

Oracle[®] CRM Application Foundation

API Reference Guide

Release 11*i*

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Primary Author: Robert Geiwitz

Contributors: Sharad Mathur, Rajesh Singh, James Baldo, Lars Martinsson, Huub Bouten, Colin Furtaw

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Oracle CRM Application Foundation API Reference Guide, Release 11*i*

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

- Did you find any errors?
- Is the information clearly presented?
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If you find any errors or have any other suggestions for improvement, please indicate the chapter, section, and page number (if available). You can send comments to us at:

Oracle Corporation
Oracle CRM Application Foundation, Content Development Manager
500 Oracle Parkway
Redwood Shores, CA 94065
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Preface

Audience for This Guide

Welcome to Release 11*i* of the *Oracle CRM Application Foundation API Reference Guide*. This manual describes the CRM Application Foundation's public APIs, and provides information to help you work effectively with these public APIs.

Note: This document provides API information for the following Oracle CRM Application Foundation modules only:

- Interaction History
 - Resource Manager
 - Task Manager
 - Fulfillment
 - Notes
-
-

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

- **The principles and customary practices of your business area**
- **Oracle CRM Application Foundation**

If you have never used the Oracle CRM Application Foundation modules, Oracle suggests you attend one or more of the Oracle CRM Application Foundation 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.

This preface explains how the Reference Guide is organized and introduces other sources of information that can help you.

How To Use This Guide

This manual contains the following chapters:

Chapter 1	Introduction	Discusses the following topics: <ul style="list-style-type: none">■ API and parameter specifications■ Standard IN and OUT parameters■ Status messages
Chapter 2	Interaction History Public APIs	Discusses the Interaction History public package (JTF_IH_PUB), and the associated public APIs.
Chapter 3	Resource Manager Public APIs	Discusses the following Resource Manager public packages, and the associated public APIs: <ul style="list-style-type: none">■ JTF_RESOURCES_PUB■ JTF_RS_GROUP_PUB■ JTF_RS_SALESREPS_PUB
Chapter 4	Task Manager Public APIs	Discusses the following Task Manager public packages, and the associated public APIs: <ul style="list-style-type: none">■ JTF_TASKS_PUB■ JTF_TASK_ASSIGNMENT_PUB■ JTF_TASK_REFERENCES_PUB
Chapter 5	Fulfillment Engine Public APIs	Discusses the Fulfillment public package (JTF_FM_REQUEST_GRP) and the associated public APIs.
Chapter 6	Note Public APIs	Discusses the Notes public package (JTF_NOTES_PUB), and the associated public APIs.

Typographic Conventions

This document uses the following typographic conventions:

<code>Monospace text</code>	Monospace text represents code or SQL statements.
<i>lowercase italics</i>	Lowercase italics in the text represent variables. Substitute an appropriate value for the variable.
UPPERCASE	Uppercase characters within the text represent command names, SQL reserved words and keywords, and terms associated with the Oracle database.
Indentation	Indentation helps to show structure within code examples, but is not required.
<text>	Text inside angle brackets can mean either of the following: <ul style="list-style-type: none">■ It denotes a variable that is replaced with an actual value at runtime.■ In indicates XML elements in discussions about XML code.

Documentation Accessibility

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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.

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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 CRM Application Foundation.

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 patches are available on MetaLink.

Related Documentation

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

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

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

Documents Related to All Products

Oracle Applications User's Guide

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

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

Documents Related to This Product

Oracle CRM Application Foundation Implementation Guide

Use this manual to understand the necessary configuration and setup steps that need to be performed after the Oracle CRM Application Foundation modules are installed.

Oracle CRM Application Foundation Concepts and Procedures

This manual provides basic conceptual and reference information needed to understand the Oracle CRM Application Foundation modules. In addition, it details the procedures performed by a typical end-user of the Oracle CRM Application Foundation modules.

Installation and System Administration

Oracle Applications Concepts

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

Installing Oracle Applications

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

Oracle Applications Supplemental CRM Installation Steps

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

Upgrading Oracle Applications

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

Maintaining Oracle Applications

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

Oracle Applications System Administrator's Guide

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

Oracle Alert User's Guide

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

Oracle Applications Developer's Guide

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

Oracle Applications User Interface Standards for Forms-Based Products

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

Other Implementation Documentation

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 eTechnical Reference Manuals

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

Oracle Manufacturing APIs and Open Interfaces Manual

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

Oracle Order Management Suite APIs and Open Interfaces Manual

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

Oracle Applications Message Reference Manual

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

Training and Support

Training

Oracle offers training courses to help you and your staff master the Oracle CRM Application Foundation modules and reach full productivity quickly. You have a choice of educational environments:

- You can attend courses offered by Oracle University at any one of our many Education Centers.

- You can arrange for our trainers to teach at your facility.
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In addition, Oracle training professionals can tailor standard courses or develop custom courses to meet your needs. For example, you may want to use your organization's structure, terminology, and data as examples in a customized training session delivered at your own facility.

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From on-site support to central support, our team of experienced professionals provides the help and information you need to keep the Oracle CRM Application Foundation modules 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 Oracle8i server, and your hardware and software environment.

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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.

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

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

Introduction

The public APIs provided by the Oracle CRM Application Foundation and described in this document are divided into groups of public packages. There are one or more packages for each of the following Foundation modules covered here:

- Interaction History
- Resource Manager
- Task Manager
- Fulfillment
- Notes

Within the appropriate package, each API is specified by listing its code definition, including all of its parameters. The API parameters are then defined. In addition, the data structures used by the individual APIs are also defined, as are the relevant status messages for each API.

Note: The words *procedure* and *API* are used interchangeably in this document.

1.1 Parameter Specifications

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

- Standard IN
- Standard OUT
- Procedure specific IN

- Procedure specific OUT

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

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

1.1.1 Standard IN Parameters

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

Table 1–1 Standard IN Parameters

Parameter	Data Type	Required	Description
p_api_version	NUMBER	Yes	This must match the version number of the API. An unexpected error is returned if the calling program version number is incompatible with the current API version number (provided in the documentation).
p_init_msg_list	VARCHAR2	Yes	Default = FND_API.G_FALSE. <ul style="list-style-type: none"> ■ If set to true, then the API makes a call to <i>fnd_msg_pub.initialize</i> to initialize the message stack. ■ If set to false then the calling program must initialize the message stack. This action is required to be performed only once, even in the case where more than one API is called.
p_commit	VARCHAR2(1)	No	Default = FND_API.G_FALSE <ul style="list-style-type: none"> ■ If set to true, then the API commits before returning to the calling program. ■ If set to false, then it is the calling program's responsibility to commit the transaction.

1.1.2 Standard OUT Parameters

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

Note: All standard OUT parameters are required.

Table 1–2 Standard OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2(1)	Indicates the return status of the API. The values returned are one of the following: <ul style="list-style-type: none"> ▪ FND_API.G_RET_STS_SUCCESS Success: Indicates the API call was successful ▪ FND_API.G_RET_STS_ERROR Expected Error: There is a validation error, or missing data error. ▪ FND_API.G_RET_STS_UNEXP_ERROR Unexpected Error: The calling program can not correct the error.
x_msg_count	NUMBER	Holds the number of messages in the message list.
x_msg_data	VARCHAR2(2000)	Holds the encoded message if x_msg_count is equal to one.

1.1.3 Parameter Size

Verify the size of the column from the base table for that column when passing a parameter of a specific length. For example, if you pass a NUMBER value, first query to find the exact value to pass. An incorrect value can cause the API call to fail.

1.1.4 Missing Parameter Attributes

The following table describes optional IN parameters which are initialized to pre-defined values representing missing constants. These constants are defined for the common PL/SQL data types and should be used in the initialization of the API formal parameters.

Table 1–3 Initialized IN Parameters

Parameter	Type	Initialized Value
G_MISS_NUM	CONSTANT	NUMBER:= 9.99E125
G_MISS_CHAR	CONSTANT	VARCHAR2(1):= chr(0)
G_MISS_DATE	CONSTANT	DATE:= TO_DATE('1','J');

These constants are defined in the package FND_API in the file *findpapis.pls*. All columns in a record definition are set to the G_MISS_X constant as defined for the data type.

1.1.5 Parameter Validations

The following types of parameters are always validated during the API call:

- Standard IN
- Standard OUT
- Mandatory procedure specific IN
- Procedure specific OUT

1.1.6 Invalid Parameters

If the API encounters any invalid parameters during the API call, then one of the following actions will occur:

- An exception is raised.
- An error message identifying the invalid parameter is generated.
- All API actions are cancelled.

1.2 Version Information

It is mandatory that every API call pass a version number for that API as its first parameter (*p_api_version*).

This version number must match the internal version number of that API. An unexpected error is returned if the calling program version number is incompatible with the current API version number.

Warning: The currently supported version at this time is 1.0. Use only this for the API version number.

In addition, the object version number **must** be input for all update and delete APIs.

- If the *object_version_number* passed by the API matches that of the object in the database, then the update is completed.
- If the *object_version_number* passed by the API does not match that of the object in the database, then an error condition is generated.

1.3 Status Messages

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

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

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

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

Table 1–4 Status Message and Description

Status	Description
S	<p>Indicates that the API performed all the operations requested by its caller.</p> <ul style="list-style-type: none"> ■ A success return status may or may not be accompanied by messages in the API message list. ■ Currently, the CRM Foundation APIs do not provide a message for a return status of success.

Table 1–4 Status Message and Description

Status	Description
E	<p>Indicates that the API failed to perform one or more of the operations requested by its caller.</p> <p>An error return status is accompanied by one or more messages describing the error.</p>
U	<p>Indicates that the API encountered an error condition it did not expect, or could not handle, and that it is unable to continue with its regular processing.</p> <ul style="list-style-type: none"> ■ For example, certain programming errors such as attempting to divide by zero causes this error. ■ These types of errors usually cannot be corrected by the user and requires a system administrator or application developer to correct.

Warning and Information Messages

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

- Warnings
- Information

To create a warning message, perform the following steps:

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

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

This global variable is not part of the FND_API package.

