23	varchar2	240	NULL	N	Descriptive flexfield segment
attribute24	attribute24	varchar2	240	NULL	N	Descriptive flexfield segment
attribute25	attribute25	varchar2	240	NULL	N	Descriptive flexfield segment
attribute26	attribute26	varchar2	240	NULL	N	Descriptive flexfield segment
attribute27	attribute27	varchar2	240	NULL	N	Descriptive flexfield segment
attribute28	attribute28	varchar2	240	NULL	N	Descriptive flexfield segment
attribute29	attribute29	varchar2	240	NULL	N	Descriptive flexfield segment
attribute30	attribute30	varchar2	240	NULL	N	Descriptive flexfield segment
attribute_category	attribute_category	varchar2	240	NULL	N	Descriptive flexfield structure definition



---

---

# Messages and Errors

This appendix covers:

- Handling Messages
- Interpreting Error Conditions
- Understanding Error Messages

## Handling Messages

APIs put result messages into a message list. Programs calling APIs can then get the messages from the list and process them by issuing them, loading them in a database table, or writing them to a log file.

Messages are stored in an encoded format to enable API callers to find out message names by using the standard functions provided by the message dictionary. It also allows storing these messages in database tables and reporting off these tables in different languages.

The structure of the message list is not public. Neither API developers nor API callers can access this list except through calling the API message utility routines mentioned below.

The following utility functions are defined in the FND\_MSG\_PUB package, in the file AFASMSG.S.pls:

**Initialize** Initializes the API message list.

**Add** Adds a message to the API message list.

**Get** Gets a message from the API message list.

**Count\_Msg** Returns the number of messages in the API message list.

**Delete** Deletes one or more messages from the API message list.

**Reset** Resets the index used in getting messages.

**Count\_And\_Get** Returns the number of messages in the API message list. If this number is one, then it also returns the message data.

Refer to the documentation of these functions and procedures for usage information.

To add a message to the API message list, developers should use the regular message dictionary procedures `FND_MESSAGE.SET_NAME` and `FND_MESSAGE.SET_TOKEN` to set the message name and tokens on the message dictionary stack. They should then call `FND_MSG_PUB.Add` to fetch the messages off the message dictionary stack and add it to the API message list.

To get a message from the API message list, API callers should use the procedure `FND_MSG_PUB.Get`. This procedure operates in 5 different modes:

**First** Gets the first message in the API message list.

**Next** Gets the next message in the API message list.

**Last** Gets the last message in the API message list.

**Previous** Gets the previous message in the API message list.

**Specific** Gets a specific message from the API message list.

For better performance and reduction in the overall number of calls a program needs to make in order to execute an API, it is recommended that APIs provide their callers with the following information:

- message count
- message data

The message count holds the number of messages in the API message list. If this number is one, then message data holds the message in an encoded format.

## Interpreting Error Conditions

The parameter `x_return_status` indicates whether the API was successful or failed. The values are as follows:

- S for success
- E for error
- U unknown or unexpected status

## Understanding Error Messages

These error messages are output to the stored procedure message file, and can be monitored through the return `x_msg_count`. In conjunction with the `x_return_status`, this can be used to monitor the success or failure of the procedure call.

### Displaying Errors in Languages Other than English

Language translation of error messages is determined by the environment variable `NLS_LANGUAGE`. If the message is not found in the required language, then the message is retrieved in US English.

The following is a complete listing of the Inventory API Error Messages. Note that a message that is preceded with Warning is not a fatal API error, just a warning, and a message preceded with Error is a fatal API error.

Any uppercase word preceded by an ampersand (&) is a token, or placeholder, for an actual value that will be populated at runtime.

Message Code	Message Name
IC_API_ITEM_ALREADY_EXISTS	Item number &ITEM already exists
IC_API_INVALID_UOM	Invalid unit of measure &UOM for item number &ITEM
IC_API_INVALID_DUALUM_IND	Dual unit of measure indicator not in range 0 - 3 for item number &ITEM
IC_API_INVALID_DEVIATION	Invalid deviation factor for item number &ITEM
IC_API_INVALID_LOT_CTL	Invalid lot control flag for item number &ITEM
IC_API_INVALID_LOT_INDIVISIBLE	Invalid lot indivisible flag for item number &ITEM

<b>Message Code</b>	<b>Message Name</b>
IC_API_INVALID_SUBLLOT_CTL	Invalid subplot control flag for item number &ITEM
IC_API_INVALID_LOCT_CTL	Invalid location control flag for item number &ITEM
IC_API_INVALID_NONINV_IND	Invalid non-inventory flag for item number &ITEM
IC_API_INVALID_MATCH_TYPE	Invalid match type for item number &ITEM
IC_API_INVALID_INV_TYPE	Invalid inventory type for item number &ITEM
IC_API_INVALID_INACTIVE_IND	Invalid inactive flag for item number &ITEM
IC_API_INVALID_SHELF_LIFE	Invalid shelf life for item number &ITEM
IC_API_INVALID_RETEST_INTERVAL	Invalid retest interval for item number &ITEM
IC_API_INVALID_ABCCODE	Invalid ABC code for item number &ITEM
IC_API_INVALID_GL_CLASS	Invalid GL class for item number &ITEM
IC_API_INVALID_INV_CLASS	Invalid inventory class for item number &ITEM
IC_API_INVALID_SALES_CLASS	Invalid sales class for item number &ITEM
IC_API_INVALID_SHIP_CLASS	Invalid ship class for item number &ITEM
IC_API_INVALID_FRT_CLASS	Invalid freight class for item number &ITEM
IC_API_INVALID_PRICE_CLASS	Invalid price class for item number &ITEM
IC_API_INVALID_STORAGE_CLASS	Invalid storage class for item number &ITEM
IC_API_INVALID_PURCH_CLASS	Invalid purchase class for item number &ITEM
IC_API_INVALID_TAX_CLASS	Invalid tax class for item number &ITEM
IC_API_INVALID_CUSTOMS_CLASS	Invalid customs class for item number &ITEM
IC_API_INVALID_ALLOC_CLASS	Invalid allocation class for item number &ITEM
IC_API_INVALID_PLANNING_CLASS	Invalid planning class for item number &ITEM
IC_API_INVALID_ITEMCOST_CLASS	Invalid item cost class for item number &ITEM
IC_API_INVALID_COST_MTHD_CODE	Invalid cost method for item number &ITEM
IC_API_INVALID_GRADE_CTL	Invalid grade control flag for item number &ITEM
IC_API_INVALID_STATUS_CTL	Invalid status control flag for item number &ITEM

<b>Message Code</b>	<b>Message Name</b>
IC_API_INVALID_QC_GRADE	Invalid QC grade for item number &ITEM
IC_API_INVALID_LOT_STATUS_API	Invalid lot status for item number &ITEM
IC_API_INVALID_QCITEM_NO	Invalid QC reference item number for item number &ITEM
IC_API_INVALID_QCHOLD_RES_CODE	Invalid QC hold reason code for item number &ITEM
IC_API_INVALID_EXPACTION_CODE	Invalid expiry action code for item number &ITEM
IC_API_INVALID_WHSE_ITEM_NO	Invalid warehouse item number for item number &ITEM
IC_API_INVALID_EXPERIMENTAL_IND	Invalid experimental indicator for item number &ITEM
IC_API_INVALID_SEQ_DPND_CLASS	Invalid sequence dependent class for item number &ITEM
IC_API_INVALID_COMMODITY_CODE	Invalid commodity code for item number &ITEM
IC_API_INVALID_MATR_DAYS	Invalid maturity days for item number &ITEM
IC_API_INVALID_HOLD_DAYS	Invalid hold release days for item number &ITEM
SY_API_UNABLE_TO_GET_SURROGATE	Failed to get &SKEY surrogate key
IC_API_INVALID_ITEM_NO	Invalid item &ITEM_NO
IC_API_INVALID_LOT_NO	Invalid lot &LOT_NO - &SUBLOT_NO for item &ITEM_NO
IC_API_INVALID_LOT_UOM_TYPE	Invalid UOM type for item &ITEM_NO lot &LOT_NO - &SUBLOT_NO UOM &UOM
IC_API_INVALID_LOT_UOM	Invalid UOM &UOM for item &ITEM_NO lot &LOT_NO - &SUBLOT_NO
IC_API_ITEM_CNV_ALREADY_EXISTS	Conversion already exists for item &ITEM_NO lot &LOT_NO - &SUBLOT_NO UOM type &UM_TYPE
IC_API_INVALID_TYPE_FACTOR	Invalid conversion factor for item &ITEM_NO lot &LOT_NO - &SUBLOT_NO

<b>Message Code</b>	<b>Message Name</b>
IC_API_LOT_ITEM_UOM_MISMATCH	From UOM is of wrong type for item &ITEM_NO lot &LOT_NO - &SUBLOT_NO
IC_API_ITEM_LOT_UOM_FAILED	Cannot convert from &UM1 to &UM2 for item &ITEM_NO lot &LOT_NO - &SUBLOT_NO
IC_API_INVALID_TRANS_TYPE	Invalid transaction type &TRANS_TYPE
IC_API_INVALID_JOURNAL_NO	Invalid journal number &JOURNAL_NO
SY_API_UNABLE_TO_GET_DOC_NO	Failed to get doc number for type &DOC_TYPE organization &ORGN_CODE
IC_API_INVALID_ITEM_NO	Invalid item &ITEM_NO
IC_API_TRANS_TYPE_FOR_ITEM	Invalid transaction type &TRANS_TYPE for item &ITEM_NO
IC_API_INVALID_LOT_NO	Invalid lot &LOT_NO - &SUBLOT_NO for item &ITEM_NO
IC_API_INVALID_UOM	Invalid unit of measure &UOM for item number &ITEM_NO
IC_API_SUBLOT_NOT_REQD	Sub-lot is not required for item &ITEM_NO as it is not sub-lot controlled
IC_API_INVALID_WHSE_CODE	Invalid warehouse code &WHSE_CODE
IC_API_INVALID_LOCATION	Invalid location &LOCATION warehouse code &WHSE_CODE
IC_API_INVALID_QTY	Invalid quantities for item &ITEM_NO lot &LOT_NO - &SUBLOT_NO
IC_API_LOCT_ONHAND_EXISTS	Inventory exists item &ITEM_NO lot &LOT_NO - &SUBLOT_NO at &WHSE_CODE-&LOCATION
IC_API_NO_LOCT_ONHAND	No inventory for item &ITEM_NO lot &LOT_NO - &SUBLOT_NO at &WHSE_CODE-&LOCATION
IC_API_NEG_QTY_NOT_ALLOWED	Negative qty - item &ITEM_NO lot &LOT_NO - &SUBLOT_NO at &WHSE_CODE-&LOCATION
IC_API_MOVE_STATUS_ERR	Move status error for item &ITEM_NO lot &LOT_NO - &SUBLOT_NO
IC_API_INVALID_LOT_STATUS	Invalid lot status for item number &ITEM_NO

Message Code	Message Name
IC_API_INVALID_QC_GRADE	Invalid QC grade for item number &ITEM_NO
SY_API_INVALID_REASON_CODE	Invalid reason code &REASON_CODE
SY_API_INVALID_CO_CODE	Invalid company code &CO_CODE
SY_API_INVALID_ORGN_CODE	Invalid organization code &ORGN_CODE
IC_API_INVALID_TRANS_DATE	Invalid transaction date &TRANS_DATE
SY_API_UNABLE_TO_GET_SURROGATE	Failed to get &SKEY surrogate key
SY_API_INVALID_OP_CODE	Invalid operator code &OP_CODE
IC_API_INVALID_ITEM	Invalid item &ITEM
IC_API_ITEM_NOT_LOT_CTL	Item &ITEM is not lot controlled
IC_API_SUBLLOT_NOT_REQD	Sub-lot &SUBLLOT supplied for item &ITEM, lot &LOT which is not sublot controlled
IC_API_LOT_ALREADY_EXISTS	Lot &LOT - &SUBLLOT for item number &ITEM already exists
IC_API_INVALID_LOT_QC_GRADE	Invalid QC grade for item &ITEM lot &LOT - &SUBLLOT
IC_API_INVALID_LOT_EXPACTION_CODE	Invalid expiry action for item &ITEM lot &LOT - &SUBLLOT
IC_API_INVALID_EXPACTION_DATE_API	Invalid expiry action date for item &ITEM lot &LOT - &SUBLLOT
IC_API_INVALID_EXPIRE_DATE	Invalid expire date for item &ITEM lot &LOT - &SUBLLOT
IC_API_INVALID_RETEST_DATE	Invalid retest date for item &ITEM lot &LOT - &SUBLLOT
IC_API_INVALID_LOT_STRENGTH	Invalid strength for item &ITEM lot &LOT - &SUBLLOT
IC_API_INVALID_LOT_INACTIVE_IND	Invalid inactive indicator for item &ITEM lot &LOT - &SUBLLOT
IC_API_INVALID_LOT_ORIGINATION_TYPE	Invalid origination type for item &ITEM lot &LOT - &SUBLLOT
IC_API_INVALID_LOT_SHIPVENDOR_NO	Invalid ship vendor for item &ITEM lot &LOT - &SUBLLOT

Message Code	Message Name
IC_API_INVALID_LOT_MATR_DAYS	Invalid maturity days for item &ITEM lot &LOT - &SUBLOT
IC_API_INVALID_LOT_HOLD_DAYS	Invalid hold days for item &ITEM lot &LOT - &SUBLOT
SY_API_UNABLE_TO_GET_SURROGATE	Failed to get &SKEY surrogate key

## File Error Messages

These messages are related to the handling of the ASCII flat input and output files. They are sent to the standard output device as it is inappropriate to attempt to send them to the files which themselves can cause the erroneous condition. They are hard-coded in English.

Message Name	Message Code
UTL_FILE.INVALID_OPERATION	Invalid operation for 'FILE'
UTL_FILE.INVALID_PATH	Invalid path for 'FILE'
UTL_FILE.INVALID_MODE	Invalid mode for 'FILE'
UTL_FILE.INVALID_FILEHANDLE	Invalid File handle for 'FILE'
UTL_FILE.WRITE_ERROR	Invalid Write Error for 'FILE'
UTL_FILE.READ_ERROR	Invalid Read Error for 'FILE'
UTL_FILE.INTERNAL_ERROR	Internal Error

---

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## How to Get Your OPM Inventory APIs Running

This appendix is used in conjunction with the rest of the guide, but is not intended to replace it. The information below is supplemental material that provides additional information regarding OPM Inventory APIs.

Following are four steps to use the Inventory APIs:

1. Create a wrapper file
2. Create a parameter file
3. Determine where log files writes and open permissions
4. Run the API

### Step 1 Creating the Wrapper File

Below are some actual wrapper files that you can copy, use, and modify to get these APIs working.

#### Valid Username

When running the API there has to be a valid username for logging in to create the item or transaction. This username must be a valid applications username, and must be put in the following line of code in the wrapper file. In this example, PROCESS\_OPS is a valid applications user.

```
return_sts :=gmigutl.setup('PROCESS_OPS');
```

#### Call to gmigutl.setup

It is important that your wrapper make a call to the gmigutl.setup procedure. This is new to 11i, and this call is necessary in order for the API to complete successfully.

---

## Example Create Item Wrapper

Copy wrapper below to file.

```
set serveroutput on size 2000
set timing on
DECLARE
return_sts BOOLEAN;
tester NUMBER;
message VARCHAR2(240);
l_return_code VARCHAR2(5);
BEGIN
return_sts :=gmitutl.setup('PROCESS_OPS');
if return_sts = true then
l_return_code :='TRUE';
dbms_output.put_line('Setup is ' ||l_return_code);
gmi_item_wrp.CREATE_ITEM('/usr/tmp','icitem.txt','icitem.log',',,');
dbms_output.put_line('Create itemAPI has completed');
dbms_output.put_line('Please check the log files to make sure no errors
occurred during execution');
else
l_return_code :='FALSE';
dbms_output.put_line('Setup is ' || l_return_code);
fnd_msg_pub.get
(p_msg_index => 1,
p_data => message,
p_encoded => FND_API.G_FALSE,
p_msg_index_out => tester
);
dbms_output.put_line(message);
end if;
END;
/
set serveroutput off
set timing off
```

---

**Note:** To use this wrapper, ensure you modify the following lines, making the changes highlighted in the earlier sections.

---

```
return_sts :=gmitutl.setup('PROCESS_OPS');
gmi_item_wrp.CREATE_ITEM('/usr/tmp','icitem.txt','icitem.log',',,');
```

---

## Example Quantities API

Copy wrapper below to file.

```
set serveroutput on size 2000
set timing on
DECLARE
return_sts BOOLEAN;
tester NUMBER;
message VARCHAR2(240);
l_return_code VARCHAR2(5);
BEGIN
return_sts :=gmigutl.setup('PROCESS_OPS');
if return_sts = true then
l_return_code :='TRUE';
dbms_output.put_line('Setup is ' ||l_return_code);
GMI_QUANTITY_WRP.post ('/usr/tmp','icqty.txt','icqty.log','');
dbms_output.put_line('Quantities API has completed');
dbms_output.put_line('Please check the log files to make sure no errors
occurred during execution');
else
l_return_code :='FALSE';
dbms_output.put_line('Setup is ' || l_return_code);
fnd_msg_pub.get
(p_msg_index => 1,
p_data => message,
p_encoded => FND_API.G_FALSE,
p_msg_index_out => tester
);
dbms_output.put_line(message);
end if;
END;
/
set serveroutput off
set timing off
```

---

---

**Note:** To use this wrapper, ensure you modify the following lines, making the changes highlighted in the earlier sections.

---

---

```
return_sts :=gmigutl.setup('PROCESS_OPS');
GMI_QUANTITY_WRP.post ('/usr/tmp','icqty.txt','icqty.log','');
```

---

## Lot Create API

Copy wrapper below to file.

```
set serveroutput on size 2000
set timing on
DECLARE
return_sts BOOLEAN;
tester NUMBER;
message VARCHAR2(240);
l_return_code VARCHAR2(5);
BEGIN
return_sts :=gmitutl.setup('PROCESS_OPS');
if return_sts = true then
l_return_code :='TRUE';
dbms_output.put_line('Setup is ' ||l_return_code);
GMI_LOTS_WRP.Create_Lot('/usr/tmp','iclot.txt','iclot.log','');
dbms_output.put_line('Lot Create API has completed');
dbms_output.put_line('Please check the log files to make sure no errors
occurred during execution');
else
l_return_code :='FALSE';
dbms_output.put_line('Setup is ' || l_return_code);
fnd_msg_pub.get
(p_msg_index => 1,
p_data => message,
p_encoded => FND_API.G_FALSE,
p_msg_index_out => tester
);
dbms_output.put_line(message);
end if;
END;
/
set serveroutput off
set timing off
```

---

---

**Note:** To use this wrapper, ensure you modify the following lines, making the changes highlighted in the earlier sections.