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

```
x_return_status := G_RET_STS_WARNING
```

This code replaces the more usual:

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

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

Interaction History Public APIs

Interaction History provides other CRM modules with a common framework for capturing and accessing all "interaction" data associated with customer contacts. Interaction History acts as the central repository and provides a consistent API interface for tracking all automated or agent-based customer interactions.

2.1 Package JTF_IH_PUB

All public procedures (APIs) relating to interactions, activities, media items, and media item lifecycles are stored in the JTF_IH_PUB package. There are three types of Interaction History APIs:

- Non-cached Creation APIs
- Cached Creation APIs
- Counting APIs

Cached APIs vs. Non-cached APIs

Interaction History provides two categories of public creation APIs:

- Non-cached
- Cached

Non-cached APIs enable a client application to write and close an interaction in a single API call. This action is more efficient than that used for the cached APIs as the record is written and created in one transaction cycle. However, the client application must persist the interaction data during the creation of the interaction, or the entire interaction record can be lost if the data flow is interrupted.

If you use non-cached APIs for transactions and communication between the client application and the server is disrupted during creation of the record, then the entire transaction is lost.

Cached APIs enable Interaction History clients to create and update interactions on the server prior to closing the interaction, before the interaction becomes a historical record which cannot be updated or deleted. In this case, a partial interaction record is stored on the server and updated as needed until the final Close Interaction API call makes it a historical record. This mechanism provides some level of fault-tolerance and recovery to client applications creating the interactions.

If you use cached APIs for transactions and communication between the client application and the server is disrupted, all information captured up to the point of disruption can be recovered.

Counting APIs

The counting APIs are classified as selector methods. They return the count of an interaction or an activity based on filtering parameter values that are passed by the caller.

2.1.1 Interaction History Public APIs

The following three tables describe the public APIs which are discussed in this chapter.

Table 2–1 Interaction History Non-cached Creation APIs

Procedure	Description
Create Interaction	Creates an interaction record in table JTF_IH_INTERACTIONS, and associates one or more activities with this interaction in table JTF_IH_ACTIVITIES.
Create Media Item	Creates a media item in table JTF_IH_MEDIA_ITEMS.
Create Media Lifecycle	Creates a media lifecycle record in table JTF_IH_MEDIA_ITEM_LC_SEGS.

Table 2–2 Interaction History Cached Creation APIs

Procedure	Description
Open Interaction	<ul style="list-style-type: none"> ■ Creates an interaction in table JTF_IH_INTERACTIONS. ■ Sets the state of the interaction to OPEN. ■ Returns a sequence generated <i>interaction_id</i> number.
Update Interaction	Updates the current interaction with values supplied by the calling application. The state of the interaction remains open.
Close Interaction	Sets the state of the interaction and its associated activities to CLOSE.
Add Activity	<ul style="list-style-type: none"> ■ Creates an activity in the table JTF_IH_ACTIVITIES that is associated with the interaction that is passed by the calling application. The state of the interaction and associated activity remain open. ■ Returns a sequence generated <i>activity_id</i> number.
Update Activity	Updates the current interaction with values supplied by the calling application. The state of the interaction remains open.
Update Activity Duration	Updates the current activities <i>end_date_time</i> and <i>duration</i> with values supplied by the calling application.
Open Media Item	<ul style="list-style-type: none"> ■ Creates a media item in table JTF_IH_MEDIA_ITEMS. The state of the media item remains open. ■ Returns a sequence generated <i>media_id</i> number.
Update Media Item	Updates the current Media Item with values supplied by the calling application. The state of the media item remains open.
Close Media Item	Sets the state of the media item and its associated media lifecycle to CLOSE.
Add Media Lifecycle	<ul style="list-style-type: none"> ■ Creates a Media Lifecycle in table JTF_IH_MEDIA_ITM_LC_SEGS that is associated with a Media Item that is passed by the calling application. The state of the media item and associated media lifecycle remain open. ■ Returns a sequence generated MILCS_ID number.
Update Media Lifecycle	Updates the current media lifecycle with values supplied by the calling application. The state of the media lifecycle remains open.

Table 2–3 Interaction History Counting APIs

Procedure	Description
Get Interaction Activity Count	Retrieves the activity count from table JTF_IH_ACTIVITIES.
Get Interaction Count	Retrieves the interaction count from table JTF_IH_ACTIVITIES.

2.2 Non-cached Creation APIs

The non-cached creation APIs consist of the following procedures:

- Create Interaction
- Create Media Item
- Create Media Lifecycle

2.2.1 Create Interaction

This procedure performs the following tasks:

- It creates a customer interaction record in table JTF_IH_INTERACTIONS.
- It associates one or more activities with that record in table JTF_IH_ACTIVITIES.

Procedure Specification

```
PROCEDURE create_interaction
(
  p_api_version          in    number,
  p_init_msg_list       in    varchar2 default fnd_api.g_false,
  p_commit              in    varchar2 default fnd_api.g_false,
  p_resp_appl_id       in    number default null,
  p_resp_id            in    number default null,
  p_user_id            in    number,
  p_login_id           in    number default null,
  x_return_status      out    varchar2,
  x_msg_count          out    number,
  x_msg_data           out    varchar2,
  p_interaction_rec    in    interaction_rec_type,
  p_activities         in    activity_tbl_type
);
```

Current Version

1.0

Parameter Descriptions

In the Create APIs, the value of the input parameter is set to NULL if it corresponds to the value of the *G_MISS_X* constant. If it does not correspond, the passed-in value is retained.

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

Table 2–4 Create Interaction IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier
p_resp_id	NUMBER	No*	Responsibility identifier
p_user_id	NUMBER	No*	Corresponds to the column USER_ID in the table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.

Table 2–4 Create Interaction IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_interaction_rec	INTERACTION_REC_TYPE	Yes	<p>Contains the elements that comprise the interaction record.</p> <p>The following record parameters are always validated:</p> <ul style="list-style-type: none"> ▪ start_date_time If the <i>start_date_time</i> parameter is not supplied, then <i>sysdate</i> is inserted in its place. ▪ end_date_time ▪ handler_id ▪ outcome_id ▪ result_id ▪ reason_id ▪ resource_id ▪ party_id ▪ source_code ▪ source_code_id <p>See "Interaction Record Type" on page 2-40 for the record specification.</p>

Table 2–4 Create Interaction IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_activities	activity_tbl_type	Yes	<p>The following record parameters are always validated:</p> <ul style="list-style-type: none"> ▪ start_date_time <p>If the <i>start_date_time</i> parameter is not supplied, then <i>sysdate</i> is inserted in its place.</p> <ul style="list-style-type: none"> ▪ end_date_time ▪ action_item_id ▪ outcome_id ▪ result_id ▪ reason_id ▪ action_id ▪ source_code ▪ source_code_id <p>See "Activity Record Type" on page 2-41 for the record specification.</p>

¹ The Application ID, Responsibility ID, and the User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–5 Create Interaction OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

2.2.2 Create Media Item

This procedure creates a media item in table JTF_IH_MEDIA_ITEMS.

Procedure Specification

```
PROCEDURE create_mediaitem
(
  p_api_version    in      number,
  p_init_msg_list  in      varchar2      default fnd_api.g_false,
  p_commit         in      varchar2      default fnd_api.g_false,
  p_resp_appl_id   in      number        default null,
  p_resp_id        in      number        default null,
  p_user_id        in      number,
  p_login_id       in      number        default null,
  x_return_status  out     varchar2,
  x_msg_count      out     number,
  x_msg_data       out     varchar2,
  p_media          in      media_rec_type,
  p_mlcs           in      mlcs_tbl_type
);
```

Current Version

1.0

Parameter Descriptions

In the Create APIs, the value of the input parameter is set to NULL if it corresponds to the value of the *G_MISS_X* constant. If it does not correspond, the passed-in value is retained.

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

Table 2–6 Create Media Item IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier

Table 2–6 Create Media Item IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_resp_id	NUMBER	No*	Responsibility identifier
p_user_id	NUMBER	No*	Corresponds to the column USER_ID in the table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in the table FND_LOGINS, and identifies the login session.
p_media	media_rec_type	Yes	See "Media Item Record Type" on page 2-42.
p_mlcs	mlcs_tbl_type	Yes	See "Media Item Lifecycle Record Type" on page 2-42.

¹ The Application ID, Responsibility ID, and User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–7 Create Media Item OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

2.2.3 Create Media Lifecycle

This procedure creates a media lifecycle record in table JTF_IH_MEDIA_ITEM_LC_SEGS.

Procedure Specification

```
PROCEDURE create_medialifecycle
(
  p_api_version   in      number,
  p_init_msg_list in      varchar2      default fnd_api.g_false,
  p_commit        in      varchar2      default fnd_api.g_false,
```

```

    p_resp_appl_id in      number          default null,
    p_resp_id   in        number          default null,
    p_user_id   in        number,
    p_login_id  in        number          default null,
    x_return_status out    varchar2,
    x_msg_count out    number,
    x_msg_data  out    varchar2,
    p_media_lc_rec in      media_lc_rec_type
);

```

Current Version

1.0

Parameter Descriptions

In the Create APIs, the value of the input parameter is set to NULL if it corresponds to the value of the *G_MISS_X* constant. If it does not correspond, the passed-in value is retained.

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

Table 2–8 Create Media Lifecycle IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier
p_resp_id	NUMBER	No*	Responsibility identifier
p_user_id	NUMBER	No*	Corresponds to the column USER_ID in the table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in the table FND_LOGINS, and identifies the login session.

Table 2–8 Create Media Lifecycle IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_media_lc_rec	media_lc_rec_type	Yes	<p>This record captures the media lifecycle. The following record parameters are always validated:</p> <ul style="list-style-type: none"> ■ start_date_time If the <i>start_date_time</i> parameter is not supplied, then <i>sysdate</i> is inserted in its place. ■ end_date_time <p>See "Media Item Lifecycle Record Type" on page 2-42 for the record specification.</p>

¹ The Application ID, Responsibility ID, and User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–9 Create Media Lifecycle OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

2.3 Cached Creation APIs

The cached creation APIs consist of the following procedures:

- Open Interaction
- Update Interaction
- Close Interaction
- Add Activity
- Update Activity
- Update Activity Duration
- Open Media Item

- Update Media Item
- Close Media Item
- Add Media Lifecycle
- Update Media Lifecycle

2.3.1 Open Interaction

This procedure performs the following tasks:

- It creates an interaction in table JTF_IH_INTERACTIONS.
- It sets the state of the interaction to open.
- It returns a sequence generated *interaction_id* number.

Procedure Specification

```

PROCEDURE Open_Interaction
(
  p_api_version          in    number,
  p_init_msg_list       in    varchar2 default fnd_api.g_false,
  p_commit              in    varchar2 default fnd_api.g_false,
  p_resp_appl_id       in    number  default null,
  p_resp_id            in    number  default null,
  p_user_id            in    number,
  p_login_id          in    number  default null,
  x_return_status      out    varchar2,
  x_msg_count         out    number,
  x_msg_data          out    varchar2,
  p_interaction_rec    in    interaction_rec_type,
  x_interaction_id     out    number
);
    
```

Current Version

1.0

Parameter Descriptions

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

Table 2–10 Open Interaction IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier
p_resp_id	NUMBER	No*	Responsibility identifier
p_user_id	NUMBER	No*	Corresponds to the column USER_ID in table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.
p_interaction_rec	interaction_rec_type	Yes	<p>Contains the elements that comprise the interaction record.</p> <p>The following record parameters are always validated:</p> <ul style="list-style-type: none"> ▪ start_date_time If the <i>start_date_time</i> parameter is not supplied, then <i>sysdate</i> is inserted in its place. ▪ end_date_time ▪ handler_id ▪ outcome_id ▪ result_id ▪ reason_id ▪ resource_id ▪ party_id ▪ source_code ▪ source_code_id <p>See "Interaction Record Type" on page 2-40 for the record specification.</p>

¹ The Application ID, Responsibility ID, and User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–11 Open Interaction OUT Parameter

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_interaction_id	NUMBER	Corresponds to a sequence generated reference for the interaction record.

2.3.2 Update Interaction

Updates the current interaction with values supplied by the calling application. The state of the interaction remains open.

Procedure Specification

```
PROCEDURE update_interaction
(
    p_api_version          in      number,
    p_init_msg_list       in      varchar2 default fnd_api.g_false,
    p_commit               in      varchar2 default fnd_api.g_false,
    p_resp_appl_id        in      number  default null,
    p_resp_id              in      number  default null,
    p_user_id              in      number,
    p_login_id             in      number  default null,
    x_return_status        out     varchar2,
    x_msg_count            out     number,
    x_msg_data             out     varchar2,
    p_interaction_rec      in      interaction_rec_type
);
```

Current Version

1.0

Parameter Descriptions

In the Update APIs, columns which have passed-in values corresponding to the *G_MISS_X* constants are **not** updated.

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

Table 2–12 Update Interaction IN Parameters

Parameter	Date Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier
p_resp_id	NUMBER	No*	Responsibility identifier
p_user_id	NUMBER	No	Corresponds to the column USER_ID in table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.

Table 2–12 Update Interaction IN Parameters

Parameter	Date Type	Required	Descriptions and Validations
p_interaction_rec	interaction_rec_type	Yes	<p>Used in updating the interaction record.</p> <p>The following record parameters are always validated:</p> <ul style="list-style-type: none"> ▪ start_date_time If the <i>start_date_time</i> parameter is not supplied, then <i>sysdate</i> is inserted in its place. ▪ end_date_time ▪ handler_id ▪ outcome_id ▪ result_id ▪ reason_id ▪ resource_id ▪ party_id ▪ source_code ▪ source_code_id <p>See "Interaction Record Type" on page 2-40 for the record specification.</p>

¹ The Application ID, Responsibility ID, and User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–13 Update Interaction OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

2.3.3 Close Interaction

This procedure sets the state of the interaction and its associated activities to CLOSE based upon successful completion of the call.

Procedure Specification

```
PROCEDURE Close_Interaction
(
  p_api_version          in      number,
  p_init_msg_list        in      varchar2  default fnd_api.g_false,
  p_commit                in      varchar2  default fnd_api.g_false,
  p_resp_appl_id         in      number    default null,
  p_resp_id              in      number    default null,
  p_user_id              in      number,
  p_login_id             in      number    default null,
  x_return_status        out      varchar2,
  x_msg_count            out      number,
  x_msg_data             out      varchar2,
  p_interaction_rec      in      interaction_rec_type
);
```

Current Version

1.0

Parameter Descriptions

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

Table 2–14 Close Interaction IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier
p_resp_id	NUMBER	No*	Responsibility identifier

Table 2–14 Close Interaction IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_user_id	NUMBER	No*	Corresponds to the column USER_ID in table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.
p_interaction_rec	interaction_rec_type	Yes	<p>Contains the elements that comprise the interaction record.</p> <p>The following record parameters are always validated:</p> <ul style="list-style-type: none"> ▪ start_date_time <p>If the <i>start_date_time</i> parameter is not supplied, then <i>sysdate</i> is inserted in its place.</p> <ul style="list-style-type: none"> ▪ end_date_time <p>If the <i>end_date_time</i> parameter is not supplied at the time that the <i>Close_Interaction</i> API is invoked, then <i>sysdate</i> is inserted in its place.</p> <ul style="list-style-type: none"> ▪ handler_id ▪ outcome_id ▪ result_id ▪ reason_id ▪ resource_id ▪ party_id ▪ source_code ▪ source_code_id <p>See "Interaction Record Type" on page 2-40 for the record specification.</p>

¹ The Application ID, Responsibility ID, and User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–15 Close Interaction OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

2.3.4 Add Activity

This procedure performs the following tasks:

- It creates an activity in table JTF_IH_ACTIVITIES that is associated with the interaction passed by the calling application. The state of the interaction and associated activity remain open.
- It returns a sequence generated *activity_id* number.

Procedure Specification

```
PROCEDURE Add_Activity
(
  p_api_version          in      number,
  p_init_msg_list       in      varchar2  default fnd_api.g_false,
  p_commit              in      varchar2  default fnd_api.g_false,
  p_resp_appl_id       in      number    default null,
  p_resp_id            in      number    default null,
  p_user_id            in      number,
  p_login_id           in      number    default null,
  x_return_status      out      varchar2,
  x_msg_count          out      number,
  x_msg_data           out      varchar2,
  p_activity_rec       in      activity_rec_type,
  x_activity_id        out      number
);
```

Current Version

1.0

Parameter Descriptions

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

Table 2–16 Add Activity IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier
p_resp_id	NUMBER	No*	Responsibility identifier
p_user_id	NUMBER	No*	Corresponds to the column USER_ID in table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.
p_activity_rec	activity_rec_type	Yes	Used in updating the interaction record. The following record parameters are always validated: <ul style="list-style-type: none"> ▪ start_date_time If the <i>start_date_time</i> parameter is not supplied, then <i>sysdate</i> is inserted in its place. <ul style="list-style-type: none"> ▪ end_date_time ▪ action_item_id ▪ outcome_id ▪ result_id ▪ reason_id ▪ action_id ▪ source_code ▪ source_code_id See "Activity Record Type" on page 2-41 for the record specification.

¹ The Application ID, Responsibility ID, and User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–17 Add Activity OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_activity_id	NUMBER	Corresponds to the sequence generated activity identifier for the record created.

2.3.5 Update Activity

This procedure updates the current interaction with the values supplied by the calling application. The state of the interaction remains open upon completion of the API call.

Procedure Specification

```

PROCEDURE Update_Activity
(
    p_api_version          in      number,
    p_init_msg_list        in      varchar2    default fnd_api.g_false,
    p_commit               in      varchar2    default fnd_api.g_false,
    p_resp_appl_id         in      number      default null,
    p_resp_id              in      number      default null,
    p_user_id              in      number,
    p_login_id             in      number      default null,
    x_return_status        out      varchar2,
    x_msg_count            out      number,
    x_msg_data             out      varchar2,
    p_activity_rec         in      activity_rec_type
);
    
```

Current Version

1.0

Parameter Descriptions

In the Update APIs, columns which have passed-in values corresponding to the *G_MISS_X* constants are **not** updated.

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

Table 2–18 Update Activity IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier
p_resp_id	NUMBER	No*	Responsibility identifier
p_user_id	NUMBER	No*	Corresponds to the column USER_ID in table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.
p_activity_rec	activity_rec_type	Yes	Used in updating the interaction record. The following record parameters are always validated: <ul style="list-style-type: none"> ▪ start_date_time If the <i>start_date_time</i> parameter is not supplied, then <i>sysdate</i> is inserted in its place. ▪ end_date_time ▪ action_item_id ▪ outcome_id ▪ result_id ▪ reason_id ▪ action_id ▪ source_code ▪ source_code_id See "Activity Record Type" on page 2-41 for the record specification.

¹ The Application ID, Responsibility ID, and User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–19 Update Activity OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

2.3.6 Update Activity Duration

This procedure updates the current activities *end_date_time* and *duration* with values supplied by the calling application.

Procedure Specification

```
PROCEDURE Update_ActivityDuration
(
  p_api_version          in    number,
  p_init_msg_list       in    varchar2  default fnd_api.g_false,
  p_commit              in    varchar2  default fnd_api.g_false,
  p_resp_appl_id       in    number    default null,
  p_resp_id            in    number    default null,
  p_user_id            in    number,
  p_login_id           in    number    default null,
  x_return_status      out    varchar2,
  x_msg_count          out    number,
  x_msg_data           out    varchar2,
  p_activity_id        in    number,
  p_end_date_time      in    date,
  p_duration           in    number
);
```

Current Version

1.0

Parameter Descriptions

In the Update APIs, columns which have passed-in values corresponding to the *G_MISS_X* constants are *not* updated.

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

Table 2–20 Update Activity Duration IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier
p_resp_id	NUMBER	Optional*	Responsibility identifier
p_user_id	NUMBER	Optional*	Corresponds to the column USER_ID in table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.
p_activity_id	NUMBER		Activity identifier. This number corresponds to a certain activity.
p_end_date_time	DATE		End date time. Time in date format at the end of the transaction.
p_duration	NUMBER		Duration. Time difference between the end_date_time and the start_date_time converted to seconds.