---

---

```
return_sts :=gmitutl.setup('PROCESS_OPS');
GMI_LOTS_WRP.Create_Lot ('/usr/tmp','iclot.txt','iclot.log','');
```

---

## Example Unit Of Measure API

Copy wrapper below to file.

```
set serveroutput on size 2000
set timing on
DECLARE
return_sts BOOLEAN;
tester NUMBER;
message VARCHAR2(240);
l_return_code VARCHAR2(5);
BEGIN
return_sts :=gmigutl.setup('PROCESS_OPS');
if return_sts = true then
l_return_code :='TRUE';
dbms_output.put_line('Setup is ' ||l_return_code);
GMI_ITEM_LOT_CONV_WRP.create_conv('/usr/tmp','icuum.txt','icuum.log','');
dbms_output.put_line('Create UOM API has completed');
dbms_output.put_line('Please check the log files to make sure no errors
occurred during execution');
else
l_return_code :='FALSE';
dbms_output.put_line('Setup is ' || l_return_code);
fnd_msg_pub.get
(p_msg_index => 1,
p_data => message,
p_encoded => FND_API.G_FALSE,
p_msg_index_out => tester
);
dbms_output.put_line(message);
end if;
END;
/
set serveroutput off
set timing off
```

---

---

**Note:** To use this wrapper, ensure you modify the following lines, making the changes highlighted in the earlier sections.

---

---

```
return_sts :=gmigutl.setup('PROCESS_OPS');
GMI_ITEM_LOT_CONV_WRP.create_conv('/usr/tmp','icuum.txt','icuum.log','');
```

---

## Step 2 Parameter File

The parameter file is a text file that lists all parameters depending on which particular API you are running, and what actions you are attempting to do.

This parameter file must be placed in the same directory as the previous log file, or the syntax in the above line of code would have to change to tell the API where to look for it.

Below is a list of the parameters required by each of the APIs. In addition, there is a copy of one parameter file that was used to create an item to see how the file should look. For non-required fields that you want to be blank, use the comma to hold the place. This is an example of what your parameter file should look like for creating an item.

### Example

```
API100,newitem,100,,,LB,0,,,,,0,0,0,0,0,,0,,,,,,,,,,,,,,,,,,,,,0,0,,,,,,,,,,,,,API  
100,0,,,NONE,,,PROCESS_OPS,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
```

### Item Create API

```
item_no, item_desc1, item_desc2, alt_itema, alt_itemb, item_um, dualum_ind,  
item_um2, deviation_lo, deviation_hi, level_code, lot_ctl, lot_indivisible,  
sublot_ctl, loct_ctl, noninv_ind, match_type, inactive_ind, inv_type, shelf_  
life, retest_interval, item_abccode, gl_class, inv_class, sales_class, ship_  
class, frt_class, price_class, storage_class, purch_class, tax_class, customs_  
class, alloc_class, planning_class, itemcost_class, cost_mthd_code, upc_code,  
grade_ctl, status_ctl, qc_grade, lot_status, bulk_id, pkg_id, qcitem_no, qchold_  
res_code, expaction_code, fill_qty, fill_um, expaction_interval, phantom_type,  
whse_item_no, experimental_ind, exported_date, seq_dpnd_class, commodity_code,  
ic_matr_days, ic_hold_days, attribute1, , attribute2, attribute3, attribute4,  
attribute5, attribute6, attribute7, attribute8, attribute9, attribute10,  
attribute11, attribute12, attribute13, attribute14, attribute15, attribute16,  
attribute17, attribute18, attribute19, attribute20, attribute21, attribute22,  
attribute23, attribute24, attribute25, attribute26, attribute27, attribute28,  
attribute29, attribute30, attribute_category, user_name
```

### Item Lot/Sublot Conversion API

```
item_no, lot_no, sublot_no, from_uom, to_uom, type_factor, user_name
```

### Inventory Quantities API

```
trans_type, item_no, journal_no, from_whse_code, to_whse_code, item_um, item_  
um2, lot_no, sublot_no, from_location, to_location, trans_qty, trans_qty2, qc_  
grade, lot_status, co_code, orgn_code , trans_date, reason_code, user_name
```

---

## Lot Create API

item\_no, lot\_no, subplot\_no, lot\_desc, qc\_grade, expaction\_code, expaction\_date, lot\_created, retest\_date, strength, inactive\_ind, origination\_type, shipvendor\_no, vendor\_lot\_no, ic\_matr\_date, ic\_hold\_date, attribute1, attribute2, attribute3, attribute4, attribute5, attribute6, attribute7, attribute8, attribute9, attribute10, attribute11, attribute12, attribute13, attribute14, attribute15, attribute16, attribute17, attribute18, attribute19, attribute20, attribute21, attribute22, attribute23, attribute24, attribute25, attribute26, attribute27, attribute28, attribute29, attribute30, attribute\_category, user\_name

### Step 3 Log Files

When an API is run it generates a log file that describes what was generated during the API call or what went wrong. These log files must be placed in a specific directory on your system (determined by a parameter in your init.ora file) and that directory must have open permissions to write to that directory. To find out where this directory is, you should run the following query.

```
SQL> select value from v$parameter where name like 'utl%';
```

This query may return multiple directories, so you need to make sure that the directory you want your log files to write to exists, and that the permissions are open to write to it. This directory is entered in your wrapper file where you determine what you want the log file to be called. An example of the code is below. The directory that the log file is writing to in this example is /usr/tmp. The icqty.log is defined as the log file to be generated, and the other file listed is icqty.txt, the parameter file discussed in the next step.

```
GMI_QUANTITY_WRP.post ('/usr/tmp','icqty.txt','icqty.log','');
```

There is also a log file that is generated with the session number that can provide some additional information. That log file is system generated, and is named wrapperxxxxx.log, where the xxxxx is the session number. These two log files have similar information, but if you encounter problems this is another place to look for help.

---

#### **Step 4 Running the API**

The Inventory APIs are PL/SQL based and run database packages, and are run by SQL\*Plus or Unix, initiating a sql session first.

##### **Via Unix**

```
sqlplus apps/apps@database @wrapper_file
```

##### **Via SQL\*Plus**

Login into SQL\*Plus, and start the wrapper file using @wrapper\_file.

---



---

## XML Transactions

### OPM Inventory XML Transactions

This table lists the OPM Inventory prebuilt inbound XML Message Maps that are associated with Oracle defined Events and Event Subscriptions. If the message map is based on data from another Oracle component such as the Oracle Exchange, then it is specified under Source Oracle Component. Review that message map to determine, if it is appropriate as a general purpose message to meet your needs.

---



---

**Note:** This is an additional interface to the existing OPM Inventory APIs. There is no change to the way the APIs currently function.

---



---

OPM Inventory Transaction Description	Message Map	Standard	DTD Used	Source Oracle Component	OPM Inventory API
Item Create	GMI_ITEM_OAG71_IN	OAG	gmi_create_item_001	customized	GMIPAPI.create_item
Lot Create	GMI_LOT_OAG71_IN	OAG	gmi_create_lot_001	customized	GMIPAPI.create_lot
Item Lot/Sublot Conversion	GMI_LTCNV_OAG71_IN	OAG	gmi_convert_lot_001	customized	GMIPAPI.Create_Item_Lot_UOM_Conv
Inventory Quantities	GMI_QTY_OAG71_IN	OAG	gmi_transact_quantity_001	customized	GMIPAPI.Inventory_posting

The details for these message maps follow.

## Installation and Setup Procedures

The following steps are required to enable the OPM PL/SQL APIs, understand the XML messages, and process them using XML Gateway and Workflow technologies.

1. Install XML Gateway Family Pack B or higher.
2. Complete the post installation steps for XML Gateway and Oracle XML Transport Agent (OXTA). Refer to "XML Gateway Setup" in the *Oracle XML Gateway User's Guide*.
3. Set up an HR Location to be used as a Trading Partner in Step 4.

Header Region Parameter	Data
Name	PR-New York (User Defined)
Description	XML Trading Partner (User Defined)
Inactive Date	Null
Global	Yes

Details Region - Address Details Tab Parameter	Data
Address Style	United States (User Defined)
Address	123 Main Street New York NY 10001 (User Defined)

For details, refer to the "Trading Partner Validation for Inbound Messages" section in the *Oracle XML Gateway User's Guide*.

4. Set up the Trading Partner along with transactions details.

API	Data
Header Information for all the APIs	Party Type: Internal Trading Partner Name: PR-New York (User Defined) Trading Partner Site: 123 Main Street New York NY 10001 (User Defined) Company Admin Email: <your email address> (User Defined)

API	Data
Trading Partner Details region - Item Create API	Transaction Type: GMI Transaction Subtype: ITEM Standard Code: OAG External Transaction Type: GMI External Transaction Subtype: ITEM Direction: IN Map: GMI_ITEM_OAG71_IN. Source Trading Partner Location Code: XML_API (User Defined)
Trading Partner Details region - Lot Create API	Transaction Type: GMI Transaction Subtype: LOT Standard Code: OAG External Transaction Type: GMI External Transaction Subtype: LOT Direction: IN Map: GMI_LOT_OAG71_IN. Source Trading Partner Location Code: XML_API (User Defined)
Trading Partner Details region - Item Lot/Sublot Conversion API	Transaction Type: GMI Transaction Subtype: LTCNV Standard Code: OAG External Transaction Type: GMI External Transaction Subtype: LTCNV Direction: IN Map: GMI_LTCNV_OAG71_IN. Source Trading Partner Location Code: XML_API (User Defined)

API	Data
Trading Partner Details region - Inventory Quantities API	Transaction Type: GMI Transaction Subtype: QTY Standard Code: OAG External Transaction Type: GMI External Transaction Subtype: QTY Direction: IN Map: GMI_QTY_OAG71_IN. Source Trading Partner Location Code: XML_API (User Defined)

- Complete the implementation steps, including Trading Partner Setup, for XML Gateway.

## DTDs

OPM Inventory references the standard DTDs issued by the Open Applications Group (OAG) if they exist. Otherwise, other appropriate DTDs are used.

The following DTDs are required for specific XML transactions that are provided by OPM Inventory.

XML Standard	DTD Name	Description
OAG	gmi_create_item_001.dtd	Item Create
OAG	gmi_create_lot_001.dtd	Lot Create
OAG	gmi_convert_lot_001.dtd	Item/Lot Conversion
OAG	gmi_transact_quantity_001.dtd	Inventory Quantities

These DTDs are loaded into the Oracle XML Gateway repository during the install process.

The following OAG DTDs are required for all OAG messages. These DTDs are automatically loaded into the Oracle XML Gateway repository when the transaction-specific DTDs listed above are loaded.

- oagis\_segments\_71.dtd
- oagis\_resources\_71.dtd

- oagis\_fields\_71.dtd
- oagis\_domains\_71.dtd
- oagis\_entity\_extensions\_71.dtd (if used)

Refer to "How to Load Message Maps and DTDs" in the *Oracle XML Gateway User's Guide* for details.

## Setup

### XML Gateway Prerequisites

Perform all the necessary setups in the Oracle XML Gateway. Some steps apply to the development of a new transaction, while others are for the implementation of the Oracle prebuilt transactions. This table summarizes these steps.

Step	Description	New Transaction Development	Transaction Implementation
1	Define System Profile Values	N/A	Required
2	Define XML Gateway Responsibility	N/A	Required
3	Define the utl_file_dir parameters. Done by DBA.	N/A	Required
4	Define Hubs	N/A	As Needed
5	Define XML Standards	Required	N/A
6	Define Transactions	Required	N/A
7	Define Lookup Values	Required	N/A
8	Define Trading Partners	N/A	Required
9	Trading Partner Code Conversion (through the Define Trading Partner window)	N/A	As Needed
10	Define Standard Code Conversion	N/A	As Needed

The following areas must be setup to process the XML transaction:

- Profile Options
- Trading Partner/Hub Setup
- Transaction Setup
- Code Conversion values (Optional)
- Message maps (new)

The Trading Partner and Transaction setups are discussed below.

Refer to the *Oracle XML Gateway User's Guide* for other details.

## Trading Partner Setup

Use the Define Trading Partner window to define the following:

- With whom you are conducting business
- Which transactions are you exchanging
- How you want the message transported
- Indicate if you want a Confirmation
- Trading Partner specific code conversion values

## Transaction Setup

Transaction Type and Transaction Subtype represent the codes that respectively identify the Oracle application and their transaction code to process a given XML transaction. These values are seeded by Oracle.

This table has the seeded codes to recognize the transactions from OPM Inventory.

Transaction Type (Application)	Transaction Subtype (Transaction Code)	Description
GMI	ITEM	GMI Create Item Transaction
GMI	LOT	GMI Create Lot Transaction
GMI	ITMCV	GMI Item Conversion Transaction
GMI	QTY	GMI Quantity Transaction

External Transaction Type and External Transaction Subtype represent the codes found in the Oracle XML Gateway envelope to identify the type of transaction. The expected codes for the Oracle XML Gateway envelope are seeded by Oracle.

The message map identifies the Transaction Type and Transaction Subtype for the message.

The Oracle XML Gateway envelope identifies the External Transaction Type and External Transaction Subtype for the message. The Transaction setup in the Oracle XML Gateway cross-references the pairs of codes so the message identified by the XML Gateway is associated with the proper Oracle application and transaction within that application.

Since there are many XML standards that format XML transactions, there are many different combination of External Transaction Type and External Transaction Subtype. All combinations are processed as the same Transaction Type and Transaction Subtype into the Oracle application.

This table lists the seeded transaction identification data for OPM Inventory transactions.

Transaction Type (Application)	Transaction Subtype (Transaction Code)	External Transaction Type (for the Envelope)	External Transaction Subtype (for the Envelope)
GMI	ITEM	GMI	ITEM
GMI	LOT	GMI	LOT
GMI	ITMCV	GMI	ITMCV
GMI	QTY	GMI	QTY

Oracle seeds many of these values. However, if your organization receives other XML transactions that follow a different naming convention to format the names of the External Transaction Type and External Transaction Subtype, then those values must be defined in the Transaction Setup window.

Refer to the *Oracle XML Gateway User's Guide* for more details.

## Copy Prebuilt XML Message Maps

If the Oracle prebuilt message map is not exactly what you want, then copy the Oracle message map and make modifications to create your own version.

It is recommended that you do not modify the Oracle prebuilt message map, so you have it as a base to start your versions of the message map as needed. Use a different message map name when you save it and use a corporate identifier as a prefix to recognize your message maps from those provided by Oracle.

If you modify the Oracle provided message map, then an Oracle patch can override your modification.

Refer to "Oracle XML Gateway Setup" in the *Oracle XML Gateway User's Guide* for details.

## Workflow Business Event System Prerequisites

Events and event subscriptions are predefined for Oracle prebuilt transactions. These can be configured during implementation if you want to customize them. Refer to the Oracle Workflow Events and Subscription in the XML Transactions section for additional information.

Refer to the section on integrating with Workflow Business Event System in the *Oracle XML Gateway User's Guide* for details.

## Oracle Workflow Events and Subscriptions

### Events

Events and event subscriptions are predefined for Oracle prebuilt XML transactions. These can be configured during implementation. For new transactions, the events and event subscriptions must be defined.

Refer to the section on integrating with Workflow Business Event System in the *Oracle XML Gateway User's Guide* for details.

### Inbound Transactions

This table lists the Workflow Business Events that have been defined in OPM Inventory for inbound transactions.

Event Description	OPM Inventory Event Name	Subscription Name	Associated Prebuilt Message Map Name
Create Item Event	oracle.apps.gmi.api.item.create	GMIXMLAP/CREATE_ITEM	GMI_ITEM_OAG71_IN
Create Lot Event	oracle.apps.gmi.api.lot.create	GMIXMLAP/CREATE_LOT	GMI_LOT_OAG71_IN
Lot Conversion Event	oracle.apps.gmi.api.lot.convert	GMIXMLAP/CREATE_LTCONV	GMI_LTCNV_OAG71_IN
Transact Quantity Event	oracle.apps.gmi.api.quantity.transact	GMIXMLAP/CREATE_TRANSACTION	GMI_QTY_OAG71_IN

### Subscriptions

For Oracle prebuilt transactions, configure a predefined event subscriptions by doing the following:

- Confirm that the event is enabled.
- Disable an enabled event subscription, if you do not want to implement it.
- Determine if you want the event subscription to be executed immediately or in deferred mode.
- Modify the event subscription to integrate with existing Workflow processes.
- Modify the rule function associated with the event subscription, if additional rules are necessary. Not recommended.

Refer to the section on integrating with Workflow Business Event System in the *Oracle XML Gateway User's Guide* for details on how to Manage Workflow Processes.

This table lists the Seeded Workflow Event Subscriptions for inbound transactions:

Event Subscription Name	Workflow Item Type	Rule Function	Workflow Process Name	Event Filter
GMIXMLAP/CREATE_ITEM	GMIXMLAP	Wf_rule.default_rule	CREATE_ITEM	oracle.apps.gmi.api.item.create
GMIXMLAP/CREATE_LOT	GMIXMLAP	Wf_rule.default_rule	CREATE_LOT	oracle.apps.gmi.api.lot.create
GMIXMLAP/CREATE_LTCONV	GMIXMLAP	Wf_rule.default_rule	CREATE_CONV	oracle.apps.gmi.api.lot.convert
GMIXMLAP/CREATE_TRANSACTION	GMIXMLAP	Wf_rule.default_rule	CREATE_TRANSACTION	oracle.apps.gmi.api.quantity.transact

## Workflow Error Notification

Oracle XML Gateway and Oracle Workflow detected errors are automatically sent to either the System Administrator or the Trading Partner's contact.

Notifications are online and sent through e-mail only if Workflow Mailer is enabled and the System Administrator contact is stored in the System Profile.

System Administrators get messages regarding system or process errors. Trading Partner contacts get messages regarding data errors.

Standard Error Messages returned by the OPM Inventory APIs are used. Refer to "Messages and Errors" for the list of error messages. These messages are either sent embedded in an XML Outbound format or through Workflow Notification as shown in the table below.

This table details who receives the notifications and when it is sent.