¹ The application ID, responsibility ID, and user ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–21 Update Activity Duration OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

2.3.7 Open Media Item

This procedure creates a media item record in table JTF_IH_MEDIA_ITEMS. The state of the media item remains open upon completion of the API call. This API returns the media_id value as an output parameter.

Procedure Specification

```
PROCEDURE Open_MediaItem
(
    p_api_version    in        number,
    p_init_msg_list  in        varchar2    default fnd_api.g_false,
    p_commit         in        varchar2    default fnd_api.g_false,
    p_resp_appl_id  in        number      default null,
    p_resp_id       in        number      default null,
    p_user_id       in        number,
    p_login_id      in        number      default null,
    x_return_status out        varchar2,
    x_msg_count     out        number,
    x_msg_data      out        varchar2,
    p_media_rec     in        media_rec_type,
    x_media_id      out        number
);
```

Current Version

1.0

Parameter Descriptions

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

Table 2–22 Open Media Item IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier
p_resp_id	NUMBER	No*	Responsibility identifier

Table 2–22 Open Media Item IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_user_id	NUMBER	No*	Corresponds to the column USER_ID in table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.
p_media	media_rec_type		<p>Enumerates the elements that comprise a media record.</p> <p>The following record parameters are always validated:</p> <ul style="list-style-type: none"> ■ start_date_time If the <i>start_date_time</i> parameter is not supplied, then <i>sysdate</i> is inserted in its place. ■ end_date_time <p>See "Media Item Record Type" on page 2-42 for the record specification.</p>

¹ The Application ID, Responsibility ID, and User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–23 Open Media Item OUT Parameter

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_media_id	NUMBER	The record number for the created media item. It is automatically generated by sequence JTF_IH_MEDIA_ITEMS_S1.

2.3.8 Update Media Item

This procedure updates the current media item with values supplied by the calling application. The state of the media item remains open upon completion of the API

call. For this to be a valid operation, the *media_id* update state must be active (ACTIVE= 'Y').

This procedure only updates columns with valid values. All input values must be valid as the procedure does not perform a partial update.

Procedure Specification

```
PROCEDURE Update_MediaItem
(
  p_api_version    in      number,
  p_init_msg_list  in      varchar2      default fnd_api.g_false,
  p_commit         in      varchar2      default fnd_api.g_false,
  p_resp_appl_id   in      number        default null,
  p_resp_id        in      number        default null,
  p_user_id        in      number,
  p_login_id       in      number        default null,
  x_return_status  out     varchar2,
  x_msg_count      out     number,
  x_msg_data       out     varchar2,
  p_media_rec      in      media_rec_type
);
```

Current Version

1.0

Parameter Descriptions

In the Update APIs, columns which have passed-in values corresponding to the *G_MISS_X* constants are **not** updated.

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

Table 2–24 Update Media Item IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier

Table 2–24 Update Media Item IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_resp_id	NUMBER	No*	Responsibility identifier
p_user_id	NUMBER	No	Corresponds to the column USER_ID in the table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No*	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.
p_media_rec	media_rec_type		<p>Enumerates the elements that comprise a media record.</p> <p>The following record parameters are always validated:</p> <ul style="list-style-type: none"> ■ start_date_time If the <i>start_date_time</i> parameter is not supplied, then <i>sysdate</i> is inserted in its place. ■ end_date_time <p>See "Media Item Record Type" on page 2-42 for the record specification.</p>

¹ The Application ID, Responsibility ID, and User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–25 Update Media Item OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

2.3.9 Close Media Item

This procedure sets the state of the current media item and its associated media lifecycle to CLOSE. For this to be a valid operation, the *media_id* update state must be active (ACTIVE= 'Y').

The record set, media item and associated *milcs_id(s)* are now considered to be historical records. They are now immutable and can no longer be updated or changed.

Procedure Specification

```
PROCEDURE Close_MediaItem
(
  p_api_version    in      number,
  p_init_msg_list  in      varchar2      default fnd_api.g_false,
  p_commit         in      varchar2      default fnd_api.g_false,
  p_resp_appl_id  in      number        default null,
  p_resp_id       in      number        default null,
  p_user_id       in      number,
  p_login_id      in      number        default null,
  x_return_status out      varchar2,
  x_msg_count     out      number,
  x_msg_data      out      varchar2,
  p_media_rec     in      media_rec_type
);
```

Current Version

1.0

Parameter Descriptions

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

Table 2–26 Close Media Item IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier
p_resp_id	NUMBER	No*	Responsibility identifier
p_user_id	NUMBER	No*	Corresponds to the column USER_ID in table FND_USER, and identifies the Oracle Applications user.

Table 2–26 Close Media Item IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.
p_media_rec	media_rec_type	Yes	<p>Enumerates the elements that comprise a media record.</p> <p>The following record parameters are always validated:</p> <ul style="list-style-type: none"> ▪ start_date_time If the <i>start_date_time</i> parameter is not supplied, then <i>sysdate</i> is inserted in its place. ▪ end_date_time If the <i>end_date_time</i> parameter is not supplied at the time that the <i>Close_MediaItem</i> API is invoked, then <i>sysdate</i> is inserted in its place. <p>See "Media Item Record Type" on page 2-42 for the record specification.</p>

¹ The Application ID, Responsibility ID, and User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–27 Close Media Item OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

2.3.10 Add Media Lifecycle

This procedure performs the following tasks:

- It creates a media lifecycle record in table JTF_IH_MEDIA_ITEM_LC_SEGS that is associated with a media item passed to it by the calling application. The state of the media item and associated media lifecycle remain open.

- It returns a sequence generated *milcs_id* number.

For this to be a valid operation, the *media_id* update state must be active (ACTIVE='Y').

All parameter values passed-in must be valid. The procedure does not create a record with a partial set of valid values.

Procedure Specification

```
PROCEDURE Add_MediaLifecycle
(
  p_api_version    in      number,
  p_init_msg_list  in      varchar2      default fnd_api.g_false,
  p_commit         in      varchar2      default fnd_api.g_false,
  p_resp_appl_id   in      number        default null,
  p_resp_id        in      number        default null,
  p_user_id        in      number,
  p_login_id       in      number        default null,
  x_return_status  out     varchar2,
  x_msg_count      out     number,
  x_msg_data       out     varchar2,
  p_media_lc_rec   in      media_lc_rec_type,
  x_milcs_id       out     number
);
```

Current Version

1.0

Parameter Descriptions

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

Table 2–28 Add Media Lifecycle IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier

Table 2–28 Add Media Lifecycle IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_resp_id	NUMBER	No*	Responsibility identifier
p_user_id	NUMBER	No*	Corresponds to the column USER_ID in table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.
p_media_lc_rec	media_lc_rec_type		<p>Composite record that enumerates the elements that comprise a media lifecycle.</p> <p>The following record parameters are always validated:</p> <ul style="list-style-type: none"> ■ start_date_time If the <i>start_date_time</i> parameter is not supplied, then <i>sysdate</i> is inserted in its place. ■ end_date_time <p>See "Media Item Lifecycle Record Type" on page 2-42 for the record specification.</p>

¹ The Application ID, Responsibility ID, and User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–29 Add Media Lifecycle OUT Parameter

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_milcs_id	NUMBER	Corresponds to the sequence generated media lifecycle identifier for the record created.

2.3.11 Update Media Lifecycle

This procedure updates the current media lifecycle in table JTF_IH_MEDIA_ITEM_LC_SEGS that is associated with the media item (with state OPEN) passed to it by the calling application. The state of the media item and the state of the media lifecycle remain open upon completion of the API call.

All parameter values passed-in must be valid. This procedure does not update a record with a partial set of valid values.

Procedure Specification

```
PROCEDURE Update_MediaLifecycle
(
  p_api_version    in      number,
  p_init_msg_list  in      varchar2      default fnd_api.g_false,
  p_commit         in      varchar2      default fnd_api.g_false,
  p_resp_appl_id  in      number         default null,
  p_resp_id       in      number         default null,
  p_user_id       in      number,
  p_login_id      in      number         default null,
  x_return_status out      varchar2,
  x_msg_count     out      number,
  x_msg_data      out      varchar2,
  p_media_lc_rec  in      media_lc_rec_type
);
```

Current Version

1.0

Parameter Descriptions

In the Update APIs, columns which have passed-in values corresponding to the *G_MISS_X* constants are **not** updated.

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

Table 2–30 Update Media Lifecycle IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.

Table 2–30 Update Media Lifecycle IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier
p_resp_id	NUMBER	No*	Responsibility identifier
p_user_id	NUMBER	No*	Corresponds to the column USER_ID in table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.
p_media_lc_rec	media_lc_rec_type	Yes	<p>Composite record that enumerates the elements that comprise a media lifecycle.</p> <p>The following record parameters are always validated:</p> <ul style="list-style-type: none"> ▪ start_date_time If the <i>start_date_time</i> parameter is not supplied, then <i>sysdate</i> is inserted in its place. ▪ end_date_time <p>See "Media Item Lifecycle Record Type" on page 2-42 for the record specification.</p>

¹ The Application ID, Responsibility ID, and User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–31 Update Media Lifecycle OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

2.4 Counting APIs

The counting APIs consist of the following procedures:

- Get Interaction Activity Count
- Get Interaction Count

2.4.1 Get Interaction Activity Count

This procedure retrieves the interaction and activity count from table `JTF_IH_ACTIVITIES` based on the input parameters.