<b>Number</b>	<b>Scenario</b>	<b>Confirmation Flag in the Message set to</b>	<b>Workflow Mail Notification to ECX admin?</b>	<b>Outbound XML Message to Trading Partner?</b>
1	XML Message does not conform to DTD	N/A	N	Y
2	XML Message Processed Successfully	0 - do not send outbound messages.	N	N
2	XML Message Processed Successfully	1 - send out bound message only in case of errors.	N	N
2	XML Message Processed Successfully	2 - send outbound messages all the time.	N	Y
3	XML Message conforms to DTD but fails because of business related reasons.	0 - do not send outbound messages.	N	N
3	XML Message conforms to DTD but fails because of business related reasons.	1 - send out bound message only in case of errors.	Y	Y
3	XML Message conforms to DTD but fails because of business related reasons.	2 - send outbound messages all the time.	Y	Y
4	XML Message conforms to DTD and business logic, and corresponding tables are updated.	0 - do not send outbound messages.	N	N

Number	Scenario	Confirmation Flag in the Message set to	Workflow Mail Notification to ECX admin?	Outbound XML Message to Trading Partner?
4	XML Message conforms to DTD and business logic, and corresponding tables are updated.	1 - send out bound message only in case of errors.	N	N
4	XML Message conforms to DTD and business logic, and corresponding tables are updated.	2 - send outbound messages all the time.	N	Y

See *Oracle XML Gateway User's Guide* for more info.

A Confirmation Business Object Document will be send to the Trading partner if the setup for the incoming transaction and the incoming messages have been enabled to receive a Confirmation.

## Confirmation Business Object Document

In order to enable the Confirmation BOD for an incoming XML message the following must be complete:

1. In the Define Trading Partner form, set the Confirm Flag to Yes for the Trading Partner and associated inbound message.
2. The incoming message must have the value of the confirmation flag in the CNTROLAREA to 1 or 2. The confirmation flag can have the value:
  - a. 0 = No confirmation Business Object Document requested
  - b. 1 = Send back a confirmation Business Object Document (BOD) only if an error has occurred
  - c. 2 = Always send a confirmation Business Object Document (BOD)

Please refer to the *Oracle XML Gateway Message Designer User's Guide* for more details.

If the two conditions are met, then the Confirmation BOD is sent to the Trading Partner email that is set up in the Trading Partners window.

If an XML message is successfully processed, then a value of SUCCESS is returned in the status element of the Confirmation BOD and sent back to the Trading Partner.

If an XML message fails, then the error message returned by the API is embedded in the Confirmation BOD and sent back to the Trading Partner.

Please refer to the "Messages and Errors" section to see the list of error messages returned by the APIs.

## Transaction Detail: Inbound OPM Inventory Create Item

This table lists the message maps that are provided by OPM Inventory for the inbound create item message. If the inbound message is associated with another Oracle source such as Oracle Exchange, then it is noted under the Oracle Transaction Source column. Each message maps detail is described below.

OPM Inventory Transaction	Message Map	Standard	DTD Used	Oracle Transaction Source
Item Create API	GMI_ITEM_OAG71_IN	OAG	gmi_create_item_001	Customized

It is likely that multiple versions of a given standards XML DTDs must be maintained. Not all trading partners advance to the newer version DTD at the same rate or advance at all. If a version 7 message meets your needs, then you can not move to the next version. You can use multiple maps at any one time depending on your trading partner requirements.

## Workflow Troubleshooting

For Oracle Workflow or Oracle XML Gateway detected errors, review the log file for the details and use the Workflow Administrator functions to monitor and manage Workflow processes. Refer to the section on how to Manage and Monitor Workflow processes in the *Oracle XML Gateway User's Guide* for the details.

## Message Map Detail: GMI\_ITEM\_OAG71\_IN

### Map Summary

The GMI\_ITEM\_OAG71\_IN message map is associated with the OPM Inventory inbound create item. The following sections present details associated with that message map.

Most data values are seeded data.

### XML Gateway Details

Message Map Name:	GMI_ITEM_OAG71_IN
Direction:	Inbound

(Internal) Transaction Type:	GMI
(Internal) Transaction Subtype:	ITEM
External Transaction Type:	GMI
External Transaction Subtype:	ITEM
DTD Directory:	gmi/xml/oag71
Map Directory:	patch/115/xml/US
Message Maps XGM File Name:	GMI_ITEM_OAG71_IN.xgm

### Workflow Business Event System Details

Event Name initiated by the Message Map after the transaction is processed:	oracle.apps.gmi.api.create.item
Event Subscription Name initiated by the Application after the transaction is processed:	GMIXMLAP/CREATE_ITEM

### General XML DTD Details

Standard:	OAG
Release:	7.1
Format:	DTD
DTD Name:	gmi_create_item_001

### General Message Map Details

The Open Interface or API is initiated for the transaction by the Message Map:	Yes
--	-----

Name of the Application Open Interface or API(s) associated with validation of the entire transaction:	OPM Inventory Create Item
Are levels expanded or collapsed in the Message Map?	No
The Message Map sends out notifications other than default notifications:	Confirmation BODs

### Target Detail Open Interface Tables

GMI\_ITEMS\_XML\_INTERFACE

### Defaulted Columns

Defaulted Columns	Default Value and Condition (if any)
ITEM_INTERFACE_ID	Database sequence
CREATION_DATE	N/A
CREATED_BY	N/A
LAST_UPDATE_DATE	N/A
LAST_UPDATED_BY	N/A
LAST_UPDATE_LOGIN	N/A

### Attached XSLT

XSLTs are not provided in the Oracle transactions. Add them to your own if you want to forward the incoming message to another system by invoking the Execute Procedure to Perform XSLT Transaction action in the Message Map.

XML style sheets must be stored in the directory defined in the profile option, if they are used.

### Source-Target Data Relationship

This table shows the source-target data relationship for the inbound create item message. The table displays the source XML data item and the target Application API, or table that it maps to. Each hierarchy level can repeat within a transaction. A (C) or (E) after the table name indicates if the data level is collapsed or expanded.

Hierarchy Level	SOURCE (XML)	TARGET (Application)
1	Create Item	gmi_items_xml_interface

## DTD Content

This is the OAG Version 7.1 CREATE\_ITEM DTD.

```

<!-- gmi_create_item_001.dtd -->
<!-- $Header: gmi_create_item_001.dtd 115.0 2002/06/19 15:39:17 pbamb noship $ -->

<!ENTITY % GMI_RESOURCES SYSTEM "gmi_resources.dtd">
%GMI_RESOURCES;

<!ELEMENT GMI_CREATE_ITEM_001 (CNTROLAREA,DATAAREA)>

  <!ATTLIST VERB value CDATA #FIXED "CREATE">
  <!ATTLIST NOUN value CDATA #FIXED "ITEM">
  <!ATTLIST REVISION value CDATA #FIXED "001">

  <!ELEMENT DATAAREA (GMI_ITEM_RECORD)>

<!-- End of file. -->

<!-- gmi_resources.dtd -->
<!-- $Header: gmi_resources.dtd 115.0 2002/06/19 15:39:40 pbamb noship $ -->

<!ENTITY % OAGIS_DTD SYSTEM "oagis_resources_71.dtd">
%OAGIS_DTD;

<!ENTITY % GMI_SEGMENTS SYSTEM "gmi_segments.dtd">
%GMI_SEGMENTS;

<!-- End of file. -->

<!-- gmi_segments.dtd -->
<!-- $Header: gmi_segments.dtd 115.1 2002/06/19 15:51:21 pbamb noship $ -->

<!-- RS - Common GMI elements -->
<!ENTITY % GMI_FIELDS SYSTEM "gmi_fields.dtd">
%GMI_FIELDS;

```

```
<!-- common gmi fields -->

<!-- Item -->
<!ELEMENT GMI_ITEM_RECORD(
  EXT_ITEM_ID,
  ITEM_NUMBER           ,
  ITEM_DESC1           ,
  ITEM_DESC2?         ,
  ALT_ITEMA?          ,
  ALT_ITEMB?          ,
  ITEM_UOM             ,
  DUALUM_IND          ,
  ITEM_UOM2?          ,
  DEVIATION_LO        ,
  DEVIATION_HI        ,
  LEVEL_CODE?         ,
  LOT_CTL             ,
  LOT_INDIVISIBLE     ,
  SUBLOT_CTL          ,
  LOCT_CTL            ,
  NONINV_IND          ,
  MATCH_TYPE          ,
  INACTIVE_IND        ,
  INV_TYPE?           ,
  SHELF_LIFE          ,
  RETEST_INTERVAL     ,
  ITEM_ABCCODE?       ,
  GL_CLASS?           ,
  INV_CLASS?          ,
  SALES_CLASS?        ,
  SHIP_CLASS?         ,
  FRT_CLASS?          ,
  PRICE_CLASS?        ,
  STORAGE_CLASS?     ,
  PURCH_CLASS?        ,
  TAX_CLASS?          ,
  CUSTOMS_CLASS?     ,
  ALLOC_CLASS?        ,
  PLANNING_CLASS?     ,
  ITEM_COST_CLASS?    ,
  COST_MTHD_CODE?    ,
  UPC_CODE?           ,
  GRADE_CTL           ,
  STATUS_CTL          ,
  QC_GRADE?           ,
```

LOT\_STATUS? ,  
BULK\_ID? ,  
PKG\_ID? ,  
QCITEM\_NUMBER? ,  
QCHOLD\_RES\_CODE? ,  
EXPACTION\_CODE? ,  
FILL\_QTY ,  
FILL\_UM? ,  
EXPACTION\_INTERVAL? ,  
PHANTOM\_TYPE? ,  
WHSE\_ITEM\_NUMBER? ,  
EXPERIMENTAL\_IND? ,  
EXPORTED\_DATE? ,  
SEQ\_DPND\_CLASS? ,  
COMMODITY\_CODE? ,  
IC\_MATR\_DAYS? ,  
IC\_HOLD\_DAYS? ,  
ATTRIBUTE1? ,  
ATTRIBUTE2? ,  
ATTRIBUTE3? ,  
ATTRIBUTE4? ,  
ATTRIBUTE5? ,  
ATTRIBUTE6? ,  
ATTRIBUTE7? ,  
ATTRIBUTE8? ,  
ATTRIBUTE9? ,  
ATTRIBUTE10? ,  
ATTRIBUTE11? ,  
ATTRIBUTE12? ,  
ATTRIBUTE13? ,  
ATTRIBUTE14? ,  
ATTRIBUTE15? ,  
ATTRIBUTE16? ,  
ATTRIBUTE17? ,  
ATTRIBUTE18? ,  
ATTRIBUTE19? ,  
ATTRIBUTE20? ,  
ATTRIBUTE21? ,  
ATTRIBUTE22? ,  
ATTRIBUTE23? ,  
ATTRIBUTE24? ,  
ATTRIBUTE25? ,  
ATTRIBUTE26? ,  
ATTRIBUTE27? ,  
ATTRIBUTE28? ,

```

ATTRIBUTE29?      ,
ATTRIBUTE30?      ,
ATTRIBUTE_CATEGORY? ,
USER_NAME         ,
ONT_PRICING_QTY_SOURCE?
)>

```

```

<!ELEMENT EXCEPTION(
EXCEPTION_TYPE,
EXCEPTION_TEXT,
EXCEPTION_FIELD?,
EXCEPTION_CATEGORY?
)>

```

```

<!-- End of file. -->

```

```

<!-- gmi_fields.dtd -->

```

```

<!-- $Header: gmi_fields.dtd 115.1 2002/06/19 15:50:30 pbamb noship $ -->

```

```

<!-- RS - common gmi elements -->

```

```

<!ELEMENT EXT_ITEM_ID           %STRDOM;>
<!ELEMENT ITEM_DESC1           %STRDOM;>
<!ELEMENT ITEM_DESC2           %STRDOM;>
<!ELEMENT ALT_ITEMA            %STRDOM;>
<!ELEMENT ALT_ITEMB            %STRDOM;>
<!ELEMENT ITEM_UOM             %STRDOM;>
<!ELEMENT DUALUM_IND           %STRDOM;>
<!ELEMENT ITEM_UOM2            %STRDOM;>
<!ELEMENT DEVIATION_LO         %STRDOM;>
<!ELEMENT DEVIATION_HI         %STRDOM;>
<!ELEMENT LEVEL_CODE           %STRDOM;>
<!ELEMENT LOT_CTL              %STRDOM;>
<!ELEMENT LOT_INDIVISIBLE      %STRDOM;>
<!ELEMENT SUBLOT_CTL           %STRDOM;>
<!ELEMENT LOCT_CTL             %STRDOM;>
<!ELEMENT NONINV_IND           %STRDOM;>
<!ELEMENT MATCH_TYPE           %STRDOM;>
<!ELEMENT INACTIVE_IND         %STRDOM;>
<!ELEMENT INV_TYPE             %STRDOM;>
<!ELEMENT SHELF_LIFE           %STRDOM;>
<!ELEMENT RETEST_INTERVAL      %STRDOM;>
<!ELEMENT ITEM_ABCCODE         %STRDOM;>
<!ELEMENT GL_CLASS             %STRDOM;>

```

```
<!ELEMENT INV_CLASS %STRDOM;>
<!ELEMENT SALES_CLASS %STRDOM;>
<!ELEMENT SHIP_CLASS %STRDOM;>
<!ELEMENT FRT_CLASS %STRDOM;>
<!ELEMENT PRICE_CLASS %STRDOM;>
<!ELEMENT STORAGE_CLASS %STRDOM;>
<!ELEMENT PURCH_CLASS %STRDOM;>
<!ELEMENT TAX_CLASS %STRDOM;>
<!ELEMENT CUSTOMS_CLASS %STRDOM;>
<!ELEMENT ALLOC_CLASS %STRDOM;>
<!ELEMENT PLANNING_CLASS %STRDOM;>
<!ELEMENT ITEMCOST_CLASS %STRDOM;>
<!ELEMENT COST_MTHD_CODE %STRDOM;>
<!ELEMENT UPC_CODE %STRDOM;>
<!ELEMENT GRADE_CTL %STRDOM;>
<!ELEMENT STATUS_CTL %STRDOM;>
<!ELEMENT BULK_ID %STRDOM;>
<!ELEMENT PKG_ID %STRDOM;>
<!ELEMENT QCITEM_NUMBER %STRDOM;>
<!ELEMENT QCHOLD_RES_CODE %STRDOM;>
<!ELEMENT EXPACTION_CODE %STRDOM;>
<!ELEMENT FILL_QTY %STRDOM;>
<!ELEMENT FILL_UM %STRDOM;>
<!ELEMENT EXPACTION_INTERVAL %STRDOM;>
<!ELEMENT PHANTOM_TYPE %STRDOM;>
<!ELEMENT WHSE_ITEM_NUMBER %STRDOM;>
<!ELEMENT EXPERIMENTAL_IND %STRDOM;>
<!ELEMENT EXPORTED_DATE %STRDOM;>
<!ELEMENT SEQ_DPND_CLASS %STRDOM;>
<!ELEMENT COMMODITY_CODE %STRDOM;>
<!ELEMENT IC_MATR_DAYS %STRDOM;>
<!ELEMENT IC_HOLD_DAYS %STRDOM;>
<!ELEMENT ATTRIBUTE1 %STRDOM;>
<!ELEMENT ATTRIBUTE2 %STRDOM;>
<!ELEMENT ATTRIBUTE3 %STRDOM;>
<!ELEMENT ATTRIBUTE4 %STRDOM;>
<!ELEMENT ATTRIBUTE5 %STRDOM;>
<!ELEMENT ATTRIBUTE6 %STRDOM;>
<!ELEMENT ATTRIBUTE7 %STRDOM;>
<!ELEMENT ATTRIBUTE8 %STRDOM;>
<!ELEMENT ATTRIBUTE9 %STRDOM;>
<!ELEMENT ATTRIBUTE10 %STRDOM;>
<!ELEMENT ATTRIBUTE11 %STRDOM;>
<!ELEMENT ATTRIBUTE12 %STRDOM;>
<!ELEMENT ATTRIBUTE13 %STRDOM;>
```

```
<!ELEMENT ATTRIBUTE14          %STRDOM;>
<!ELEMENT ATTRIBUTE15          %STRDOM;>
<!ELEMENT ATTRIBUTE16          %STRDOM;>
<!ELEMENT ATTRIBUTE17          %STRDOM;>
<!ELEMENT ATTRIBUTE18          %STRDOM;>
<!ELEMENT ATTRIBUTE19          %STRDOM;>
<!ELEMENT ATTRIBUTE20          %STRDOM;>
<!ELEMENT ATTRIBUTE21          %STRDOM;>
<!ELEMENT ATTRIBUTE22          %STRDOM;>
<!ELEMENT ATTRIBUTE23          %STRDOM;>
<!ELEMENT ATTRIBUTE24          %STRDOM;>
<!ELEMENT ATTRIBUTE25          %STRDOM;>
<!ELEMENT ATTRIBUTE26          %STRDOM;>
<!ELEMENT ATTRIBUTE27          %STRDOM;>
<!ELEMENT ATTRIBUTE28          %STRDOM;>
<!ELEMENT ATTRIBUTE29          %STRDOM;>
<!ELEMENT ATTRIBUTE30          %STRDOM;>
<!ELEMENT ATTRIBUTE_CATEGORY   %STRDOM;>
<!ELEMENT ONT_PRICING_QTY_SOURCE %STRDOM;>

<!-- if we need any exception handling for future use -->

<!ELEMENT EXCEPTION_TYPE%STRDOM;>
<!ELEMENT EXCEPTION_TEXT%STRDOM;>
<!ELEMENT EXCEPTION_FIELD%STRDOM;>
<!ELEMENT EXCEPTION_CATEGORY%STRDOM;>

<!-- End of file. -->
```

## Map Detail

This table describes the Data Types or fields in the DTD used by this message map.

Not Used fields can be removed by the message map so that empty data tags are not generated for outbound transactions, nor examined by inbound transactions.

Table Notations:

### 1. Qualifiers Notation

Some data tags include qualifiers and types such as the following:

```
<OPERAMT qualifier="EXTENDED" tappet">
```

They are noted as the following in the Description/Comment column of this map detail table:

<OPERAMT(EXTENTED(T)>

### 2. Target Attributes Column

Several applicable attributes are coded in the Target Attribute column in this map detail table. This table lists the target attributes that apply to the column in the message map.

Target Attribute	Description
C	Code Conversion is set up
D	Default is assigned
R	Required by the DTD or the Oracle Application
N	Not Required
NU	Not Used

### 3. Action Codes Column

If at least one Action Code is assigned to that column in the message map, then the word ACTION is placed in the Action Codes column in the detail table.

See the *Oracle XML Gateway User's Guide* for the list of action codes available.

The following is the message map detail for GMI\_ITEM\_OAG71\_IN.