Procedure Specification

```
PROCEDURE Get_InteractionActivityCount
(
  p_api_version      in      number,
  p_init_msg_list    in      varchar2      default fnd_api.g_false,
  p_resp_appl_id     in      number        default null,
  p_resp_id          in      number        default null,
  p_user_id          in      number,
  p_login_id         in      number        default null,
  x_return_status    out     varchar2,
  x_msg_count        out     number,
  x_msg_data         out     varchar2,
  p_outcome_id       in      number,
  p_result_id        in      number,
  p_reason_id        in      number,
  p_script_id        in      number,
  p_media_id         in      number,
  x_activity_count   out     number
);
```

Current Version

1.0

Parameter Descriptions

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

Table 2–32 Get Interaction Activity Count IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier
p_resp_id	NUMBER	No*	Responsibility identifier
p_user_id	NUMBER	Yes	Corresponds to the column USER_ID in table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.
p_outcome_id	NUMBER	Yes	Outcome identifier. The number corresponds to a certain outcome.
p_result_id	NUMBER	Yes	Result identifier. The number corresponds to a certain result.
p_reason_id	NUMBER	Yes	Reason identifier. The number corresponds to certain reasons.
p_script_id	NUMBER	No	User hook
p_media_id	NUMBER	No	See "Media Item Record Type" on page 2-42 for the record specification.

¹ The Application ID, Responsibility ID, and User ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

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

Table 2–33 Get Interaction Activity Count OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_activity_count	NUMBER	Corresponds to the number of interactions and activities found that match the search criteria.

2.4.2 Get Interaction Count

This procedure retrieves the interaction count from table JTF_IH_INTERACTIONS based on the input parameters.

Procedure Specification

```
PROCEDURE Get_InteractionCount
(
  p_api_version      in      number,
  p_init_msg_list    in      varchar2      default fnd_api.g_false,
  p_resp_appl_id     in      number        default null,
  p_resp_id          in      number        default null,
  p_user_id          in      number,
  p_login_id         in      number        default null,
  x_return_status    out     varchar2,
  x_msg_count        out     number,
  x_msg_data         out     varchar2,
  p_outcome_id       in      number,
  p_result_id        in      number,
  p_reason_id        in      number,
  p_attribute1       in      varchar2      default null,
  p_attribute2       in      varchar2      default null,
  p_attribute3       in      varchar2      default null,
  p_attribute4       in      varchar2      default null,
  p_attribute5       in      varchar2      default null,
  p_attribute6       in      varchar2      default null,
  p_attribute7       in      varchar2      default null,
  p_attribute8       in      varchar2      default null,
  p_attribute9       in      varchar2      default null,
  p_attribute10      in      varchar2      default null,
  p_attribute11      in      varchar2      default null,
  p_attribute12      in      varchar2      default null,
  p_attribute13      in      varchar2      default null,
  p_attribute14      in      varchar2      default null,
  p_attribute15      in      varchar2      default null,
  p_attribute_category in  varchar2      default null,
  x_interaction_count out     number
);
```

Current Version

1.0

Parameter Descriptions

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

Table 2–34 Get Interaction Count IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_resp_appl_id	NUMBER	No ¹	Application identifier
p_resp_id	NUMBER	No*	Responsibility identifier
p_user_id	NUMBER	No*	Corresponds to the column USER_ID in table FND_USER, and identifies the Oracle Applications user.
p_login_id	NUMBER	No	Corresponds to the column LOGIN_ID in table FND_LOGINS, and identifies the login session.
p_outcome_id	NUMBER	No	Outcome identifier. The number corresponds to a certain outcome.
p_result_id	NUMBER	No	Result identifier. The number corresponds to a certain result.
p_reason_id	NUMBER	No	Reason identifier. The number corresponds to certain reasons.
p_attribute1	VARCHAR2(150)	No ²	Customer flex field segment.
p_attribute2	VARCHAR2(150)	No**	Customer flex field segment.
p_attribute3	VARCHAR2(150)	No**	Customer flex field segment.
p_attribute4	VARCHAR2(150)	No**	Customer flex field segment.
p_attribute5	VARCHAR2(150)	No**	Customer flex field segment.
p_attribute6	VARCHAR2(150)	No**	Customer flex field segment.
p_attribute7	VARCHAR2(150)	No**	Customer flex field segment.
p_attribute8	VARCHAR2(150)	No**	Customer flex field segment.
p_attribute9	VARCHAR2(150)	No**	Customer flex field segment.
p_attribute10	VARCHAR2(150)	No**	Customer flex field segment.

Table 2–34 Get Interaction Count IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_attribute11	VARCHAR2(150)	No**	Customer flex field segment.
p_attribute12	VARCHAR2(150)	No**	Customer flex field segment.
p_attribute13	VARCHAR2(150)	No**	Customer flex field segment.
p_attribute14	VARCHAR2(150)	No**	Customer flex field segment.
p_attribute15	VARCHAR2(150)	No**	Customer flex field segment.
p_attribute_category	VARCHAR2(30)	No	

¹ The application ID, responsibility ID, and user ID determine which profile values are used as defaults. Those items marked with an asterisk also follow these guidelines.

² You must pass in segment IDs for none or all descriptive flexfield columns that might be used in the descriptive flexfield. Those items marked with two asterisks also follow these guidelines.

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

Table 2–35 Get Interaction Count OUT Parameter

Name	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_interaction_count	NUMBER	Corresponds to the number of interactions found.

2.5 Data Structure Specifications

The following data structures are used by the Interaction History APIs:

- Interaction Record Type
- Activity Record Type
- Media Item Record Type
- Media Item Lifecycle Record Type

Nested Record Types

PL/SQL record types are used in all open, add, and close Interaction History APIs. In certain cases, nested record types are used as well.

For example, in the *Create_Interaction* API:

- Input parameter *p_activities* is a record of type *activity_tbl_type*.
- In turn, *activity_tbl_type* contains a record of type *activity_rec_type* as one of its elements.

Using nested data structures in this fashion enables the calling API to pass one or more activities to an Interaction History creation API.

2.5.1 Interaction Record Type

This composite record type enumerates all the elements that represent an interaction record. This business entity represents a contact point between a customer, customer system, or potential customer and a single human or automated agent.

Record Specification

```
TYPE interaction_rec_type IS RECORD
(
  interaction_id           number           :=fnd_api.g_miss_num,
  reference_form          varchar2(1000)   :=fnd_api.g_miss_char,
  follow_up_action        varchar2(80)    :=fnd_api.g_miss_char,
  duration                number          :=fnd_api.g_miss_num,
  inter_interaction_duration number        :=fnd_api.g_miss_num,
  non_productive_time_amount number       :=fnd_api.g_miss_num,
  preview_time_amount     number          :=fnd_api.g_miss_num,
  productive_time_amount  number          :=fnd_api.g_miss_num,
  start_date_time         date            :=fnd_api.g_miss_date,
  wrapup_time_amount      number          :=fnd_api.g_miss_num,
  handler_id              number          :=fnd_api.g_miss_num,
  script_id               number          :=fnd_api.g_miss_num,
  outcome_id              number          :=fnd_api.g_miss_num,
  result_id               number          :=fnd_api.g_miss_num,
  reason_id               number          :=fnd_api.g_miss_num,
  resource_id             number          :=fnd_api.g_miss_num,
  party_id                number          :=fnd_api.g_miss_num,
  parent_id               number          :=fnd_api.g_miss_num,
  object_id               number          :=fnd_api.g_miss_num,
  object_type              varchar2(30)   :=fnd_api.g_miss_char,
```

```

source_code_id          number          :=fnd_api.g_miss_num,
source_code             varchar2(30)       :=fnd_api.g_miss_char,
attribute1              varchar2(150)      :=fnd_api.g_miss_char,
attribute2              varchar2(150)      :=fnd_api.g_miss_char,
attribute3              varchar2(150)      :=fnd_api.g_miss_char,
attribute4              varchar2(150)      :=fnd_api.g_miss_char,
attribute5              varchar2(150)      :=fnd_api.g_miss_char,
attribute6              varchar2(150)      :=fnd_api.g_miss_char,
attribute7              varchar2(150)      :=fnd_api.g_miss_char,
attribute8              varchar2(150)      :=fnd_api.g_miss_char,
attribute9              varchar2(150)      :=fnd_api.g_miss_char,
attribute10             varchar2(150)      :=fnd_api.g_miss_char,
attribute11             varchar2(150)      :=fnd_api.g_miss_char,
attribute12             varchar2(150)      :=fnd_api.g_miss_char,
attribute13             varchar2(150)      :=fnd_api.g_miss_char,
attribute14             varchar2(150)      :=fnd_api.g_miss_char,
attribute15             varchar2(150)      :=fnd_api.g_miss_char,
attribute_category      varchar2(30)       :=fnd_api.g_miss_char
);

```

2.5.2 Activity Record Type

This composite record type enumerates all elements that represent an activity record. This business entity can be associated with the business functions performed during an interaction.

Record Specification

```

TYPE activity_rec_type IS RECORD
(
    activity_id          number          :=fnd_api.g_miss_num,
    duration             number          :=fnd_api.g_miss_num,
    cust_account_id     number          :=fnd_api.g_miss_num,
    cust_org_id         number          :=fnd_api.g_miss_num,
    role                varchar2(240)   :=fnd_api.g_miss_char,
    start_date_time     date            :=fnd_api.g_miss_date,
    task_id             number          :=fnd_api.g_miss_num,
    doc_id              number          :=fnd_api.g_miss_num,
    doc_ref             varchar2(30)    :=fnd_api.g_miss_char,
    doc_source_object_name varchar2(80)   :=fnd_api.g_miss_char,
    media_id            number          :=fnd_api.g_miss_num,
    action_item_id      number          :=fnd_api.g_miss_num,
    interaction_id      number          :=fnd_api.g_miss_num,
    outcome_id          number          :=fnd_api.g_miss_num,

```

```
result_id          number          :=fnd_api.g_miss_num,
reason_id         number          :=fnd_api.g_miss_num,
description       varchar2(1000) :=fnd_api.g_miss_char,
action_id        number          :=fnd_api.g_miss_num,
interaction_action_type varchar2(240) :=fnd_api.g_miss_char,
object_id        number          :=fnd_api.g_miss_num,
object_type      varchar2(30)   :=fnd_api.g_miss_char,
source_code_id   number          :=fnd_api.g_miss_num,
source_code      varchar2(30)   :=fnd_api.g_miss_char
);
```

2.5.3 Media Item Record Type

This composite record type enumerates all elements that represent a media record. This business entity can be generated by a customer, by the system, or an application.