Field/Data Type	Target Attributes	Action Codes	Description/Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
CNTRLOAREA	R	N/A	This area provides data about the XML document i.e. BSR, SENDER and DATETIME described below.	N/A	N/A

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<BSR>  <VERB> <NOUN> <REVISON>	R  R R R	N/A	Shows the Business Service Request name per OAGI: Value is 'CREATE'. Value is 'ITEM'. Value is '001'.	N/A	N/A
<SENDER> <LOGICALID> <COMPONENT> <TASK> <REFERENCEID> <CONFIRMATION> <LANGUAGE> <CODEPAGE> <AUTHID>	R R R R R R R R	N/A	This area provides data about the sender of the XML document.	N/A	N/A
<DATETIME> <YEAR> <MONTH> <DAY> <HOUR> <MINUTE> <SECOND> <SUBSECOND> <TIMEZONE>	R R R R R R R R	N/A	This area provides data about the date and time the XML document was sent.	N/A	N/A

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<GMI_ITEM_RECORD>	R	N/A	This area provides detailed data about the XML document.	GMI_ITEMS_XML_INTERFACE.ITEM_NUMBER	ic_item_mst.ITEM_NUMBER
<EXT_ITEM_ID>	R			GMI_ITEMS_XML_INTERFACE.ITEM_DESC1	ic_item_mst.ITEM_DESC1
<ITEM_NUMBER>	R			GMI_ITEMS_XML_INTERFACE.ITEM_DESC2	ic_item_mst.ITEM_DESC2
<ITEM_DESC1>	R			GMI_ITEMS_XML_INTERFACE.ALT_ITEMA	ic_item_mst.ALT_ITEMA
<ITEM_DESC2>	N			GMI_ITEMS_XML_INTERFACE.ALT_ITEMB	ic_item_mst.ALT_ITEMB
<ALT_ITEMA>	N			GMI_ITEMS_XML_INTERFACE.ITEM_UOM	ic_item_mst.ITEM_UOM
<ALT_ITEMB>	R			GMI_ITEMS_XML_INTERFACE.DUALUM_IND	ic_item_mst.DUALUM_IND
<ITEM_UOM>	R			GMI_ITEMS_XML_INTERFACE.ITEM_UOM2	ic_item_mst.ITEM_UOM2
<DUALUM_IND>	N			GMI_ITEMS_XML_INTERFACE.DEVIATION_LO	ic_item_mst.DEVIATION_LO
<ITEM_UOM2>	R			GMI_ITEMS_XML_INTERFACE.DUALUM_IND	ic_item_mst.DUALUM_IND
<DEVIATION_LO>	N			GMI_ITEMS_XML_INTERFACE.DEVIATION_HI	ic_item_mst.DEVIATION_HI
<DEVIATION_HI>				GMI_ITEMS_XML_INTERFACE.LEVEL_CODE	ic_item_mst.LEVEL_CODE
<LEVEL_CODE>				GMI_ITEMS_XML_INTERFACE.LEVEL_CODE	

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column	
<LOT_CTL>	R	N/A	This area provides detailed data about the XML document.	GMI_ITEMS_XML_INTERFACE.LOT_CTL	ic_item_mst.LOT_CTL	
<LOT_INDIVISIBLE>	R			GMI_ITEMS_XML_INTERFACE.LOT_INDIVISIBLE	ic_item_mst.LOT_INDIVISIBLE	
<SUBLLOT_CTL>	R			GMI_ITEMS_XML_INTERFACE.SUBLLOT_CTL	ic_item_mst.SUBLLOT_CTL	
<LOCT_CTL>	R			GMI_ITEMS_XML_INTERFACE.LOCT_CTL	ic_item_mst.NONINV_IND	
<NONINV_IND>	N			GMI_ITEMS_XML_INTERFACE.NONINV_IND	ic_item_mst.MATCH_TYPE	
<MATCH_TYPE>	R			GMI_ITEMS_XML_INTERFACE.MATCH_TYPE	ic_item_mst.INACTIVE_IND	
<INACTIVE_IND>				GMI_ITEMS_XML_INTERFACE.INACTIVE_IND	ic_item_mst.INV_TYPE	
<INV_TYPE>				GMI_ITEMS_XML_INTERFACE.INV_TYPE	ic_item_mst.SHELF_LIFE	
<SHELF_LIFE>				GMI_ITEMS_XML_INTERFACE.SHELF_LIFE		
<RETEST_INTERVAL>	R	N/A		This area provides detailed data about the XML document.	GMI_ITEMS_XML_INTERFACE.RETEST_INTERVAL	ic_item_mst.RETEST_INTERVAL
<ITEM_ABCCODE>	N				GMI_ITEMS_XML_INTERFACE.ITEM_ABCCODE	ic_item_mst.ITEM_ABCCODE
<GL_CLASS>	N				GMI_ITEMS_XML_INTERFACE.GL_CLASS	ic_item_mst.GL_CLASS
<INV_CLASS>	N				GMI_ITEMS_XML_INTERFACE.INV_CLASS	ic_item_mst.INV_CLASS
<SALES_CLASS>	N		GMI_ITEMS_XML_INTERFACE.SALES_CLASS		ic_item_mst.SALES_CLASS	
<SHIP_CLASS>	N		GMI_ITEMS_XML_INTERFACE.SHIP_CLASS		ic_item_mst.SHIP_CLASS	
<FRT_CLASS>			GMI_ITEMS_XML_INTERFACE.FRT_CLASS		ic_item_mst.FRT_CLASS	
<PRICE_CLASS>			GMI_ITEMS_XML_INTERFACE.PRICE_CLASS		ic_item_mst.PRICE_CLASS	

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<STORAGE_CLASS>	N	N/A	This area provides detailed data about the XML document.	GMI_ITEMS_XML_INTERFACE.STORAGE_CLASS	ic_item_mst.STORAGE_CLASS
<PURCH_CLASS>	N			GMI_ITEMS_XML_INTERFACE.PURCH_CLASS	ic_item_mst.PURCH_CLASS
<TAX_CLASS>	N			GMI_ITEMS_XML_INTERFACE.TAX_CLASS	ic_item_mst.TAX_CLASS
<CUSTOMS_CLASS>	N			GMI_ITEMS_XML_INTERFACE.CUSTOMS_CLASS	ic_item_mst.CUSTOMS_CLASS
<ALLOC_CLASS>	N			GMI_ITEMS_XML_INTERFACE.ALLOC_CLASS	ic_item_mst.ALLOC_CLASS
<PLANNING_CLASS>	N			GMI_ITEMS_XML_INTERFACE.PLANNING_CLASS	ic_item_mst.PLANNING_CLASS
<ITEMCOST_CLASS>	N			GMI_ITEMS_XML_INTERFACE.ITEMCOST_CLASS	ic_item_mst.ITEMCOST_CLASS
<COST_MTHD_CODE>	N			GMI_ITEMS_XML_INTERFACE.COST_MTHD_CODE	ic_item_mst.COST_MTHD_CODE
<UPC_CODE>	N			GMI_ITEMS_XML_INTERFACE.UPC_CODE	ic_item_mst.UPC_CODE
<GRADE_CTL>	R			GMI_ITEMS_XML_INTERFACE.GRADE_CTL	ic_item_mst.GRADE_CTL

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<STATUS_CTL>	R	N/A	This area provides detailed data about the XML document.	GMI_ITEMS_XML_INTERFACE.STATUS_CTL	ic_item_mst.STATUS_CTL
<QC_GRADE>	N			GMI_ITEMS_XML_INTERFACE.QC_GRADE	ic_item_mst.QC_GRADE
<LOT_STATUS>	N			GMI_ITEMS_XML_INTERFACE.LOT_STATUS	ic_item_mst.LOT_STATUS
<BULK_ID>	N			GMI_ITEMS_XML_INTERFACE.BULK_ID	ic_item_mst.BULK_ID
<PKG_ID>	N			GMI_ITEMS_XML_INTERFACE.PKG_ID	ic_item_mst.QCITEM_NUMBER
<QCITEM_NUMBER>	R			GMI_ITEMS_XML_INTERFACE.QCITEM_NUMBER	ic_item_mst.QCHOLD_RES_CODE
<QCHOLD_RES_CODE>	N			GMI_ITEMS_XML_INTERFACE.QCHOLD_RES_CODE	ic_item_mst.EXPACTION_CODE
<EXPACTION_CODE>	R			GMI_ITEMS_XML_INTERFACE.QCHOLD_RES_CODE	ic_item_mst.FILL_QTY
<FILL_QTY>	R			GMI_ITEMS_XML_INTERFACE.QCHOLD_RES_CODE	ic_item_mst.FILL_UM
<EXPACTION_CODE>				GMI_ITEMS_XML_INTERFACE.EXPACTION_CODE	ic_item_mst.EXPACTION_INTERVAL
<FILL_UM>				GMI_ITEMS_XML_INTERFACE.FILL_QTY	ic_item_mst.PHANTOM_TYPE
<EXPACTION_INTERVAL>				GMI_ITEMS_XML_INTERFACE.FILL_UM	ic_item_mst.WHSE_ITEM_NUMBER
<PHANTOM_TYPE>				GMI_ITEMS_XML_INTERFACE.EXPACTION_INTERVAL	
<WHSE_ITEM_NUMBER>				GMI_ITEMS_XML_INTERFACE.PHANTOM_TYPE	
				GMI_ITEMS_XML_INTERFACE.WHSE_ITEM_NUMBER	

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<EXPERIMENTAL_IND>	R R	N/A	This area provides detailed data about the XML document.	GMI_ITEMS_XML_INTERFACE.EXPERIMENTAL_IND	ic_item_mst.EXPERIMENTAL_IND
<EXPORTED_DATE>	N N			GMI_ITEMS_XML_INTERFACE.EXPORTED_DATE	ic_item_mst.EXPORTED_DATE
<SEQ_DPND_CLASS>	N N			GMI_ITEMS_XML_INTERFACE.SEQ_DPND_CLASS	ic_item_mst.SEQ_DPND_CLASS
<COMMODITY_CODE>				GMI_ITEMS_XML_INTERFACE.COMMODITY_CODE	ic_item_mst.COMMODITY_CODE
<IC_MATR_DAYS>				GMI_ITEMS_XML_INTERFACE.IC_MATR_DAYS	ic_item_mst.IC_MATR_DAYS
<IC_HOLD_DAYS>				GMI_ITEMS_XML_INTERFACE.IC_HOLD_DAYS	ic_item_mst.IC_HOLD_DAYS
<ATTRIBUTE1>	N	N/A		This area provides detailed data about the XML document.	GMI_ITEMS_XML_INTERFACE.ATTRIBUTE1
<ATTRIBUTE2>	N		GMI_ITEMS_XML_INTERFACE.ATTRIBUTE2		ic_item_mst.ATTRIBUTE2
<ATTRIBUTE3>	N		GMI_ITEMS_XML_INTERFACE.ATTRIBUTE3		ic_item_mst.ATTRIBUTE3
<ATTRIBUTE4>	N		GMI_ITEMS_XML_INTERFACE.ATTRIBUTE4		ic_item_mst.ATTRIBUTE4
<ATTRIBUTE5>	N		GMI_ITEMS_XML_INTERFACE.ATTRIBUTE5		ic_item_mst.ATTRIBUTE5
<ATTRIBUTE6>	N		GMI_ITEMS_XML_INTERFACE.ATTRIBUTE6		ic_item_mst.ATTRIBUTE6
<ATTRIBUTE7>	N		GMI_ITEMS_XML_INTERFACE.ATTRIBUTE7		ic_item_mst.ATTRIBUTE7
<ATTRIBUTE8>	N		GMI_ITEMS_XML_INTERFACE.ATTRIBUTE8		ic_item_mst.ATTRIBUTE8
<ATTRIBUTE9>	N		GMI_ITEMS_XML_INTERFACE.ATTRIBUTE9		ic_item_mst.ATTRIBUTE9
<ATTRIBUTE10>	N		GMI_ITEMS_XML_INTERFACE.ATTRIBUTE10		ic_item_mst.ATTRIBUTE10

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<ATTRIBUTE11>	N	N/A	This area provides detailed data about the XML document.	GMI_ITEMS_XML_INTERFACE.ATTRIBUTE11	ic_item_mst.ATTRIBUTE11
<ATTRIBUTE12>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE12	ic_item_mst.ATTRIBUTE12
<ATTRIBUTE13>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE13	ic_item_mst.ATTRIBUTE13
<ATTRIBUTE14>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE14	ic_item_mst.ATTRIBUTE14
<ATTRIBUTE15>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE15	ic_item_mst.ATTRIBUTE15
<ATTRIBUTE16>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE16	ic_item_mst.ATTRIBUTE16
<ATTRIBUTE17>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE17	ic_item_mst.ATTRIBUTE17
<ATTRIBUTE18>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE18	ic_item_mst.ATTRIBUTE18
<ATTRIBUTE19>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE19	ic_item_mst.ATTRIBUTE19
<ATTRIBUTE20>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE20	ic_item_mst.ATTRIBUTE20
<ATTRIBUTE21>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE21	ic_item_mst.ATTRIBUTE21
<ATTRIBUTE22>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE22	ic_item_mst.ATTRIBUTE22
<ATTRIBUTE23>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE23	ic_item_mst.ATTRIBUTE23

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<ATTRIBUTE24>	N	N/A	This area provides detailed data about the XML document.	GMI_ITEMS_XML_INTERFACE.ATTRIBUTE24	ic_item_mst.ATTRIBUTE24
<ATTRIBUTE25>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE25	ic_item_mst.ATTRIBUTE25
<ATTRIBUTE26>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE26	ic_item_mst.ATTRIBUTE26
<ATTRIBUTE27>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE27	ic_item_mst.ATTRIBUTE27
<ATTRIBUTE28>	NN			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE28	ic_item_mst.ATTRIBUTE28
<ATTRIBUTE29>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE29	ic_item_mst.ATTRIBUTE29
<ATTRIBUTE30>	N			GMI_ITEMS_XML_INTERFACE.ATTRIBUTE30	ic_item_mst.ATTRIBUTE30
<ATTRIBUTE_CATEGORY>				GMI_ITEMS_XML_INTERFACE.ATTRIBUTE_CATEGORY	ic_item_mst.ATTRIBUTE_CATEGORY
<USER_NAME>				GMI_ITEMS_XML_INTERFACE.USER_NAME	ic_item_mst.USER_NAME
<ONT_PRICING_QTY_SOURCE>				GMI_ITEMS_XML_INTERFACE.ONT_PRICING_QTY_SOURCE	ic_item_mst.ONT_PRICING_QTY_SOURCE

### Sample Message

Following is an example of the XML transaction generated by the GMI\_ITEM\_OAG71\_IN message map. In the <DATAAREA>, substitute the sample values with your values.

```
<?xml version = '1.0' encoding = 'UTF-8' standalone = 'no'?>
<!DOCTYPE GMI_CREATE_ITEM_001 SYSTEM "GMI_CREATE_ITEM_001.dtd">
<GMI_CREATE_ITEM_001>
<CONTROLAREA>
  <BSR>
    <VERB value="CREATE">CREATE</VERB>
    <NOUN value="ITEM">ITEM</NOUN>
    <REVISION value="001">001</REVISION>
  </BSR>
  <SENDER>
    <LOGICALID>www.oracle.com</LOGICALID>
    <COMPONENT>ITEM</COMPONENT>
  </SENDER>
</CONTROLAREA>
</GMI_CREATE_ITEM_001>
```

```
<TASK>CREATE</TASK>
<REFERENCEID>101</REFERENCEID>
<CONFIRMATION>2</CONFIRMATION>
<LANGUAGE>US</LANGUAGE>
<CODEPAGE>UTF8</CODEPAGE>
<AUTHID>APPS</AUTHID>
</SENDER>
<DATETIME qualifier="CREATION">
  <YEAR>2002</YEAR>
  <MONTH>7</MONTH>
  <DAY>26</DAY>
  <HOUR>10</HOUR>
  <MINUTE>31</MINUTE>
  <SECOND>56</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0800</TIMEZONE>
</DATETIME>
</CNTRLAREA>
<DATAAREA>
  <GMI_ITEM_RECORD>
    <EXT_ITEM_ID>13</EXT_ITEM_ID>
    <ITEM_NUMBER>OPMX02</ITEM_NUMBER>
    <ITEM_DESC1>XMLITEMOPMX02</ITEM_DESC1>
    <ITEM_DESC2></ITEM_DESC2>
    <ALT_ITEMA></ALT_ITEMA>
    <ALT_ITEMB></ALT_ITEMB>
    <ITEM_UOM>LB</ITEM_UOM>
    <DUALUM_IND>0</DUALUM_IND>
    <ITEM_UOM2></ITEM_UOM2>
    <DEVIATION_LO>1</DEVIATION_LO>
    <DEVIATION_HI>1</DEVIATION_HI>
    <LEVEL_CODE></LEVEL_CODE>
    <LOT_CTL>0</LOT_CTL>
    <LOT_INDIVISIBLE>0</LOT_INDIVISIBLE>
    <SUBLOT_CTL>0</SUBLOT_CTL>
    <LOCT_CTL>0</LOCT_CTL>
    <NONINV_IND>0</NONINV_IND>
    <MATCH_TYPE>3</MATCH_TYPE>
    <INACTIVE_IND>0</INACTIVE_IND>
    <INV_TYPE></INV_TYPE>
    <SHELF_LIFE>100</SHELF_LIFE>
    <RETEST_INTERVAL>50</RETEST_INTERVAL>
    <ITEM_ABCCODE></ITEM_ABCCODE>
    <GL_CLASS></GL_CLASS>
    <INV_CLASS></INV_CLASS>
```

```
<SALES_CLASS></SALES_CLASS>
<SHIP_CLASS></SHIP_CLASS>
<FRT_CLASS></FRT_CLASS>
<PRICE_CLASS></PRICE_CLASS>
<STORAGE_CLASS></STORAGE_CLASS>
<PURCH_CLASS></PURCH_CLASS>
<TAX_CLASS></TAX_CLASS>
<CUSTOMS_CLASS></CUSTOMS_CLASS>
<ALLOC_CLASS></ALLOC_CLASS>
<PLANNING_CLASS></PLANNING_CLASS>
<ITEMCOST_CLASS></ITEMCOST_CLASS>
<COST_MTHD_CODE></COST_MTHD_CODE>
<UPC_CODE></UPC_CODE>
<GRADE_CTL>0</GRADE_CTL>
<STATUS_CTL>0</STATUS_CTL>
<QC_GRADE></QC_GRADE>
<LOT_STATUS></LOT_STATUS>
<BULK_ID></BULK_ID>
<PKG_ID></PKG_ID>
<QCITEM_NUMBER></QCITEM_NUMBER>
<QCHOLD_RES_CODE></QCHOLD_RES_CODE>
<EXPACTION_CODE></EXPACTION_CODE>
<FILL_QTY>0</FILL_QTY>
<FILL_UM></FILL_UM>
<EXPACTION_INTERVAL>0</EXPACTION_INTERVAL>
<PHANTOM_TYPE>0</PHANTOM_TYPE>
<WHSE_ITEM_NUMBER>OPMX02</WHSE_ITEM_NUMBER>
<EXPERIMENTAL_IND>0</EXPERIMENTAL_IND>
<EXPORTED_DATE>20020702 100102</EXPORTED_DATE>
<SEQ_DPND_CLASS></SEQ_DPND_CLASS>
<COMMODITY_CODE></COMMODITY_CODE>
<IC_MATR_DAYS></IC_MATR_DAYS>
<IC_HOLD_DAYS></IC_HOLD_DAYS>
<ATTRIBUTE1></ATTRIBUTE1>
<ATTRIBUTE2></ATTRIBUTE2>
<ATTRIBUTE3></ATTRIBUTE3>
<ATTRIBUTE4></ATTRIBUTE4>
<ATTRIBUTE5></ATTRIBUTE5>
<ATTRIBUTE6></ATTRIBUTE6>
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<ATTRIBUTE9></ATTRIBUTE9>
<ATTRIBUTE10></ATTRIBUTE10>
<ATTRIBUTE11></ATTRIBUTE11>
<ATTRIBUTE12></ATTRIBUTE12>
```

```
<ATTRIBUTE13></ATTRIBUTE13>
<ATTRIBUTE14></ATTRIBUTE14>
<ATTRIBUTE15></ATTRIBUTE15>
<ATTRIBUTE16></ATTRIBUTE16>
<ATTRIBUTE17></ATTRIBUTE17>
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<ATTRIBUTE26></ATTRIBUTE26>
<ATTRIBUTE27></ATTRIBUTE27>
<ATTRIBUTE28></ATTRIBUTE28>
<ATTRIBUTE29></ATTRIBUTE29>
<ATTRIBUTE30></ATTRIBUTE30>
<ATTRIBUTE_CATEGORY></ATTRIBUTE_CATEGORY>
<USER_NAME>OPMUSR</USER_NAME>
<ONT_PRICING_QTY_SOURCE></ONT_PRICING_QTY_SOURCE>
</GMI_ITEM_RECORD>
</DATAAREA>
</GMI_CREATE_ITEM_001>
```

## Transaction Detail: Inbound OPM Inventory Create Lot

This table lists the message maps that are provided by OPM Inventory for the inbound create lot message. If the inbound message is associated with another Oracle source such as Oracle Exchange, then it is noted under the Oracle Transaction Source column. Each message maps detail is described below.

OPM Inventory Transaction	Message Map	Standard	DTD Used	Oracle Transaction Source
Lot Create	GMI_LOT_OAG71_IN	OAG	gmi_create_lot_001	Customized

It is likely that multiple versions of a given standards XML DTDs must be maintained. Not all trading partners advance to the newer version DTD at the same rate or advance at all. If a version 7 message meets your needs, then you can not move to the next version. You can use multiple maps at any one time depending on your trading partner requirements.

### Workflow Troubleshooting

For Oracle Workflow or Oracle XML Gateway detected errors, review the log file for the details and use the Workflow Administrator functions to monitor and manage Workflow processes. Refer to the section on how to Manage and Monitor Workflow processes in the *Oracle XML Gateway User's Guide* for the details.

### Message Map Detail: GMI\_LOT\_OAG71\_IN

#### Map Summary

The GMI\_LOT\_OAG71\_IN message map is associated with the OPM Inventory inbound create lot message. The following sections present details associated with that message map.

Most data values are seeded data.

#### XML Gateway Details

Message Map Name:	GMI_LOT_OAG71_IN
Direction:	Inbound

(Internal) Transaction Type:	GMI
(Internal) Transaction Subtype:	LOT
External Transaction Type:	GMI
External Transaction Subtype:	LOT
DTD Directory:	gmi/xml/oag71
Map Directory:	patch/115/xml/US
Message Maps XGM File Name:	GMI_LOT_OAG71_IN.xgm

### Workflow Business Event System Details

Event Name initiated by the Message Map after the transaction is processed:	oracle.apps.gmi.api.lot.create
Event Subscription Name initiated by the Application after the transaction is processed:	GMIXMLAP/CREATE_LOT

### General XML DTD Details

Standard:	OAG
Release:	7.1
Format:	DTD
DTD Name:	gmi_create_lot_001

### General Message Map Details

The Open Interface or API is initiated for the transaction by the Message Map:	Yes
--	-----

Name of the Application Open Interface or API(s) associated with validation of the entire transaction:	OPM Inventory Create Lot Transaction
Are levels expanded or collapsed in the Message Map?	No
The Message Map sends out notifications other than default notifications:	Confirmation BODs

### Target Detail Open Interface Tables:

GMI\_LOTS\_XML\_INTERFACE

### Defaulted Columns

Defaulted Columns	Default Value and Condition (if any)
LOT_INTERFACE_ID	Database sequence
CREATION_DATE	N/A
CREATED_BY	N/A
LAST_UPDATE_DATE	N/A
LAST_UPDATED_BY	N/A
LAST_UPDATE_LOGIN	N/A

### Attached XSLT

XSLTs are not provided in the Oracle transactions. You can add them to your own or modified Message Maps by invoking the Execute Procedure to Perform XSLT Transaction action in the Message Map.

XML style sheets must be stored in the directory defined in the profile option, if they are used.

### Source-Target Data Relationship

This table shows the source-target data relationship for the inbound create lot message. The table displays the source XML data item and the target Application API or table that it maps to. Each hierarchy level can repeat within a transaction. A (C) or (E) after the table name indicates if the data level is collapsed or expanded.

Hierarchy Level	SOURCE (XML)	TARGET (Application)
1	Create Lot	gmi_lots_xml_interface

## DTD Content

This is the OAG Version 7.1 CREATE\_LOT DTD.

```

<!-- gmi_create_lot_001.dtd -->
<!-- $Header: gmi_create_lot_001.dtd 115.0 2002/06/19 15:39:24 pbamb
noship $ -->

<!ENTITY % GMI_RESOURCES SYSTEM "gmi_resources.dtd">
%GMI_RESOURCES;

<!ELEMENT GMI_CREATE_LOT_001 (CNTROLAREA,DATAAREA)>

  <!ATTLIST VERB value CDATA #FIXED "CREATE">
  <!ATTLIST NOUN value CDATA #FIXED "LOT">
  <!ATTLIST REVISION value CDATA #FIXED "001">

  <!ELEMENT DATAAREA (GMI_CREATE_LOT_RECORD)>

<!-- End of file. -->

<!-- gmi_resources.dtd -->
<!-- $Header: gmi_resources.dtd 115.0 2002/06/19 15:39:40 pbamb
noship $ -->

<!ENTITY % OAGIS_DTD SYSTEM "oagis_resources_71.dtd">
%OAGIS_DTD;

<!ENTITY % GMI_SEGMENTS SYSTEM "gmi_segments.dtd">
%GMI_SEGMENTS;

<!-- End of file. -->

<!-- gmi_segments.dtd -->
<!-- $Header: gmi_segments.dtd 115.1 2002/06/19 15:51:21 pbamb
noship $ -->

<!-- RS - Common GMI elements -->
<!ENTITY % GMI_FIELDS SYSTEM "gmi_fields.dtd">
%GMI_FIELDS;

```

```
<!-- common gmi fields -->

<!-- Create Lot Record -->
<!ELEMENT GMI_CREATE_LOT_RECORD(
  EXT_LOT_ID,
  ITEM_NUMBER,
  LOT_NUMBER,
  SUBLot_NUMBER?,
  LOT_DESC,
  QC_GRADE?,
  EXPACTION_CODE?,
  EXPACTION_DATE?,
  LOT_CREATED?,
  EXPIRE_DATE?,
  RETEST_DATE?,
  STRENGTH?,
  INACTIVE_IND?,
  ORIGINATION_TYPE?,
  SHIPVENDOR_NO?,
  VENDOR_LOT_NO?,
  IC_MATR_DATE?,
  IC_HOLD_DATE?,
  ATTRIBUTE1?,
  ATTRIBUTE2?,
  ATTRIBUTE3?,
  ATTRIBUTE4?,
  ATTRIBUTE5?,
  ATTRIBUTE6?,
  ATTRIBUTE7?,
  ATTRIBUTE8?,
  ATTRIBUTE9?,
  ATTRIBUTE10?,
  ATTRIBUTE11?,
  ATTRIBUTE12?,
  ATTRIBUTE13?,
  ATTRIBUTE14?,
  ATTRIBUTE15?,
  ATTRIBUTE16?,
  ATTRIBUTE17?,
  ATTRIBUTE18?,
  ATTRIBUTE19?,
  ATTRIBUTE20?,
  ATTRIBUTE21?,
```

```

        ATTRIBUTE22?,
        ATTRIBUTE23?,
        ATTRIBUTE24?,
        ATTRIBUTE25?,
        ATTRIBUTE26?,
        ATTRIBUTE27?,
        ATTRIBUTE28?,
        ATTRIBUTE29?,
        ATTRIBUTE30?,
        ATTRIBUTE_CATEGORY?,
USER_NAME
)>

<!ELEMENT EXCEPTION(
EXCEPTION_TYPE,
EXCEPTION_TEXT,
EXCEPTION_FIELD?,
EXCEPTION_CATEGORY?
)>

<!-- End of file. -->

<!-- gmi_fields.dtd -->
<!-- $Header: gmi_fields.dtd 115.1 2002/06/19 15:50:30 pbamb noship
$ -->

<!-- RS - common gmi elements -->

<!ELEMENT EXT_LOT_ID          %STRDOM;>
<!ELEMENT LOT_DESC           %STRDOM;>
<!ELEMENT EXPACTION_DATE     %STRDOM;>
<!ELEMENT LOT_CREATED        %STRDOM;>
<!ELEMENT EXPIRE_DATE        %STRDOM;>
<!ELEMENT RETEST_DATE        %STRDOM;>
<!ELEMENT STRENGTH           %STRDOM;>
<!ELEMENT ORIGINATION_TYPE   %STRDOM;>
<!ELEMENT SHIPVENDOR_NO     %STRDOM;>
<!ELEMENT VENDOR_LOT_NO     %STRDOM;>
<!ELEMENT IC_MATR_DATE       %STRDOM;>
<!ELEMENT IC_HOLD_DATE       %STRDOM;>

<!-- if we need any exception handling for future use -->

```

```

<!ELEMENT EXCEPTION_TYPE%STRDOM;>
<!ELEMENT EXCEPTION_TEXT%STRDOM;>
<!ELEMENT EXCEPTION_FIELD%STRDOM;>
<!ELEMENT EXCEPTION_CATEGORY%STRDOM;>

```

```

<!-- End of file. -->

```

## Map Detail

This table describes the Data Types or fields in the DTD used by this message map.

Not Used fields can be removed by the message map so that empty data tags are not generated for outbound transactions, nor examined by inbound transactions.

Table Notations:

### 1. Qualifiers Notation

Some data tags include qualifiers and types such as the following:

```
<OPERAMT qualifier="EXTENDED" type="T">
```

They are noted as the following in the Description/Comment column of this map detail table:

```
<OPERAMT(EXTENDED(T)>
```

### 2. Target Attributes Column

Several applicable attributes are coded in the Target Attribute column in this map detail table. This table lists the target attributes that apply to the column in the message map.

Target Attribute	Description
C	Code Conversion is set up
D	Default is assigned
R	Required by the DTD or the Oracle Application
N	Not Required
NU	Not Used

### 3. Action Codes Column

If at least one Action Code is assigned to that column in the message map, then the word ACTION is placed in the Action Codes column in the detail table.

See the *Oracle XML Gateway User's Guide* for the list of action codes available.

The following is the message map detail for GMI\_LOT\_OAG71\_IN.

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
CNTRLOAREA	R	N/A	This area provides data about the XML document i.e. BSR, SENDER and DATETIME described below.	N/A	N/A
<BSR>  <VERB> <NOUN> <REVISON>	R  R R R	N/A	Shows the Business Service Request name per OAGI. Value is 'CREATE'. Value is 'LOT'. Value is '001'.	N/A	N/A
<SENDER> <LOGICALID> <COMPONENT> <TASK> <REFERENCEID> <CONFIRMATION> <LANGUAGE> <CODEPAGE> <AUTHID>	R R N R R R R R	N/A	This area provides data about the sender of the XML document.	N/A	N/A
<DATETIME> <YEAR> <MONTH> <DAY> <HOUR> <MINUTE> <SECOND> <SUBSECOND> <TIMEZONE>	R R R R R R R R R	N/A	This area provides data about the date and time the XML document was sent.	N/A	N/A

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<GMI_CREATE_ LOT_RECORD> <EXT_LOT_ID> <ITEM_NUMBER> <LOT_NUMBER> <SUBLOT_ NUMBER> <LOT_DESC> <QC_GRADE> <EXPACTION_ CODE> <EXPACTION_ DATE>	R R R R R N N N	N/A	This area provides detailed data about the XML document.	GMI_LOTS_XML_ INTERFACE.ITEM_ NUMBER GMI_LOTS_XML_ INTERFACE.LOT_ NUMBER GMI_LOTS_XML_ INTERFACE.SUBLOT_ NUMBER GMI_LOTS_XML_ INTERFACE.LOT_DESC NUMBER GMI_LOTS_XML_ INTERFACE.QC_GRADE NUMBER GMI_LOTS_XML_ INTERFACE.LOT_DESC NUMBER GMI_LOTS_XML_ INTERFACE.EXPACTION_ CODE GMI_LOTS_XML_ INTERFACE.EXPACTION_ DATE	ic_lots_mst.ITEM_ NUMBER ic_lots_mst.LOT_ NUMBER ic_lots_mst.SUBLOT_ NUMBER ic_lots_mst.LOT_DESC ic_lots_mst.QC_GRADE ic_lots_ mst.EXPACTION_ CODE ic_lots_ mst.EXPACTION_DATE

Transaction Detail: Inbound OPM Inventory Create Lot

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<LOT_CREATED>	R	N/A	This area provides detailed data about the XML document.	GMI_LOTS_XML_INTERFACE.LOT_CREATED	ic_lots_mst.LOT_CREATED
<EXPIRE_DATE>	N			GMI_LOTS_XML_INTERFACE.EXPIRE_DATE	ic_lots_mst.EXPIRE_DATE
<RETEST_DATE>	N			GMI_LOTS_XML_INTERFACE.RETEST_DATE	ic_lots_mst.RETEST_DATE
<STRENGTH>	R			GMI_LOTS_XML_INTERFACE.STRENGTH	ic_lots_mst.STRENGTH
<INACTIVE_IND>	R			GMI_LOTS_XML_INTERFACE.INACTIVE_IND	ic_lots_mst.INACTIVE_IND
<ORIGINATION_TYPE>	R			GMI_LOTS_XML_INTERFACE.ORIGINATION_TYPE	ic_lots_mst.ORIGINATION_TYPE
<SHIPVENDOR_NO>	R			GMI_LOTS_XML_INTERFACE.SHIPVENDOR_NO	ic_lots_mst.SHIPVENDOR_NO
<VENDOR_LOT_NO>	N			GMI_LOTS_XML_INTERFACE.VENDOR_LOT_NO	ic_lots_mst.VENDOR_LOT_NO
<IC_MATR_DATE>	N			GMI_LOTS_XML_INTERFACE.IC_MATR_DATE	ic_lots_mst.IC_MATR_DATE
<IC_HOLD_DATE>	N			GMI_LOTS_XML_INTERFACE.IC_HOLD_DATE	ic_lots_mst.IC_HOLD_DATE

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<ATTRIBUTE1>	N	N/A	This area provides detailed data about the XML document.	GMI_LOTS_XML_INTERFACE.ATTRIBUTE1	ic_lots_mst.ATTRIBUTE1
<ATTRIBUTE2>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE2	ic_lots_mst.ATTRIBUTE2
<ATTRIBUTE3>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE3	ic_lots_mst.ATTRIBUTE3
<ATTRIBUTE4>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE4	ic_lots_mst.ATTRIBUTE4
<ATTRIBUTE5>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE5	ic_lots_mst.ATTRIBUTE5
<ATTRIBUTE6>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE6	ic_lots_mst.ATTRIBUTE6
<ATTRIBUTE7>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE7	ic_lots_mst.ATTRIBUTE7
<ATTRIBUTE8>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE8	ic_lots_mst.ATTRIBUTE8
<ATTRIBUTE9>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE9	ic_lots_mst.ATTRIBUTE9
<ATTRIBUTE10>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE10	ic_lots_mst.ATTRIBUTE10

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column	
<ATTRIBUTE11>	N	N/A	This area provides detailed data about the XML document.	GMI_LOTS_XML_INTERFACE.ATTRIBUTE11	ic_lots_mst.ATTRIBUTE11	
<ATTRIBUTE12>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE12	ic_lots_mst.ATTRIBUTE12	
<ATTRIBUTE13>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE13	ic_lots_mst.ATTRIBUTE13	
<ATTRIBUTE14>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE14	ic_lots_mst.ATTRIBUTE14	
<ATTRIBUTE15>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE15	ic_lots_mst.ATTRIBUTE15	
<ATTRIBUTE16>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE16	ic_lots_mst.ATTRIBUTE16	
<ATTRIBUTE17>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE17	ic_lots_mst.ATTRIBUTE17	
<ATTRIBUTE18>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE18	ic_lots_mst.ATTRIBUTE18	
<ATTRIBUTE19>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE19	ic_lots_mst.ATTRIBUTE19	
<ATTRIBUTE20>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE20	ic_lots_mst.ATTRIBUTE20	
<ATTRIBUTE21>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE21	ic_lots_mst.ATTRIBUTE21	
	N					
	N					
	N					
	N					
	N					
	N					
	N					
	N					
	N					
	N					
	N					

Field/Data Type	Target Attributes	Action Codes	Description/ Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<ATTRIBUTE22>	N	N/A	This area provides detailed data about the XML document.	GMI_LOTS_XML_INTERFACE.ATTRIBUTE22	ic_lots_mst.ATTRIBUTE22
<ATTRIBUTE23>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE23	ic_lots_mst.ATTRIBUTE23
<ATTRIBUTE24>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE24	ic_lots_mst.ATTRIBUTE24
<ATTRIBUTE25>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE25	ic_lots_mst.ATTRIBUTE25
<ATTRIBUTE26>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE26	ic_lots_mst.ATTRIBUTE26
<ATTRIBUTE27>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE27	ic_lots_mst.ATTRIBUTE27
<ATTRIBUTE28>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE28	ic_lots_mst.ATTRIBUTE28
<ATTRIBUTE29>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE29	ic_lots_mst.ATTRIBUTE29
<ATTRIBUTE30>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE30	ic_lots_mst.ATTRIBUTE30
<ATTRIBUTE_CATEGORY>	N			GMI_LOTS_XML_INTERFACE.ATTRIBUTE_CATEGORY	ic_lots_mst.ATTRIBUTE_CATEGORY
<USER_NAME>	N			GMI_LOTS_XML_INTERFACE.USER_NAME	ic_lots_mst.USER_NAME