Record Specification

```
TYPE media_rec_type IS RECORD
(
  media_id          number          :=fnd_api.g_miss_num,
  source_id        number          :=fnd_api.g_miss_num,
  direction       varchar2(240) :=fnd_api.g_miss_char,
  duration        number          :=fnd_api.g_miss_num,
  interaction_performed varchar2(240) :=fnd_api.g_miss_char,
  start_date_time date           :=fnd_api.g_miss_date,
  media_data      varchar2(80)   :=fnd_api.g_miss_char,
  source_item_create_date_time date       :=fnd_api.g_miss_date,
  source_item_id  number          :=fnd_api.g_miss_num,
  media_item_type varchar2(80)   :=fnd_api.g_miss_char,
  media_item_ref  varchar2(240) :=fnd_api.g_miss_char
);
```

2.5.4 Media Item Lifecycle Record Type

This composite record type enumerates all elements that represent a media lifecycle record. This business entity unit represents a unit of time associated with the handling of a media item.

Record Specification

```
TYPE media_lc_rec_type IS RECORD
(
  start_date_time          date           :=fnd_api.g_miss_date,
  type_type                varchar2(80)   :=fnd_api.g_miss_char,
  type_id                  number        :=fnd_api.g_miss_num,
  duration                 number        :=fnd_api.g_miss_num,
  milcs_id                 number        :=fnd_api.g_miss_num,
  milcs_type_id            number        :=fnd_api.g_miss_num,
  media_id                 number        :=fnd_api.g_miss_num,
  handler_id               number        :=fnd_api.g_miss_num,
  resource_id              number        :=fnd_api.g_miss_num,
  milcs_code               varchar2(80)   :=fnd_api.g_miss_char
);
```

2.6 Messages and Notifications

The following APIs contained in package JTF_IH_PUB generate messages and notifications as needed:

- Create Interaction
- Open Interaction
- Update Interaction
- Close Interaction
- Add Activity
- Update Activity
- Open Media Item
- Close Media Item
- Add Media Lifecycle

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

2.6.1 JTF_IH_PUB

2.6.1.1 Create Interaction

The following table lists the messages and notifications that the Create Interaction API can generate.

Table 2–36 Create Interaction Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for party_id touchpoint1_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for resource_id touchpoint1_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for party_id touchpoint2_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for resource_id touchpoint2_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for handler_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for outcome_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for result_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for reason_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for action_item_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for action_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for script_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for source_code_id set and source_code not set is invalid.

Table 2–36 Create Interaction Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for source_code set and source_code_id not set is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for end_date_time is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for interaction_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for non_production_time_amount.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for interaction is not active.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for activity_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for action_item_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for action_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for activity is not active.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Create_Interaction): The value <parameter value> for cust_account_id is invalid.

2.6.1.2 Open Interaction

The following table lists the messages and notifications that the Open Interaction API can generate.

Table 2–37 Open Interaction Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for party_id touchpoint1_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for resource_id touchpoint1_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for party_id touchpoint2_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for resource_id touchpoint2_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for handler_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for outcome_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for result_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for reason_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for action_item_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for action_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for script_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for source_code_id set and source_code not set is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for source_code set and source_code_id not set is invalid.

Table 2–37 Open Interaction Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for end_date_time is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for interaction_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for non_production_time_amount.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_Interaction): The value <parameter value> for interaction is not active.

2.6.1.3 Update Interaction

The following table lists the messages and notifications that the Update Interaction API can generate.

Table 2–38 Update Interaction Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for party_id touchpoint1_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for resource_id touchpoint1_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for party_id touchpoint2_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for resource_id touchpoint2_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for handler_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for outcome_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for result_id is invalid.

Table 2–38 Update Interaction Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for reason_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for action_item_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for action_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for script_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for source_code_id set and source_code not set is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for source_code set and source_code_id not set is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for end_date_time is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for interaction_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for non_production_time_ amount.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Interaction): The value <parameter value> for interaction is not active.

2.6.1.4 Close Interaction

The following table lists the messages and notifications that the Close Interaction API can generate.

Table 2–39 Close Interaction Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for party_id touchpoint1_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for resource_id touchpoint1_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for party_id touchpoint2_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for resource_id touchpoint2_type is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for handler_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for outcome_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for result_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for reason_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for action_item_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for action_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for script_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for source_code_id set and source_code not set is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for source_code set and source_code_id not set is invalid.

Table 2–39 Close Interaction Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for end_date_time is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for interaction_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for non_production_time_amount.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_Interaction): The value <parameter value> for interaction is not active.

2.6.1.5 Add Activity

The following table lists the messages and notifications that the Add Activity API can generate.

Table 2–40 Add Activity Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Add_Activity): The value <parameter value> for outcome_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Add_Activity): The value <parameter value> for result_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Add_Activity): The value <parameter value> for reason_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Add_Activity): The value <parameter value> for action_item_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Add_Activity): The value <parameter value> for action_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Add_Activity): The value <parameter value> for source_code_id set and source_code not set is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Add_Activity): The value <parameter value> for source_code set and source_code_id not set is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Add_Activity): The value <parameter value> for end_date_time is invalid.

Table 2–40 Add Activity Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Add_Activity): The value <parameter value> for activity_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Add_Activity): The value <parameter value> for cust_account_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Add_Activity): The value <parameter value> for active is not active.

2.6.1.6 Update Activity

The following table lists the messages and notifications that the Update Activity API can generate.

Table 2–41 Update Activity Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Activity): The value <parameter value> for outcome_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Activity): The value <parameter value> for result_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Activity): The value <parameter value> for reason_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Activity): The value <parameter value> for action_item_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Activity): The value <parameter value> for action_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Activity): The value <parameter value> for source_code_id set and source_code not set is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Activity): The value <parameter value> for source_code set and source_code_id not set is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Activity): The value <parameter value> for end_date_time is invalid.

Table 2–41 Update Activity Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Activity): The value <parameter value> for activity_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Activity): The value <parameter value> for cust_account_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_Activity): The value <parameter value> for active is not active.

2.6.1.7 Open Media Item

The following table lists the messages and notifications that the Open Media Item API can generate.

Table 2–42 Open Media Item Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Open_MediaItem): The value <parameter value> for end_date_time is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB. Open_MediaItem): The value <parameter value> for media_item_type is invalid.

2.6.1.8 Update Media Item

The following table lists the messages and notifications that the Update Media Item API can generate.

Table 2–43 Update Media Item Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Update_MediaItem): The value <parameter value> for end_date_time is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB. Update_MediaItem): The value <parameter value> for media_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB. Update_MediaItem): The value <parameter value> for media_item_type is invalid.

2.6.1.9 Close Media Item

The following table lists the messages and notifications that the Close Media Item API can generate.

Table 2–44 Close Media Item Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Close_MediaItem): The value <parameter value> for end_date_time is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB. Close_MediaItem): The value <parameter value> for media_id is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB. Close_MediaItem): The value <parameter value> for media_item_type is invalid.

2.6.1.10 Add Media Lifecycle

The following table lists the messages and notifications that the Add Media Lifecycle API can generate.

Table 2–45 Add Media Lifecycle Messages

Type	Name	Text
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB.Add_Medialifecycle): The value <parameter value> for end_date_time is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB. Add_Medialifecycle): The value <parameter value> for milcs_code is invalid.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (JTF_IH_PUB. Add_Medialifecycle): The value <parameter value> for milcs_type_id is invalid.

Resource Manager Public APIs

Resource Manager provides the CRM modules with a common framework for importing, defining and viewing resources, creating teams and groups, and organizing resources within those teams and groups. Resource Manager acts as the central repository and provides a consistent API interface for working resources.

3.1 Resource Manager Public Packages

There are three public Resource Manager packages:

- Package JTF_RS_RESOURCE_PUB
- Package JTF_RS_GROUPS_PUB
- Package JTF_RS_SALESREPS_PUB

Package JTF_RS_RESOURCE_PUB

All public procedures (APIs) relating to creating or updating a resource are stored in package JTF_RS_RESOURCE_PUB. This package contains the following procedures:

- Create Resource
- Update Resource

Package JTF_RS_GROUPS_PUB

All public procedures (APIs) relating to creating or updating a resource group are stored in package JTF_RS_GROUPS_PUB. This package contains the following procedures:

- Create Resource Group
- Update Resource Group

Package JTF_RS_SALESREPS_PUB

All public procedures (APIs) relating to creating or updating a salesperson are stored in package JTF_RS_SALESREPS_PUB. This package contains the following procedures:

- Create SalesRep
- Update SalesRep

3.1.1 Resource Manager Public APIs

The following table describes the public APIs which are discussed in this chapter.

Table 3–1 Resource Manager Public APIs

Parameter	Description
Create Resource	Used to create all categories of resources like Employee, Party, Supplier Contact, and Other.
Update Resource	Used to update resource attributes like Resource Name, Start Date, End Date, and User Identifier.
Create Resource Group	Used to create a Resource Group.
Update Resource Group	Used to update Resource Group attributes like Group Name, Group Description, Start and End Date effectively.
Create SalesRep	Used to create a resource of type SalesRep that can be used by resources created using the Create Resource API.
Update SalesRep	Used to update SalesRep attributes like SalesRep Number, Sales Credit Type, Start and End Date effectively.

3.2 Package JTF_RS_RESOURCE_PUB

This package contains the following procedures:

- Create Resource
- Update Resource

3.2.1 Create Resource

Use this API to create all categories of resources like Employee, Party, Supplier Contact, and Other. The API first verifies that the resource does not already exist in the Resources table before creating it. From this API, you can insert resource information into Call Center, Compensation, and the Account Receivables tables.

This API automatically generates the following resource identifiers:

- resource_id
- resource_number

Resource Information versus Source Information

Within the Resource Manager, resource information and source information are two different types of information.

- **Resource** information (name, number, contact, and similar items) is defined within the Resource Manager, or through its APIs. This information can be changed or modified at will.
- **Source** information (source_id, source_name, source_number, and similar items) are pulled into the Resource Manager from another "source." Information extracted from a source external to the Resource Manager is not changed by the Resource Manager or its APIs.