### Sample Message

Following is an example of the XML transaction generated by the GMI\_LOT\_OAG71\_IN message map. In the <DATAAREA>, substitute the sample values with your values.

```
<?xml version = '1.0' encoding = 'UTF-8' standalone = 'no'?>
<!DOCTYPE GMI_CREATE_LOT_001 SYSTEM "GMI_CREATE_LOT_001.dtd">
<GMI_CREATE_LOT_001>
<CONTROLAREA>
  <BSR>
    <VERB value="CREATE">CREATE</VERB>
    <NOUN value="LOT">LOT</NOUN>
    <REVISION value="001">001</REVISION>
  </BSR>
  <SENDER>
    <LOGICALID>www.oracle.com</LOGICALID>
    <COMPONENT>LOT</COMPONENT>
  </SENDER>
</GMI_CREATE_LOT_001>
</CONTROLAREA>
</GMI_CREATE_LOT_001>
```

## Transaction Detail: Inbound OPM Inventory Create Lot

---

```
<TASK>CREATE</TASK>
<REFERENCEID>101</REFERENCEID>
<CONFIRMATION>2</CONFIRMATION>
<LANGUAGE>US</LANGUAGE>
<CODEPAGE>UTF8</CODEPAGE>
<AUTHID>APPS</AUTHID>
</SENDER>
<DATETIME qualifier="CREATION">
  <YEAR>2002</YEAR>
  <MONTH>7</MONTH>
  <DAY>29</DAY>
  <HOUR>4</HOUR>
  <MINUTE>10</MINUTE>
  <SECOND>41</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0800</TIMEZONE>
</DATETIME>
</CNTRLAREA>
<DATAAREA>
  <GMI_CREATE_LOT_RECORD>
    <EXT_LOT_ID>14</EXT_LOT_ID>
    <ITEM_NUMBER>OPM999</ITEM_NUMBER>
    <LOT_NUMBER>5</LOT_NUMBER>
    <SUBLOT_NUMBER>A</SUBLOT_NUMBER>
    <LOT_DESC>JOE ADDED</LOT_DESC>
    <QC_GRADE></QC_GRADE>
    <EXPACTION_CODE></EXPACTION_CODE>
    <EXPACTION_DATE></EXPACTION_DATE>
    <LOT_CREATED>20020401 100102</LOT_CREATED>
    <EXPIRE_DATE></EXPIRE_DATE>
    <RETEST_DATE></RETEST_DATE>
    <STRENGTH>100</STRENGTH>
    <INACTIVE_IND>0</INACTIVE_IND>
    <ORIGINATION_TYPE>0</ORIGINATION_TYPE>
    <SHIPVENDOR_NO></SHIPVENDOR_NO>
    <VENDOR_LOT_NO></VENDOR_LOT_NO>
    <IC_MATR_DATE></IC_MATR_DATE>
    <IC_HOLD_DATE></IC_HOLD_DATE>
    <ATTRIBUTE1></ATTRIBUTE1>
    <ATTRIBUTE2></ATTRIBUTE2>
    <ATTRIBUTE3></ATTRIBUTE3>
    <ATTRIBUTE4></ATTRIBUTE4>
    <ATTRIBUTE5></ATTRIBUTE5>
    <ATTRIBUTE6></ATTRIBUTE6>
    <ATTRIBUTE7></ATTRIBUTE7>
```

```
<ATTRIBUTE8></ATTRIBUTE8>
<ATTRIBUTE9></ATTRIBUTE9>
<ATTRIBUTE10></ATTRIBUTE10>
<ATTRIBUTE11></ATTRIBUTE11>
<ATTRIBUTE12></ATTRIBUTE12>
<ATTRIBUTE13></ATTRIBUTE13>
<ATTRIBUTE14></ATTRIBUTE14>
<ATTRIBUTE15></ATTRIBUTE15>
<ATTRIBUTE16></ATTRIBUTE16>
<ATTRIBUTE17></ATTRIBUTE17>
<ATTRIBUTE18></ATTRIBUTE18>
<ATTRIBUTE19></ATTRIBUTE19>
<ATTRIBUTE20></ATTRIBUTE20>
<ATTRIBUTE21></ATTRIBUTE21>
<ATTRIBUTE22></ATTRIBUTE22>
<ATTRIBUTE23></ATTRIBUTE23>
<ATTRIBUTE24></ATTRIBUTE24>
<ATTRIBUTE25></ATTRIBUTE25>
<ATTRIBUTE26></ATTRIBUTE26>
<ATTRIBUTE27></ATTRIBUTE27>
<ATTRIBUTE28></ATTRIBUTE28>
<ATTRIBUTE29></ATTRIBUTE29>
<ATTRIBUTE30></ATTRIBUTE30>
<ATTRIBUTE_CATEGORY></ATTRIBUTE_CATEGORY>
<USER_NAME>OPMUSR</USER_NAME>
</GMI_CREATE_LOT_RECORD>
</DATAAREA>
</GMI_CREATE_LOT_001>
```

## Transaction Detail: Inbound OPM Inventory Item Lot Conversion

This table lists the message maps that are provided by OPM Inventory for the inbound item lot conversion message. If the inbound message is associated with another Oracle source such as Oracle Exchange, then it is noted under the Oracle Transaction Source column. Each message maps detail is described below.

OPM Inventory Transaction	Message Map	Standard	DTD Used	Oracle Transaction Source
Item Lot/Sublot Conversion API	GMI_LTCNV_OAG71_IN	OAG	gmi_convert_lot_001	Customized

It is likely that multiple versions of a given standards XML DTDs must be maintained. Not all trading partners advance to the newer version DTD at the same rate or advance at all. If a version 7 message meets your needs, then you can not move to the next version. You can use multiple maps at any one time depending on your trading partner requirements.

### Workflow Troubleshooting

For Oracle Workflow or Oracle XML Gateway detected errors, review the log file for the details and use the Workflow Administrator functions to monitor and manage Workflow processes. Refer to the section on how to Manage and Monitor Workflow processes in the *Oracle XML Gateway User's Guide* for the details.

### Message Map Detail: GMI\_LTCNV\_OAG71\_IN

#### Map Summary

The GMI\_LTCNV\_OAG71\_IN message map is associated with the OPM Inventory inbound item lot conversion message. The following sections present details associated with that message map.

Most data values are seeded data.

#### XML Gateway Details

Message Map Name:	GMI_LTCNV_OAG71_IN
-------------------	--------------------

Direction:	Inbound
(Internal) Transaction Type:	GMI
(Internal) Transaction Subtype:	ITMCV
External Transaction Type:	GMI
External Transaction Subtype:	ITMCV
DTD Directory:	gmi/xml/oag71
Map Directory:	patch_115_xml/US
Message Maps XGM File Name:	GMI_LTCNV_OAG71_IN.xgm

### Workflow Business Event System Details

Event Name initiated by the Message Map after the transaction is processed:	oracle.apps.gmi.api.lot.convert
Event Subscription Name initiated by the Application after the transaction is processed:	GMIXMLAP/CREATE_LTCONV

### General XML DTD Details

Standard:	OAG
Release:	7.1
Format:	DTD
DTD Name:	gmi_convert_lot_001

### General Message Map Details

The Open Interface or API is initiated for the transaction by the Message Map:	Yes
--	-----

Name of the Application Open Interface or API(s) associated with validation of the entire transaction:	OPM Inventory Item Conversion
Are levels expanded or collapsed in the Message Map?	No
The Message Map sends out notifications other than default notifications:	Confirmation BODs

**Target Detail Open Interface Tables:**

GMI\_LOTS\_CONV\_XML\_INTERFACE

**Columns Enabled for Code Conversion:**

NONE

**Defaulted Columns**

Defaulted Columns	Default Value and Condition (if any)
LTCNV_INTERFACE_ID	Database sequence
CREATION_DATE	N/A
CREATED_BY	N/A
LAST_UPDATE_DATE	N/A
LAST_UPDATED_BY	N/A
LAST_UPDATE_LOGIN	N/A

**Derived Columns**

NONE

**Attached XSLT**

XSLTs are not provided in the Oracle transactions. You can add them to your own or modified message maps by invoking the Execute Procedure to Perform XSLT Transaction action in the Message Map.

XML style sheets must be stored in the directory defined in the profile option, if they are used.

## Source-Target Data Relationship

This table shows the source-target data relationship for the inbound item lot conversion message. The table displays the source XML data item and the target Application API, or table that it maps to. Each hierarchy level can repeat within a transaction. A (C) or (E) after the table name indicates if the data level is collapsed or expanded.

Hierarchy Level	SOURCE (XML)	TARGET (Application)
1	create_lot_conv	gmi_lots_conv_xml_interface

## DTD Content

This is the OAG Version 7.0 CONVERT\_LOT DTD.

```
<!-- gmi_convert_lot_001.dtd -->
<!-- $Header: gmi_convert_lot_001.dtd 115.0 2002/06/19 15:39:10
pbamb noship $ -->

<!ENTITY % GMI_RESOURCES SYSTEM "gmi_resources.dtd">
%GMI_RESOURCES;

<!ELEMENT GMI_CONVERT_LOT_001 (CNTROLAREA,DATAAREA)>

  <!ATTLIST VERB value CDATA #FIXED "CONVERT">
  <!ATTLIST NOUN value CDATA #FIXED "LOT">
  <!ATTLIST REVISION value CDATA #FIXED "001">

  <!ELEMENT DATAAREA (GMI_LOT_CONV_RECORD)>

<!-- End of file. -->

<!-- gmi_resources.dtd -->
<!-- $Header: gmi_resources.dtd 115.0 2002/06/19 15:39:40 pbamb
noship $ -->

<!ENTITY % OAGIS_DTD SYSTEM "oagis_resources_71.dtd">
%OAGIS_DTD;

<!ENTITY % GMI_SEGMENTS SYSTEM "gmi_segments.dtd">
%GMI_SEGMENTS;

<!-- End of file. -->
```

```
<!-- Lot Conversion-->
<!ELEMENT GMI_LOT_CONV_RECORD(
EXT_CONV_ID,
ITEM_NUMBER,
LOT_NUMBER,
SUBLLOT_NUMBER?,
FROM_UOM,
TO_UOM,
TYPE_FACTOR,
USER_NAME
)>

<!ELEMENT EXCEPTION(
EXCEPTION_TYPE,
EXCEPTION_TEXT,
EXCEPTION_FIELD?,
EXCEPTION_CATEGORY?
)>

<!-- gmi_fields.dtd -->
<!-- $Header: gmi_fields.dtd 115.1 2002/06/19 15:50:30 pbamb noship
$ -->

<!-- RS - common gmi elements -->

<!ELEMENT EXT_CONV_ID %STRDOM;>
<!ELEMENT FROM_UOM %STRDOM;>
<!ELEMENT TO_UOM %STRDOM;>
<!ELEMENT TYPE_FACTOR %STRDOM;>

<!-- if we need any exception handling for future use -->

<!ELEMENT EXCEPTION_TYPE%STRDOM;>
<!ELEMENT EXCEPTION_TEXT%STRDOM;>
<!ELEMENT EXCEPTION_FIELD%STRDOM;>
<!ELEMENT EXCEPTION_CATEGORY%STRDOM;>

<!-- End of file. -->
```

## Map Detail

This table describes the Data Types or fields in the DTD used by this message map.

Not Used fields can be removed by the message map so that empty data tags are not generated for outbound transactions, nor examined by inbound transactions.

Table Notations:

### 1. Qualifiers Notation

Some data tags include qualifiers and types such as the following:

```
<OPERAMT qualifier="EXTENDED" type="T">
```

They are noted as the following in the Description/Comment column of this map detail table:

```
<OPERAMT(EXTENDED(T)>
```

### 2. Target Attributes Column

Several applicable attributes are coded in the Target Attribute column in this map detail table. This table lists the target attributes that apply to the column in the message map.

Target Attribute	Description
C	Code Conversion is set up
D	Default is assigned
R	Required by the DTD or the Oracle Application
N	Not Required
NU	Not Used

### 3. Action Codes Column

If at least one Action Code is assigned to that column in the message map, then the word ACTION is placed in the Action Codes column in the detail table.

See the *Oracle XML Gateway User's Guide* for the list of action codes available.

The following is the message map detail for GMI\_LTCNV\_OAG71.IN.

Field/Data Type	Target Attributes	Action Codes	Description/Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
CNTRLOAREA	R	N/A	This area provides data about the XML document i.e. BSR, SENDER and DATETIME described below.	N/A	N/A
<BSR>  <VERB> <NOUN> <REVISION>	R R R R	N/A	Shows the Business Service Request name per OAGI: Value is 'CONVERT'. Value is 'LOT'. Value is '001'.	N/A	N/A
<SENDER> <LOGICALID> <COMPONENT> <TASK> <REFERENCEID> <CONFIRMATION> <LANGUAGE> <CODEPAGE> <AUTHID>	R R R R R R R R R	N/A	This area provides data about the sender of the XML document.	N/A	N/A
<DATETIME> <YEAR> <MONTH> <DAY> <HOUR> <MINUTE> <SECOND> <SUBSECOND> <TIMEZONE>	R R R R R R R R R	N/A	This area provides data about the date and time the XML document was sent.	N/A	N/A

Field/Data Type	Target Attributes	Action Codes	Description/Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<GMI_LOT_CONV_RECORD>	R	N/A	This area provides detailed data about the XML document.	GMI_LOTS_CONV_XML_INTERFACE.ITEM_NUMBER	ic_item_cnv.ITEM_NUMBER
<EXT_CONV_ID>	R			GMI_LOTS_CONV_XML_INTERFACE.LOT_NUMBER	ic_item_cnv.LOT_NUMBER
<ITEM_NUMBER>	R			GMI_LOTS_CONV_XML_INTERFACE.LOT_NUMBER	ic_item_cnv.SUBLOT_NUMBER
<LOT_NUMBER>	R			GMI_LOTS_CONV_XML_INTERFACE.SUBLOT_NUMBER	ic_item_cnv.FROM_UOM
<SUBLOT_NUMBER>	R			GMI_LOTS_CONV_XML_INTERFACE.SUBLOT_NUMBER	ic_item_cnv.TO_UOM
<FROM_UOM>	R			GMI_LOTS_CONV_XML_INTERFACE.FROM_UOM	ic_item_cnv.TYPE_FACTOR
<TO_UOM>	R			GMI_LOTS_CONV_XML_INTERFACE.FROM_UOM	ic_item_cnv.USER_NAME
<TYPE_FACTOR>	R			GMI_LOTS_CONV_XML_INTERFACE.TO_UOM	
<USER_NAME>	R		GMI_LOTS_CONV_XML_INTERFACE.TYPE_FACTOR		
				GMI_LOTS_CONV_XML_INTERFACE.USER_NAME	

### Sample Message

Following is an example of the XML transaction generated by the GMI\_LTCNV\_OAG71\_IN message map. In the <DATAAREA>, substitute the sample values with your values.

```
<?xml version = '1.0' encoding = 'UTF-8' standalone = 'no'?>
<!DOCTYPE GMI_CONVERT_LOT_001 SYSTEM "GMI_CONVERT_LOT_001.dtd">
<GMI_CONVERT_LOT_001>
<CNTRLAREA>
<BSR>
<VERB value="CONVERT">CONVERT</VERB>
<NOUN value="LOT">LOT</NOUN>
<REVISION value="001">001</REVISION>
```

```
</BSR>
<SENDER>
  <LOGICALID>www.oracle.com</LOGICALID>
  <COMPONENT>ITMCV</COMPONENT>
  <TASK>CREATE</TASK>
  <REFERENCEID>101</REFERENCEID>
  <CONFIRMATION>2</CONFIRMATION>
  <LANGUAGE>US</LANGUAGE>
  <CODEPAGE>UTF8</CODEPAGE>
  <AUTHID>APPS</AUTHID>
</SENDER>
<DATETIME qualifier="CREATION">
  <YEAR>2002</YEAR>
  <MONTH>7</MONTH>
  <DAY>29</DAY>
  <HOUR>4</HOUR>
  <MINUTE>55</MINUTE>
  <SECOND>1</SECOND>
  <SUBSECOND>0000</SUBSECOND>
  <TIMEZONE>-0800</TIMEZONE>
</DATETIME>
</CNTROLAREA>
<DATAAREA>
  <GMI_LOT_CONV_RECORD>
    <EXT_CONV_ID>15</EXT_CONV_ID>
    <ITEM_NUMBER>OPM999</ITEM_NUMBER>
    <LOT_NUMBER>5</LOT_NUMBER>
    <SUBLOT_NUMBER>A</SUBLOT_NUMBER>
    <FROM_UOM>EA</FROM_UOM>
    <TO_UOM>Lbs</TO_UOM>
    <TYPE_FACTOR>7</TYPE_FACTOR>
    <USER_NAME>OPMUSR</USER_NAME>
  </GMI_LOT_CONV_RECORD>
</DATAAREA>
</GMI_CONVERT_LOT_001>
```

## Transaction Detail: Inbound OPM Inventory Quantity

This table lists the message maps that are provided by OPM Inventory for the inbound inventory quantity message. If the inbound message is associated with another Oracle source such as Oracle Exchange, then it is noted under the Oracle Transaction Source column. Each message maps detail is described below.

OPM Inventory Transaction	Message Map	Standard	DTD Used	Oracle Transaction Source
Inventory Quantities API	GMI_QTY_OAG71_IN	OAG	gmi_transact_quantity_001	Customized

It is likely that multiple versions of a given standards XML DTDs must be maintained. Not all trading partners advance to the newer version DTD at the same rate or advance at all. If a version 7 message meets your needs, then you can not move to the next version. You can use multiple maps at any one time depending on your trading partner requirements.

### Workflow Troubleshooting

For Oracle Workflow or Oracle XML Gateway detected errors, review the log file for the details and use the Workflow Administrator functions to monitor and manage Workflow processes. Refer to the section on how to Manage and Monitor Workflow processes in the *Oracle XML Gateway User's Guide* for the details.

### Message Map Detail: GMI\_QTY\_OAG71\_IN

#### Map Summary

The GMI\_QTY\_OAG71\_IN message map is associated with the OPM Inventory inbound inventory quantity message. The following sections present details associated with that message map.

Most data values are seeded data.

#### XML Gateway Details

Message Map Name:	GMI_QTY_OAG71_IN
-------------------	------------------

Direction:	Inbound
(Internal) Transaction Type:	GMI
(Internal) Transaction Subtype:	QTY
External Transaction Type:	GMI
External Transaction Subtype:	QTY
DTD Directory:	gmi/xml/oag71
Map Directory:	patch/115/xml/US
Message Maps XGM File Name:	GMI_QTY_OAG71_IN.xgm

### Workflow Business Event System Details

Event Name initiated by the Message Map after the transaction is processed:	oracle.apps.gmi.api.quantity.transact
Event Subscription Name initiated by the Application after the transaction is processed:	GMIXMLAP/CREATE_TRANSACTION

### General XML DTD Details

Standard:	OAG
Release:	7.1
Format:	DTD
DTD Name:	gmi_transact_quantity_001

### General Message Map Details

The Open Interface or API is initiated for the transaction by the Message Map:	Yes
--	-----

Name of the Application Open Interface or API(s) associated with validation of the entire transaction:	OPM Inventory Quantity
Are levels expanded or collapsed in the Message Map?	No
The Message Map sends out notifications other than default notifications:	Confirmation BODs

**Target Detail Open Interface Tables:**

GMI\_QUANTITY\_XML\_INTERFACE

**Columns Enabled for Code Conversion:**

NONE

**Defaulted Columns**

Defaulted Columns	Default Value and Condition (if any)
QTY_INTERFACE_ID	Database sequence
CREATION_DATE	N/A
CREATED_BY	N/A
LAST_UPDATE_DATE	N/A
LAST_UPDATED_BY	N/A
LAST_UPDATE_LOGIN	N/A

**Derived Columns**

NONE

**Attached XSLT**

XSLTs are not provided in the Oracle transactions. You can add them to your own or modified message maps by invoking the Execute Procedure to Perform XSLT Transaction action in the Message Map.

XML style sheets must be stored in the directory defined in the profile option, if they are used.

## Source-Target Data Relationship

This table shows the source-target data relationship for the inbound inventory quantity message. The table displays the source XML data item and the target Application API, or table that it maps to. Each hierarchy level can repeat within a transaction. A (C) or (E) after the table name indicates if the data level is collapsed or expanded.

Hierarchy Level	SOURCE (XML)	TARGET (Application)
1	quantity	gmi_quantity_xml_interface

## DTD Content

This is the OAG Version 7.1TRANSACT\_QUANTITY DTD.

```

<!-- gmi_transact_quantity_001.dtd -->
<!-- $Header: gmi_transact_quantity_001.dtd 115.1 2002/06/19
15:52:07 pbamb ship
$ -->

<!ENTITY % GMI_RESOURCES SYSTEM "gmi_resources.dtd">
%GMI_RESOURCES;

<!ELEMENT GMI_TRANSACT_QUANTITY_001 (CNTROLAREA,DATAAREA)>

  <!ATTLIST VERB value CDATA #FIXED "TRANSACT">
  <!ATTLIST NOUN value CDATA #FIXED "QUANTITY">
  <!ATTLIST REVISION value CDATA #FIXED "001">

  <!ELEMENT DATAAREA (GMI_QUANTITY_RECORD)>
<!-- End of file. -->

<!-- gmi_resources.dtd -->
<!-- $Header: gmi_resources.dtd 115.0 2002/06/19 15:39:40 pbamb
noship $ -->

<!ENTITY % OAGIS_DTD SYSTEM "oagis_resources_71.dtd">
%OAGIS_DTD;

<!ENTITY % GMI_SEGMENTS SYSTEM "gmi_segments.dtd">
%GMI_SEGMENTS;

<!-- End of file. -->

```

```
<!-- Inventory Quantities -->
<!ELEMENT GMI_QUANTITY_RECORD(
  EXT_TRANSACTION_ID,
  TRANSACTION_TYPE,
  ITEM_NUMBER,
  JOURNAL_NUMBER?,
  FROM_WAREHOUSE,
  TO_WAREHOUSE?,
  PRIMARY_UOM,
  SECONDARY_UOM,
  LOT_NUMBER?,
  SUBLLOT_NUMBER?,
  FROM_LOCATION?,
  TO_LOCATION?,
  PRIMARY_TRANS_QTY,
  SECONDARY_TRANS_QTY,
  QC_GRADE?,
  LOT_STATUS?,
  CO_CODE,
  ORGN_CODE,
  TRANSACTION_DATE?,
  REASON_CODE,
  USER_NAME,
  JOURNAL_COMMENT?
)>

<!ELEMENT EXCEPTION(
  EXCEPTION_TYPE,
  EXCEPTION_TEXT,
  EXCEPTION_FIELD?,
  EXCEPTION_CATEGORY?
)>

<!-- gmi_fields.dtd -->
<!-- $Header: gmi_fields.dtd 115.1 2002/06/19 15:50:30 pbamb noship
$ -->

<!-- RS - common gmi elements -->

<!ELEMENT EXT_TRANSACTION_ID%STRDOM;>
<!ELEMENT TRANSACTION_TYPE          %STRDOM;>
<!ELEMENT ITEM_NUMBER                %STRDOM;>
<!ELEMENT JOURNAL_NUMBER             %STRDOM;>
```

```
<!ELEMENT FROM_WAREHOUSE          %STRDOM;>
<!ELEMENT TO_WAREHOUSE             %STRDOM;>
<!ELEMENT PRIMARY_UOM              %STRDOM;>
<!ELEMENT SECONDARY_UOM           %STRDOM;>
<!ELEMENT LOT_NUMBER               %STRDOM;>
<!ELEMENT SUBLot_NUMBER            %STRDOM;>
<!ELEMENT FROM_LOCATION            %STRDOM;>
<!ELEMENT TO_LOCATION              %STRDOM;>
<!ELEMENT PRIMARY_TRANS_QTY        %STRDOM;>
<!ELEMENT SECONDARY_TRANS_QTY      %STRDOM;>
<!ELEMENT QC_GRADE                 %STRDOM;>
<!ELEMENT LOT_STATUS               %STRDOM;>
<!ELEMENT CO_CODE                  %STRDOM;>
<!ELEMENT ORGN_CODE                %STRDOM;>
<!ELEMENT TRANSACTION_DATE         %STRDOM;>
<!ELEMENT REASON_CODE              %STRDOM;>
<!ELEMENT USER_NAME                %STRDOM;>
<!ELEMENT JOURNAL_COMMENT          %STRDOM;>

<!-- if we need any exception handling for future use -->

<!ELEMENT EXCEPTION_TYPE%STRDOM;>
<!ELEMENT EXCEPTION_TEXT%STRDOM;>
<!ELEMENT EXCEPTION_FIELD%STRDOM;>
<!ELEMENT EXCEPTION_CATEGORY%STRDOM;>

<!-- End of file. -->
```

## Map Detail

This table describes the Data Types or fields in the DTD used by this message map.

Not Used fields can be removed by the message map so that empty data tags are not generated for outbound transactions, nor examined by inbound transactions.

Table Notations:

### 1. Qualifiers Notation

Some data tags include qualifiers and types such as the following:

```
<OPERAMT qualifier="EXTENDED" type="T">
```

They are noted as the following in the Description/Comment column of this map detail table:

<OPERAMT(EXTENTED(T)>

## 2. Target Attributes Column

Several applicable attributes are coded in the Target Attribute column in this map detail table. This table lists the target attributes that apply to the column in the message map.

Target Attribute	Description
C	Code Conversion is set up
D	Default is assigned
R	Required by the DTD or the Oracle Application
N	Not Required
NU	Not Used

## 3. Action Codes Column

If at least one Action Code is assigned to that column in the message map, then the word ACTION is placed in the Action Codes column in the detail table.

See the *Oracle XML Gateway User's Guide* for the list of action codes available.

The following is the message map detail for GMI\_QTY\_OAG71\_IN.

Field/Data Type	Target Attributes	Action Codes	Description/Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
CNTRLOAREA	R	N/A	This area provides data about the XML document i.e. BSR, SENDER and DATETIME described below.	N/A	N/A
<BSR>  <VERB> <NOUN> <REVISION>	R R R R	N/A	Shows the Business Service Request name per OAGI: Value is 'TRANSACTION'. Value is 'QUANTITY'. Value is '001'.	N/A	N/A

Field/Data Type	Target Attributes	Action Codes	Description/Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<SENDER> <LOGICALID> <COMPONENT> <TASK> <REFERENCEID> <CONFIRMATION> <LANGUAGE> <CODEPAGE> <AUTHID>	R R R R R R R R	N/A	This area provides data about the sender of the XML document.	N/A	N/A
<DATETIME> <YEAR> <MONTH> <DAY> <HOUR> <MINUTE> <SECOND> <SUBSECOND> <TIMEZONE>	R R R R R R R R	N/A	This area provides data about the date and time the XML document was sent.	N/A	N/A



Transaction Detail: Inbound OPM Inventory Quantity

Field/Data Type	Target Attributes	Action Codes	Description/Comment	Oracle Open Interface Table or API.column (inbound)	Oracle base Table/View.Column
<TO_LOCATION> <PRIMARY_TRANS_QTY> <SECONDARY_TRANS_QTY> <QC_GRADE> <LOT_STATUS>	N R N N N	N/A		GMI_QUANTITY_XML_INTERFACE.TO_LOCATION GMI_QUANTITY_XML_INTERFACE.PRIMARY_TRANS_QTY GMI_QUANTITY_XML_INTERFACE.SECONDARY_TRANS_QTY GMI_QUANTITY_XML_INTERFACE.QC_GRADE GMI_QUANTITY_XML_INTERFACE.LOT_STATUS	ic_tran_pnd.TO_LOCATION ic_tran_pnd.PRIMARY_TRANS_QTY ic_tran_pnd.SECONDARY_TRANS_QTY ic_tran_pnd.QC_GRADE ic_tran_pnd.LOT_STATUS
<CO_CODE> <ORGN_CODE> <TRANSACTION_DATE> <REASON_CODE> <USER_NAME> <JOURNAL_COMMENT>	R R N R R N	N/A		GMI_QUANTITY_XML_INTERFACE.CO_CODE GMI_QUANTITY_XML_INTERFACE.ORGN_CODE GMI_QUANTITY_XML_INTERFACE.TRANSACTION_DATE GMI_QUANTITY_XML_INTERFACE.REASON_CODE GMI_QUANTITY_XML_INTERFACE.USER_NAME GMI_QUANTITY_XML_INTERFACE.JOURNAL_COMMENT	ic_tran_pnd.CO_CODE ic_tran_pnd.ORGN_CODE ic_tran_pnd.TRANSACTION_DATE ic_tran_pnd.REASON_CODE ic_tran_pnd.USER_NAME ic_tran_pnd.JOURNAL_COMMENT

## Sample Message

Following is an example of the XML transaction generated by the GMI\_QTY\_OAG71\_IN message map. In the <DATAAREA>, substitute the sample values with your values.

```
<?xml version = '1.0' encoding = 'UTF-8' standalone = 'no'?>
<!DOCTYPE GMI_TRANSACT_QUANTITY_001 SYSTEM "GMI_TRANSACT_QUANTITY_001.dtd">
<GMI_TRANSACT_QUANTITY_001>
<CNTROLAREA>
  <BSR>
    <VERB value="TRANSACT">TRANSACT</VERB>
    <NOUN value="QUANTITY">QUANTITY</NOUN>
    <REVISION value="001">001</REVISION>
  </BSR>
  <SENDER>
    <LOGICALID>www.oracle.com</LOGICALID>
    <COMPONENT>QTY</COMPONENT>
    <TASK>CREATE</TASK>
    <REFERENCEID>101</REFERENCEID>
    <CONFIRMATION>2</CONFIRMATION>
    <LANGUAGE>US</LANGUAGE>
    <CODEPAGE>UTF8</CODEPAGE>
    <AUTHID>APPS</AUTHID>
  </SENDER>
  <DATETIME qualifier="CREATION">
    <YEAR>2002</YEAR>
    <MONTH>7</MONTH>
    <DAY>29</DAY>
    <HOUR>4</HOUR>
    <MINUTE>56</MINUTE>
    <SECOND>27</SECOND>
    <SUBSECOND>0000</SUBSECOND>
    <TIMEZONE>-0800</TIMEZONE>
  </DATETIME>
</CNTROLAREA>
<DATAAREA>
  <GMI_QUANTITY_RECORD>
    <EXT_TRANSACTION_ID>16</EXT_TRANSACTION_ID>
    <TRANSACTION_TYPE>ADJI</TRANSACTION_TYPE>
    <ITEM_NUMBER>OPM100</ITEM_NUMBER>
    <JOURNAL_NUMBER></JOURNAL_NUMBER>
    <FROM_WAREHOUSE>ACW</FROM_WAREHOUSE>
    <TO_WAREHOUSE></TO_WAREHOUSE>
    <PRIMARY_UOM>LB</PRIMARY_UOM>
    <SECONDARY_UOM></SECONDARY_UOM>
```

## Transaction Detail: Inbound OPM Inventory Quantity

---

```
<LOT_NUMBER></LOT_NUMBER>
<SUBLot_NUMBER></SUBLot_NUMBER>
<FROM_LOCATION></FROM_LOCATION>
<TO_LOCATION></TO_LOCATION>
<PRIMARY_TRANS_QTY>0</PRIMARY_TRANS_QTY>
<SECONDARY_TRANS_QTY></SECONDARY_TRANS_QTY>
<QC_GRADE></QC_GRADE>
<LOT_STATUS></LOT_STATUS>
<CO_CODE>OPME</CO_CODE>
<ORGN_CODE>OPME</ORGN_CODE>
<TRANSACTION_DATE></TRANSACTION_DATE>
<REASON_CODE>ADD</REASON_CODE>
<USER_NAME>OPMUSR</USER_NAME>
<JOURNAL_COMMENT></JOURNAL_COMMENT>
</GMI_QUANTITY_RECORD>
</DATAAREA>
</GMI_TRANSACT_QUANTITY_001>
```

---

---

# Glossary

## **DTD**

A DTD (Document Type Definition) is a formal description in XML Declaration Syntax of a particular type of document. It sets out what names are used for the different types of element, where they can occur, and how they all fit together.

## **OAG**

The Open Applications Group is a non-profit consortium focusing on best practices and processes based on XML content for eBusiness and Application Integration.

## **OXTA**

The Oracle XML Transport Agent (OXTA) is a lightweight messaging platform for transmitting documents over the Internet. OXTA supports the HTTP protocol, with and without SSL, as well as being able to email documents outbound using SMTP.

OXTA is a java-based servlet that runs inside of a web server and connects to the database using jdbc. OXTA has complete audit, tracking, and resend capabilities for complete message management.

The servlet name is oracle.apps.ecx.oxta.TransportAgentServer. The URL to which you send the XML Message can look like:

<http://ap101jvm.us.oracle.com:9722/servlets/oracle.apps.ecx.oxta.TransportAgentServer>

## **XML**

XML is the Extensible Markup Language. It is designed to improve the functionality of the Web by providing more flexible and adaptable information identification.

It is extensible because it is not a fixed format like HTML (a single, predefined markup language). Instead, XML is actually a metalanguage -- a language for

describing other languages -- which lets you design your own customized markup languages for limitless different types of documents. This is possible because XML is written in SGML, the international standard meta language for text markup systems (ISO 8879).

### **Oracle Workflow Business Event System**

The Business Event System lets application product development teams:

- Define interesting business events
- Register zero or more Event Subscriptions to these business events
- Reference or raise these business events in application code

The Business Event System lets customers and consultants:

- Customize the behavior of packaged applications without having to modify any standard application code.
- Route messages to and from business to business exchanges
- Route messages to and from legacy applications

### **Business Event**

A business event is any event that might be of interest to customers or development teams. For example, the creation of a sales order can be a business event. The update of a sales order line can be another example of a business event.

### **Business Event Subscription**

Event Subscriptions to a business event typically perform any or all of the following actions:

- Execution of custom PL/SQL code
- Sending the business event to a predefined workflow process
- Asynchronous messaging using Oracle Advanced Queuing.

Event Subscriptions can be enabled or disabled using a User Interface - there is no requirement for any coding change.