Example sources include:

- Oracle Human Resources tables
- Oracle HZ Party tables

Note: The calling application must pass in the resource name to both p_resource_name and p_source_name. To ensure correct operation of the API, neither of these values can be NULL.

Procedure Specification

PROCEDURE create_resource

```
(
  p_api_version           in number,
  p_init_msg_list        in varchar2 default fnd_api.g_false,
  p_commit               in varchar2 default fnd_api.g_false,
  p_category             in jtf_rs_resource_extns.category%type,
  p_source_id            in jtf_rs_resource_extns.source_id%type           default null,
  p_address_id           in jtf_rs_resource_extns.address_id%type         default null,
  p_contact_id           in jtf_rs_resource_extns.contact_id%type         default null,
  p_managing_emp_id      in jtf_rs_resource_extns.managing_employee_id%type default null,
  p_managing_emp_num     in per_employees_current_x.employee_num%type     default null,
  p_start_date_active    in jtf_rs_resource_extns.start_date_active%type,
  p_end_date_active      in jtf_rs_resource_extns.end_date_active%type    default null,
  p_time_zone            in jtf_rs_resource_extns.time_zone%type          default null,
  p_cost_per_hr          in jtf_rs_resource_extns.cost_per_hr%type        default null,
  p_primary_language     in jtf_rs_resource_extns.primary_language%type   default null,
  p_secondary_language   in jtf_rs_resource_extns.secondary_language%type default null,
  p_support_site_id      in jtf_rs_resource_extns.support_site_id%type    default null,
  p_ies_agent_login      in jtf_rs_resource_extns.ies_agent_login%type    default null,
  p_server_group_id      in jtf_rs_resource_extns.server_group_id%type    default null,
  p_interaction_center_name in varchar2 default null,
  p_assigned_to_group_id in jtf_rs_resource_extns.assigned_to_group_id%type default null,
  p_cost_center          in jtf_rs_resource_extns.cost_center%type        default null,
  p_charge_to_cost_center in jtf_rs_resource_extns.charge_to_cost_center%type default null,
  p_comp_currency_code   in jtf_rs_resource_extns.compensation_currency_code%type default null,
  p_commissionable_flag  in jtf_rs_resource_extns.commissionable_flag%type default 'y',
  p_hold_reason_code     in jtf_rs_resource_extns.hold_reason_code%type   default null,
  p_hold_payment         in jtf_rs_resource_extns.hold_payment%type       default 'n',
  p_comp_service_team_id in jtf_rs_resource_extns.comp_service_team_id%type default null,
  p_user_id              in jtf_rs_resource_extns.user_id%type            default null,
  p_transaction_number   in jtf_rs_resource_extns.transaction_number%type  default null,
  x_return_status        out varchar2,
  x_msg_count            out number,
  x_msg_data             out varchar2,
  x_resource_id          out jtf_rs_resource_extns.resource_id%type,
  x_resource_number      out jtf_rs_resource_extns.resource_number%type,
  p_resource_name        in jtf_rs_resource_extns_tl.resource_name%type,
  p_source_name          in jtf_rs_resource_extns.source_name%type,
  p_source_number        in jtf_rs_resource_extns.source_number%type       default null,
  p_source_job_title     in jtf_rs_resource_extns.source_job_title%type    default null,
  p_source_email         in jtf_rs_resource_extns.source_email%type        default null,
  p_source_phone         in jtf_rs_resource_extns.source_phone%type        default null,
  p_source_org_id        in jtf_rs_resource_extns.source_org_id%type       default null,
  p_source_org_name      in jtf_rs_resource_extns.source_org_name%type     default null,
```

```

p_source_address1      in  jtf_rs_resource_extns.source_address1%type      default null,
p_source_address2      in  jtf_rs_resource_extns.source_address2%type      default null,
p_source_address3      in  jtf_rs_resource_extns.source_address3%type      default null,
p_source_address4      in  jtf_rs_resource_extns.source_address4%type      default null,
p_source_city          in  jtf_rs_resource_extns.source_city%type          default null,
p_source_postal_code   in  jtf_rs_resource_extns.source_postal_code%type   default null,
p_source_state         in  jtf_rs_resource_extns.source_state%type         default null,
p_source_province     in  jtf_rs_resource_extns.source_province%type     default null,
p_source_county        in  jtf_rs_resource_extns.source_county%type        default null,
p_source_country       in  jtf_rs_resource_extns.source_country%type       default null,
p_source_mgr_id        in  jtf_rs_resource_extns.source_mgr_id%type        default null,
p_source_mgr_name      in  jtf_rs_resource_extns.source_mgr_name%type      default null,
p_source_business_grp_id in jtf_rs_resource_extns.source_business_grp_id%type default null,
p_source_business_grp_name in jtf_rs_resource_extns.source_business_grp_name%type default null,
p_source_first_name    in  jtf_rs_resource_extns.source_first_name%type    default null,
p_source_last_name     in  jtf_rs_resource_extns.source_last_name%type     default null,
p_source_middle_name   in  jtf_rs_resource_extns.source_middle_name%type   default null,
p_source_category      in  jtf_rs_resource_extns.source_category%type      default null,
p_source_status        in  jtf_rs_resource_extns.source_status%type        default null,
p_source_office        in  jtf_rs_resource_extns.source_office%type        default null,
p_source_location      in  jtf_rs_resource_extns.source_location%type      default null,
p_source_mailstop     in  jtf_rs_resource_extns.source_mailstop%type     default null,
p_user_name            in  varchar2
);

```

Current Version

1.0

Parameter Descriptions

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

Table 3–2 Create Resource IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.

Table 3–2 Create Resource IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_category	jtf_rs_resource_extns.category%type	Yes	Type of resource, valid types are: <ul style="list-style-type: none"> ▪ EMPLOYEE ▪ PARTNER ▪ SUPPLIER_CONTACT ▪ OTHER ▪ PARTY ▪ TBH ▪ VENUE
p_source_id	jtf_rs_resource_extns.resource_id%type	No	Resource identifier, this parameter is only used with the following categories: <ul style="list-style-type: none"> ▪ EMPLOYEE ▪ VENUE ▪ PARTY ▪ SUPPLIER_CONTACT ▪ PARTNER
p_address_id	jtf_rs_resource_extns.address_id%type	No	Resource address.
p_contact_id	jtf_rs_resource_extns.contact_id%type	No	Resource contact identifier.
p_managing_emp_id	jtf_rs_resource_extns.managing_employee_id%type	No	Identifier for the manager of the resource.
p_managing_emp_num	per_employees_current_x.employee_num%type	No	Employee number of the resource's manager.
p_start_date_active	jtf_rs_resource_extns.start_date_active%type	Yes	Date on which the resource becomes active. This value can not be NULL, and the start date must be less than the end date.
p_end_date_active	jtf_rs_resource_extns.end_date_active%type	No	Date on which the resource is no longer active. If no end date is provided, the resource is active indefinitely.

Table 3–2 Create Resource IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_time_zone	jtf_rs_resource_extns.time_zone %type	No	Time zone, this value must be a valid time zone as defined in table HZ_TIMEZONES .
p_cost_per_hr	jtf_rs_resource_extns.cost_per_hr %type	No	The salary cost per hour for this resource. This value is used in conjunction with the p_comp_currency_code parameter.
p_primary_language	jtf_rs_resource_extns.primary_language %type	No	The resource's primary language. This value must be a valid NLS language as defined in table FND_LANGUAGES .
p_secondary_language	jtf_rs_resource_extns.secondary_language %type	No	The resource's secondary language. This value must be a valid NLS language as defined in table FND_LANGUAGES .
p_support_site_id	jtf_rs_resource_extns.support_site_id %type	No	Value used by the Service applications.
p_ies_agent_login	jtf_rs_resource_extns.ies_agent_login %type	No	Value used by Interaction Center applications (if using Oracle Scripting).
p_server_group_id	jtf_rs_resource_extns.server_group_id %type	No	Value used by Interaction Center applications.
p_interaction_center_name	VARCHAR2	No	Value used by Interaction Center applications.
p_assigned_to_group_id	jtf_rs_resource_extns.assigned_to_group_id %type	No	The group to which this resource is assigned.
p_cost_center	jtf_rs_resource_extns.cost_center %type	No	The cost center to which this resource is assigned.
p_charge_to_cost_center	jtf_rs_resource_extns.charge_to_cost_center %type	No	Cost center to charge against, this may be different than the resource's current cost center.

Table 3–2 Create Resource IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_comp_currency_code	jtf_rs_resource_extns.compensation_currency_code	No	Compensation currency type, this value must be a valid currency code as listed in table FND_CURRENCIES. This value is used in conjunction with the p_cost_per_hour parameter.
p_commissionable_flag	jtf_rs_resource_extns.commissionable_flag%type	No	Boolean value: <ul style="list-style-type: none"> ■ Yes - This resource is eligible for a commission. ■ No - This resource is not eligible for a commission. The default is Yes.
p_hold_reason_code	jtf_rs_resource_extns.hold_reason_code%type	No	The reason that compensation is being withheld. This value must be one of the lookup codes for JTF_RS_HOLD_REASON_TYPE in table FND_LOOKUPS.
p_hold_payment	jtf_rs_resource_extns.hold_payment%type	No	Boolean value: <ul style="list-style-type: none"> ■ Yes - Withhold compensation. ■ No - Do not withhold compensation. The default is No.
p_comp_service_team_id	jtf_rs_resource_extns.comp_service_team_id%type	No	The identifier for the team to which this resource belongs.

Table 3–2 Create Resource IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_user_id	jtf_rs_resource_extns.user_id%type	No	Specify this value only if the following categories are used: <ul style="list-style-type: none"> ▪ EMPLOYEE ▪ PARTY ▪ 'SUPPLIER_CONTACT' If a category other than these three is specified, the API exits with an unexpected error condition. This value is validated against table FND_USERS.
p_transaction_number	jtf_rs_resource_extns.transaction_number%type	No	Transaction identifier
p_resource_name	jtf_rs_resource_extns.tl.resource_name%type	Yes	The calling application must pass the resource name. This value can not be NULL.
p_source_name	jtf_rs_resource_extns.source_name%type	Yes	The calling application must pass the resource name. This value can not be NULL. See Resource Information versus Source Information.
p_source_number	jtf_rs_resource_extns.source_number%type	No	See Resource Information versus Source Information.
p_source_job_title	jtf_rs_resource_extns.source_job_title%type	No	See Resource Information versus Source Information.
p_source_email	jtf_rs_resource_extns.source_email%type	No	See Resource Information versus Source Information.
p_source_phone	jtf_rs_resource_extns.source_phone%type	No	See Resource Information versus Source Information.
p_source_org_id	jtf_rs_resource_extns.source_org_id%type	No	See Resource Information versus Source Information.