---

---

# Index

## A

---

ABC code, 4-4  
action code, lot expiry, 4-6  
alloc\_class, 4-5  
allocation class, 4-5  
allowable deviation, factor, 4-3  
alt\_itema, 4-3  
alt\_itemb, 4-3  
alternative name for item, 4-3  
API, 1-1  
    architecture, 1-8  
API architecture, 1-8  
API, definition, 1-2  
application code calls, 1-8  
application program interfaces, 1-2  
architecture, layered, 1-8  
ASCII flat file, 2-2, 2-5  
asynchronous mode, 2-2  
attribute\_category, 4-8, 4-15, 4-21  
attributes, 4-6, 4-14, 4-19  
authorization, to a procedure, 2-3

## B

---

Batch File, 1-4  
bulk id, 4-5  
bulk\_id, 4-5

## C

---

c\_item\_mst.grade\_ctl, 4-18  
calling program, 1-2  
calling wrapper interrogation, 2-3

calls, from application code, 1-8  
character delimited, 2-5  
co\_code, 4-14  
code calls, from the application, 1-8  
code example, 2-6  
Code Re-Use, 1-5  
commit, 2-4  
commodity code, 4-6  
commodity\_code, 4-6  
company code, 4-14  
Consistent Behavior, 1-5  
conversion factor, 4-10  
cost class, 4-5  
cost method code, 4-5  
cost\_mthd\_code, 4-5  
CPG, 1-2  
Create\_Item, 1-10, 3-2  
Create\_Item\_Lot\_UOM\_Conv, 1-10, 3-3  
Create\_Lot, 1-10  
Create\_lot, 3-5  
creating a lot, 1-7  
creating an inventory item, 1-6  
customs class, 4-5  
customs\_class, 4-5

## D

---

data from legacy systems, 1-7  
database tables, 2-3  
default lot status, 4-5  
default quality control grade, 4-5  
definition, API, 1-2  
dependencies and syntax, procedural, 2-3  
descriptive flexfield segment, 4-6

deviation\_hi, 4-3  
deviation\_lo, 4-3  
dual unit of measure indicator, 4-3  
dual UOM, 4-3  
dualum\_ind, 4-3

## E

---

Ease of Integration, 1-5  
ERP, 1-2  
executing a stored procedure, 2-3  
expaction\_code, 4-6, 4-17  
expaction\_date, 4-17  
expaction\_interval, 4-6  
experimental item indicator, 4-6  
experimental\_ind, 4-6  
expire\_date, 4-17, 4-18  
expiry action code, 4-17  
expiry action date, 4-17  
expiry action interval, 4-6  
export to Oracle financials date, 4-6  
exported\_date, 4-6

## F

---

file type, nomenclature, 1-10  
file type, .pls, 1-10  
fill qty, 4-6  
fill um, 4-6  
fill\_qty, 4-6  
fill\_um, 4-6  
Financials (Oracle), date exported to, 4-6  
flat file, 2-2  
FND\_API, 1-3  
FND\_API.G\_FALSE, 3-6  
FND\_API.G\_RET\_STS\_EXP\_ERR, 4-2  
FND\_API.G\_RET\_STS\_SUCCESS, 4-2  
FND\_API.G\_RET\_STS\_UNEXP\_ERR, 4-2  
FND\_MESSAGE, 1-3  
FND\_PUB\_MSG, 1-3  
freight class, 4-4  
from location, 4-14  
from unit of measure, 4-10  
from warehouse code, 4-13  
from\_location, 4-14

from\_uom, 4-10  
from\_whse\_code, 4-13  
frt\_class, 4-4

## G

---

GET MESSAGES, 1-5, 2-3  
gl class, 4-4  
gl\_class, 4-4  
GMI  
    Default Lot, 4-13  
    Intrastat, 4-6  
GMIGAPI, 1-8  
GMIGAPI.Create\_Item\_Lot\_Conv, 4-9  
GMIGAPI.Create\_Lot, 4-16  
GMIGUTL, 1-8  
GMIGUTL.Get\_Item, 4-10, 4-17  
GMIGUTL.Get\_Lot, 4-10  
GMIPAPI, 1-8, 3-2, 3-3, 3-4, 3-5  
GMIPAPI.pls, 3-2, 3-3, 3-4, 3-5  
GMIPAPI.Create\_Item\_Lot\_Conv, 4-9  
GMIPAPI.Create\_Lot, 4-16  
GMIPAPI.Inventory\_Posting, 4-11, 4-12  
GMIPAPIS.pls, 3-2, 3-3, 3-4, 3-5  
GMIPILW, 1-9  
GMIPITW, 1-9  
GMIPLOW, 1-9  
GMIPQTW, 1-9  
GMIPTXN, 1-9  
GMIPXFW, 1-9  
GMIVBUL, 1-9  
GMIVBUS, 1-9  
GMIVCMP, 1-9  
GMIVDBL, 1-9  
GMIVILC, 1-9  
GMIVITM, 1-9  
GMIVLOC, 1-9  
GMIVLOT, 1-9  
GMIVPND, 1-9  
GMIVQTY, 1-9  
GMIVSUM, 1-9  
GMIVTXN, 1-9  
GMIVXFR, 1-9  
grade\_ctl, 4-5  
group layer, 1-8

# I

ICSALLOW\_INACTIVE, 4-13  
IC\_API\_INVALID\_ABCCODE, A-4  
IC\_API\_INVALID\_ALLOC\_CLASS, A-4  
IC\_API\_INVALID\_COMMODITY\_CODE, A-5  
IC\_API\_INVALID\_CUSTOMS\_CLASS, A-4  
IC\_API\_INVALID\_DEVIATION, A-3  
IC\_API\_INVALID\_DUALUM\_IND, A-3  
IC\_API\_INVALID\_EXPACTIION\_CODE, A-5  
IC\_API\_INVALID\_EXPACTIION\_DATE\_API, A-7  
IC\_API\_INVALID\_EXPERIMENTAL\_IND, A-5  
IC\_API\_INVALID\_EXPIRE\_DATE, A-7  
IC\_API\_INVALID\_FRT\_CLASS, A-4  
IC\_API\_INVALID\_GL\_CLASS, A-4  
IC\_API\_INVALID\_GRADE\_CTL, A-4  
IC\_API\_INVALID\_HOLD\_DAYS, A-5  
IC\_API\_INVALID\_INACTIVE\_IND, A-4  
IC\_API\_INVALID\_INV\_CLASS, A-4  
IC\_API\_INVALID\_INV\_TYPE, A-4  
IC\_API\_INVALID\_ITEM, A-7  
IC\_API\_INVALID\_ITEM\_NO, A-5, A-6  
IC\_API\_INVALID\_ITEMCOST\_CLASS, A-4  
IC\_API\_INVALID\_JOURNAL\_NO, A-6  
IC\_API\_INVALID\_LOCATION, A-6  
IC\_API\_INVALID\_LOCT\_CTL, A-4  
IC\_API\_INVALID\_LOT\_CTL, A-3  
IC\_API\_INVALID\_LOT\_EXPACTIION\_CODE, A-7  
IC\_API\_INVALID\_LOT\_HOLD\_DAYS, A-8  
IC\_API\_INVALID\_LOT\_INACTIVE\_IND, A-7  
IC\_API\_INVALID\_LOT\_INDIVISIBLE, A-3  
IC\_API\_INVALID\_LOT\_MATR\_DAYS, A-8  
IC\_API\_INVALID\_LOT\_NO, A-5, A-6  
IC\_API\_INVALID\_LOT\_ORIGINATION\_ TYPE, A-7  
IC\_API\_INVALID\_LOT\_QC\_GRADE, A-7  
IC\_API\_INVALID\_LOT\_SHIPVENDOR\_NO, A-7  
IC\_API\_INVALID\_LOT\_STATUS, A-6  
IC\_API\_INVALID\_LOT\_STATUS\_API, A-5  
IC\_API\_INVALID\_LOT\_STRENGTH, A-7  
IC\_API\_INVALID\_LOT\_UOM, A-5  
IC\_API\_INVALID\_LOT\_UOM\_TYPE, A-5  
IC\_API\_INVALID\_MATCH\_TYPE, A-4  
IC\_API\_INVALID\_MATR\_DAYS, A-5  
IC\_API\_INVALID\_NONINV\_IND, A-4  
IC\_API\_INVALID\_PLANNING\_CLASS, A-4  
IC\_API\_INVALID\_PRICE\_CLASS, A-4  
IC\_API\_INVALID\_PURCH\_CLASS, A-4  
IC\_API\_INVALID\_QC\_GRADE, A-5, A-7  
IC\_API\_INVALID\_QCHOLD\_RES\_CODE, A-5  
IC\_API\_INVALID\_QCITEM\_NO, A-5  
IC\_API\_INVALID\_QTY, A-6  
IC\_API\_INVALID\_RETEST\_DATE, A-7  
IC\_API\_INVALID\_RETEST\_INTERVAL, A-4  
IC\_API\_INVALID\_SALES\_CLASS, A-4  
IC\_API\_INVALID\_SEQ\_DPND\_CLASS, A-5  
IC\_API\_INVALID\_SHIP\_CLASS, A-4  
IC\_API\_INVALID\_STATUS\_CTL, A-4  
IC\_API\_INVALID\_STORAGE\_CLASS, A-4  
IC\_API\_INVALID\_SUBLLOT\_CTL, A-4  
IC\_API\_INVALID\_TAX\_CLASS, A-4  
IC\_API\_INVALID\_TRANS\_DATE, A-7  
IC\_API\_INVALID\_TRANS\_TYPE, A-6  
IC\_API\_INVALID\_TYPE\_FACTOR, A-5  
IC\_API\_INVALID\_UOM, A-3, A-6  
IC\_API\_INVALID\_WHSE\_CODE, A-6  
IC\_API\_INVALID\_WHSE\_ITEM\_NO, A-5  
IC\_API\_ITEM\_ALREADY\_EXISTS, A-3  
IC\_API\_ITEM\_CNV\_ALREADY\_EXISTS, A-5  
IC\_API\_ITEM\_LOT\_UOM\_FAILED, A-6  
IC\_API\_ITEM\_NOT\_LOT\_CTL, A-7  
IC\_API\_LOCT\_ONHAND\_EXISTS, A-6  
IC\_API\_LOT\_ALREADY\_EXISTS, A-7  
IC\_API\_LOT\_ITEM\_UOM\_MISMATCH, A-6  
IC\_API\_MOVE\_STATUS\_ERR, A-6  
IC\_API\_NEG\_QTY\_NOT\_ALLOWED, A-6  
IC\_API\_NO\_LOCT\_ONHAND, A-6  
IC\_API\_NVALID\_SHELF\_LIFE, A-4  
IC\_API\_SUBLLOT\_NOT\_REQD, A-6, A-7  
IC\_API\_TRANS\_TYPE\_FOR\_ITEM, A-6  
ic\_hold\_date, 4-19  
ic\_hold\_days, 4-6  
ic\_item\_cpg table, 4-2  
ic\_item\_mst, 4-17, 4-18  
ic\_item\_mst.expaction\_code, 4-17  
ic\_item\_mst.expaction\_interval, 4-18  
ic\_item\_mst.grade\_ctl, 4-17  
ic\_item\_mst.ic\_matr\_days, 4-19  
ic\_item\_mst.lot\_ctl, 4-13  
ic\_item\_mst.qc\_grade, 4-17

ic\_item\_mst.shelf\_life, 4-18  
ic\_item\_mst.sublot\_ctl, 4-13  
ic\_jrnl\_mst, 4-13  
ic\_loct\_inv, 1-9  
ic\_lots\_cpg, 4-16  
ic\_lots\_mst, 4-14, 4-17, 4-19  
ic\_matr\_date, 4-19  
ic\_matr\_days, 4-6  
ic\_summ\_inv, 1-9  
ic\_tran\_cmp, 1-9  
ic\_tran\_pnd, 1-9  
ic\_whse\_mst, 4-13  
inactive indicator, 4-19  
inactive item indicator, 4-4  
inactive\_ind, 4-4, 4-19  
indicator, lot indivisibility, 4-3  
Insulation from Changes, 1-5  
interrogation, by calling wrapper, 2-3  
intracompany transfer package, 1-9  
inv\_class, 4-4  
inv\_type, 4-4  
inventory calendar, 4-14  
inventory class, 4-4  
inventory item, creation, 1-6  
inventory item, lot creation, 1-7  
inventory quantities, 1-2  
inventory transaction packages, 1-9  
inventory type, 4-4  
Inventory\_posting, 1-10, 3-4, C-1  
Item Cost  
    Structure, 3-2, 3-3, 3-4, 3-5  
item creation, 1-2, 1-6  
item description 1, 4-3  
item description 2, 4-3  
Item Lot/Sublot Conversion, 1-2  
item lot/sublot unit of measure conversion, 1-6  
item number, 4-2, 4-10, 4-13  
item\_abccode, 4-4  
item\_desc1, 4-3  
item\_desc2, 4-3  
item\_no, 4-2, 4-10, 4-13  
item\_um, 4-3, 4-13  
item\_um2, 4-3, 4-13  
itemcost\_class, 4-5

## J

---

journal number, 4-13  
journal\_no, 4-13

## L

---

layer  
    database access, 1-8  
    group, 1-8  
    private, 1-8  
    public, 1-8  
    validation, 1-8  
    wrapper, 1-8  
layered architecture, 1-8  
level code, 4-3  
level\_code, 4-3  
location control, 4-4  
loct\_ctl, 4-4  
logical transaction, 2-4  
lot controlled item indicator, 4-3  
Lot Create, 1-2  
Lot Create stored procedure, 3-5  
lot created date, 4-18  
lot creation, 1-7  
lot description, 4-17  
lot expiration, action code for, 4-6  
lot expire date, 4-18  
lot hold days, 4-6  
lot indivisibility, 4-3  
lot maturity days, 4-6  
lot number, 4-10, 4-13, 4-17  
lot status, 4-14  
lot status controlled item indicator, 4-5  
lot\_created, 4-17, 4-18, 4-19  
lot\_ctl, 4-3  
lot\_desc, 4-17  
lot\_indivisible, 4-3  
lot\_no, 4-10, 4-13, 4-17  
lot\_status, 4-5, 4-14

## M

---

match type, 4-4  
match\_type, 4-4  
message count, 4-2

message encoding, 3-7  
message list initialization, 3-6  
message list, specifying number of messages  
    added, 3-7  
message stack, 4-2

## N

---

network traffic, 2-3  
noninv\_ind, 4-4  
non-inventory item, 4-4

## O

---

Online User Interface (UI), 1-4  
Oracle Financials, 4-6  
Oracle Messages, 1-5  
Oracle Messages table, 2-3  
Oracle-supplied wrapper code, 1-8  
organization code, 4-14  
orgn\_code, 4-14  
origination type, 4-19  
origination\_type, 4-19

## P

---

p\_api\_version, 3-6  
p\_commit, 3-7  
p\_ic\_item\_mst\_cpg, 4-17  
p\_ic\_item\_mst\_row, 4-10, 4-17  
p\_ic\_lots\_mst\_row, 4-10  
p\_init\_msg\_list, 3-6, 4-17  
p\_item\_rec, 4-2  
package body, 1-8  
package body, nomenclature, 1-10  
package specification, 1-8  
packages, inventory transactions, 1-9  
parameters, 1-2  
permissions, 2-3  
phantom type, 4-6  
phantom\_type, 4-6  
pkg id, 4-5  
pkg\_id, 4-5  
planning class, 4-5  
planning\_class, 4-5

platform independence, 2-3  
.pls file type, 1-10  
PL/SQL, 1-2, 2-2, 2-3  
    record, 2-3  
po\_vend\_mst, 4-19  
price class, 4-4  
price\_class, 4-4  
primary transaction quantity, 4-14  
primary unit of measure, 4-13  
private layer, 1-8  
private package, 1-8  
procedure, 1-8  
procedure execution, 2-3  
procedure, stored, 2-3  
procedures stored, 2-2  
processing standard message functions, 3-7  
public layer, 1-8  
public package, 1-8  
purch\_class, 4-5  
purchase class, 4-5

## Q

---

qc\_grad\_mst, 4-14, 4-17  
qc\_grade, 4-5, 4-14, 4-17  
qchold\_res\_code, 4-6  
qcitem\_no, 4-6  
quality control  
    grade, 4-14  
    grade controlled item indicator, 4-5  
    hold reason code, 4-6  
    reference item, 4-6

## R

---

reason code, 4-14  
reason\_code, 4-14  
record validation, 2-3  
record, PL/SQL, 2-3  
retest date, 4-18  
retest interval, 4-4  
retest\_date, 4-18  
retest\_interval, 4-4  
Robust Validation, 1-6

## S

---

sales class, 4-4  
sales\_class, 4-4  
second alternative name for item, 4-3  
secondary transaction quantity, 4-14  
secondary unit of measure, 4-3, 4-13  
security, 2-3  
separation, relating to user interface, 2-3  
seq\_dpnd\_class, 4-6  
sequence dependent class, 4-6  
shelf life, 4-4  
shelf\_life, 4-4  
ship class, 4-4  
ship\_class, 4-4  
shipvendor\_no, 4-19  
specification, nomenclature, 1-10  
standard message function processing, 3-7  
status\_ctl, 4-5  
storage class, 4-5  
storage\_class, 4-5  
stored procedure, 2-2, 2-3  
    body, 2-2  
    execution, 2-3  
    specification, 2-2  
strength, 4-19  
subplot control, 4-3  
subplot number, 4-10, 4-13, 4-17  
subplot\_ctl, 4-3, 4-17  
subplot\_no, 4-10, 4-13, 4-17  
support policy, 1-3  
SY\$CPG\_INSTALL, 4-2, 4-16, 4-17  
SY\$MAX\_DATE, 4-19  
SY\_API\_INVALID\_CO\_CODE, A-7  
SY\_API\_INVALID\_OP\_CODE, A-7  
SY\_API\_INVALID\_ORGN\_CODE, A-7  
SY\_API\_INVALID\_REASON\_CODE, A-7  
SY\_API\_UNABLE\_TO\_GET\_DOC\_NO, A-6  
SY\_API\_UNABLE\_TO\_GET\_SURROGATE, A-5,  
    A-7, A-8  
sy\_orgn\_mst, 4-14  
sy\_orgn\_mst.co\_code, 4-14  
sy\_reas\_cds, 4-14  
sy\_type\_mst, 4-19  
sy\_uoms\_mst, 4-13

synchronous mode, 2-2

## T

---

table, Oracle Messages, 2-3  
table\_name, 4-19  
tax class, 4-5  
tax\_class, 4-5  
Technical Overview  
    Item Cost, 2-1  
temporary table, 2-2  
third party code, 1-8  
to location, 4-14  
to unit of measure, 4-10  
to warehouse code, 4-13  
to\_location, 4-14  
to\_uom, 4-10  
to\_whse\_code, 4-13  
traffic, network, 2-3  
trans\_date, 4-14  
trans\_qty, 4-14  
trans\_qty2, 4-14  
trans\_type, 4-13  
transaction date, 4-14  
transaction packages, inventory, 1-9  
transaction type, 4-13  
transaction, logical, 2-4  
type\_factor, 4-10

## U

---

unit of measure, 4-3  
upc\_code, 4-5  
user interface layer, 2-3  
user name, 4-6, 4-10, 4-14  
user\_name, 4-6, 4-10, 4-14  
UTL\_FILE.INVALID\_OPERATION, A-8  
UTL\_FILE.INTERNAL\_ERROR, A-8  
UTL\_FILE.INVALID\_FILEHANDLE, A-8  
UTL\_FILE.INVALID\_MODE, A-8  
UTL\_FILE.INVALID\_PATH, A-8  
UTL\_FILE.READ\_ERROR, A-8  
UTL\_FILE.WRITE\_ERROR, A-8

## V

---

validating a record, 2-3  
Value-ID Conversion, 3-7  
variables, 1-8  
vendor\_lot\_no, 4-19  
version compatibility, validation, 3-6

## W

---

warehouse item number, 4-6  
whse\_item\_no, 4-6  
wrapper, 1-9  
    GMIPILW, 1-9  
    GMIPITW, 1-9  
    GMIPLOW, 1-9  
    GMIPQTW, 1-9  
    item creation, 1-9  
    item/lot UOM conversion, 1-9  
    lot creation, 1-9  
    quantity transactions, 1-9  
wrapper code, 1-8  
wrapper function, 2-2, 2-5, 3-2, 3-3, 3-4  
wrappers, 1-8

## X

---

x\_ic\_adjs\_jnl\_row, 4-12  
x\_ic\_adjs\_jnl\_row1, 4-12  
x\_ic\_adjs\_jnl\_row2, 4-12  
x\_ic\_item\_cnv\_row, 4-9  
x\_ic\_item\_cpg\_row, 4-2  
x\_ic\_item\_cpg\_row, 4-2  
x\_ic\_item\_mst\_row, 4-2  
x\_ic\_jrnl\_mst\_row, 4-12  
x\_ic\_lots\_cpg, 4-16  
x\_ic\_lots\_cpg\_row, 4-16  
x\_ic\_lots\_mst\_row, 4-16  
x\_msg\_count, 3-7  
x\_msg\_data, 3-7  
x\_return\_status, 3-7