Table 3–2 Create Resource IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_source_org_name	jtf_rs_resource_extns.source_org_name%type	No	See Resource Information versus Source Information.
p_source_address1	jtf_rs_resource_extns.source_address1%type	No	See Resource Information versus Source Information.
p_source_address2	jtf_rs_resource_extns.source_address2%type	No	See Resource Information versus Source Information.
p_source_address3	jtf_rs_resource_extns.source_address3%type	No	See Resource Information versus Source Information.
p_source_address4	jtf_rs_resource_extns.source_address4%type	No	See Resource Information versus Source Information.
p_source_city	jtf_rs_resource_extns.source_city%type	No	See Resource Information versus Source Information.
p_source_postal_code	jtf_rs_resource_extns.source_postal_code%type	No	See Resource Information versus Source Information.
p_source_state	jtf_rs_resource_extns.source_state%type	No	See Resource Information versus Source Information.
p_source_province	jtf_rs_resource_extns.source_province%type	No	See Resource Information versus Source Information.
p_source_county	jtf_rs_resource_extns.source_county%type	No	See Resource Information versus Source Information.
p_source_country	jtf_rs_resource_extns.source_country%type	No	See Resource Information versus Source Information.
p_source_mgr_id	jtf_rs_resource_extns.source_mgr_id%type	No	See Resource Information versus Source Information.
p_source_mgr_name	jtf_rs_resource_extns.source_mgr_name%type	No	See Resource Information versus Source Information.
p_source_business_grp_id	jtf_rs_resource_extns.source_business_grp_id%type	No	See Resource Information versus Source Information.
p_source_business_grp_name	jtf_rs_resource_extns.source_business_grp_name%type	No	See Resource Information versus Source Information.
p_source_first_name	jtf_rs_resource_extns.source_first_name%type	No	See Resource Information versus Source Information.
p_source_last_name	jtf_rs_resource_extns.source_last_name%type	No	See Resource Information versus Source Information.

Table 3–2 Create Resource IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_source_middle_name	jtf_rs_resource_extns.source_middle_name%type	No	See Resource Information versus Source Information.
p_source_category	jtf_rs_resource_extns.source_category%type	No	See Resource Information versus Source Information.
p_source_status	jtf_rs_resource_extns.source_status%type	No	See Resource Information versus Source Information.
p_source_office	jtf_rs_resource_extns.source_office%type	No	See Resource Information versus Source Information.
p_source_location	jtf_rs_resource_extns.source_location%type	No	See Resource Information versus Source Information.
p_source_mailstop	jtf_rs_resource_extns.source_mailstop%type	No	See Resource Information versus Source Information.
p_user_name	VARCHAR2	Yes	The identifier of the person entering values into the source.

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

Table 3–3 Create Resource OUT Parameters

Parameter	Data type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_resource_id	jtf_rs_resource_extns.resource_id %type	The automatically generated resource identifier that is created through an internal call to JTF_RS_RESOURCE_EXTNS_S.
x_resource_number	jtf_rs_resource_extns.resource_number %type	The automatically generated resource number that is created through an internal call to JTF_RS_RESOURCE_NUMBER_S.

3.2.2 Update Resource

Use this API to update resource attributes like Resource Name, Start Date, End Date, and User ID. The API first verifies that the resource already exists in the

Resources table before attempting to update it. From this API, you can update resource information in the Call Center, Compensation, and the Account Receivables tables.

Procedure Specification

PROCEDURE update_resource

```
(
  p_api_version          in    number,
  p_init_msg_list        in    varchar2                                default fnd_api.g_false,
  p_commit               in    varchar2                                default fnd_api.g_false,
  p_resource_id          in    jtf_rs_resource_extns.resource_id%type,
  p_resource_number      in    jtf_rs_resource_extns.resource_number%type,
  p_managing_emp_id      in    jtf_rs_resource_extns.managing_employee_id%type    default fnd_api.g_miss_num,
  p_start_date_active    in    jtf_rs_resource_extns.start_date_active%type        default fnd_api.g_miss_date,
  p_end_date_active      in    jtf_rs_resource_extns.end_date_active%type          default fnd_api.g_miss_date,
  p_time_zone            in    jtf_rs_resource_extns.time_zone%type                default fnd_api.g_miss_num,
  p_cost_per_hr          in    jtf_rs_resource_extns.cost_per_hr%type              default fnd_api.g_miss_num,
  p_primary_language     in    jtf_rs_resource_extns.primary_language%type         default fnd_api.g_miss_char,
  p_secondary_language   in    jtf_rs_resource_extns.secondary_language%type        default fnd_api.g_miss_char,
  p_support_site_id      in    jtf_rs_resource_extns.support_site_id%type           default fnd_api.g_miss_num,
  p_ies_agent_login      in    jtf_rs_resource_extns.ies_agent_login%type           default fnd_api.g_miss_char,
  p_server_group_id      in    jtf_rs_resource_extns.server_group_id%type           default fnd_api.g_miss_num,
  p_assigned_to_group_id in    jtf_rs_resource_extns.assigned_to_group_id%type      default fnd_api.g_miss_num,
  p_cost_center          in    jtf_rs_resource_extns.cost_center%type              default fnd_api.g_miss_char,
  p_charge_to_cost_center in    jtf_rs_resource_extns.charge_to_cost_center%type    default fnd_api.g_miss_char,
  p_comp_currency_code   in    jtf_rs_resource_extns.compensation_currency_code%type
                                default fnd_api.g_miss_char,
  p_commissionable_flag in    jtf_rs_resource_extns.commissionable_flag%type        default fnd_api.g_miss_char,
  p_hold_reason_code     in    jtf_rs_resource_extns.hold_reason_code%type          default fnd_api.g_miss_char,
  p_hold_payment         in    jtf_rs_resource_extns.hold_payment%type              default fnd_api.g_miss_char,
  p_comp_service_team_id in    jtf_rs_resource_extns.comp_service_team_id%type      default fnd_api.g_miss_num,
  p_user_id              in    jtf_rs_resource_extns.user_id%type                  default fnd_api.g_miss_num,
  p_resource_name        in    jtf_rs_resource_extns_tl.resource_name%type
  p_source_name          in    jtf_rs_resource_extns.source_name%type,
  p_source_number        in    jtf_rs_resource_extns.source_number%type            default fnd_api.g_miss_char,
  p_source_job_title     in    jtf_rs_resource_extns.source_job_title%type          default fnd_api.g_miss_char,
  p_source_email         in    jtf_rs_resource_extns.source_email%type              default fnd_api.g_miss_char,
  p_source_phone         in    jtf_rs_resource_extns.source_phone%type              default fnd_api.g_miss_char,
  p_source_org_id        in    number                                                default fnd_api.g_miss_num,
  p_source_org_name      in    jtf_rs_resource_extns.source_org_name%type           default fnd_api.g_miss_char,
  p_source_address1      in    jtf_rs_resource_extns.source_address1%type           default fnd_api.g_miss_char,
  p_source_address2      in    jtf_rs_resource_extns.source_address2%type           default fnd_api.g_miss_char,
  p_source_address3      in    jtf_rs_resource_extns.source_address3%type           default fnd_api.g_miss_char,
  p_source_address4      in    jtf_rs_resource_extns.source_address4%type           default fnd_api.g_miss_char,
  p_source_city          in    jtf_rs_resource_extns.source_city%type               default fnd_api.g_miss_char,
  p_source_postal_code   in    jtf_rs_resource_extns.source_postal_code%type        default fnd_api.g_miss_char,
  p_source_state         in    jtf_rs_resource_extns.source_state%type              default fnd_api.g_miss_char,
  p_source_province      in    jtf_rs_resource_extns.source_province%type           default fnd_api.g_miss_char,
```

```

p_source_county      in    jtf_rs_resource_extns.source_county%type      default fnd_api.g_miss_char,
p_source_country     in    jtf_rs_resource_extns.source_country%type      default fnd_api.g_miss_char,
p_source_mgr_id      in    jtf_rs_resource_extns.source_mgr_id%type    default fnd_api.g_miss_num,
p_source_mgr_name    in    jtf_rs_resource_extns.source_mgr_name%type    default fnd_api.g_miss_char,
p_source_business_grp_id in  jtf_rs_resource_extns.source_business_grp_id%type
                                                              default fnd_api.g_miss_num,
p_source_business_grp_name in jtf_rs_resource_extns.source_business_grp_name%type
                                                              default fnd_api.g_miss_char,
p_source_first_name  in    jtf_rs_resource_extns.source_first_name%type    default fnd_api.g_miss_char,
p_source_last_name   in    jtf_rs_resource_extns.source_last_name%type     default fnd_api.g_miss_char,
p_source_middle_name in    jtf_rs_resource_extns.source_middle_name%type default fnd_api.g_miss_char,
p_source_category    in    jtf_rs_resource_extns.source_category%type      default fnd_api.g_miss_char,
p_source_status      in    jtf_rs_resource_extns.source_status%type        default fnd_api.g_miss_char,
p_source_office      in    jtf_rs_resource_extns.source_office%type        default fnd_api.g_miss_char,
p_source_location    in    jtf_rs_resource_extns.source_location%type      default fnd_api.g_miss_char,
p_source_mailstop    in    jtf_rs_resource_extns.source_mailstop%type      default fnd_api.g_miss_char,
p_address_id         in    jtf_rs_resource_extns.address_id%type           default fnd_api.g_miss_char,
p_object_version_num in    out jtf_rs_resource_extns.object_version_number%type,
p_user_name          in    varchar2                                     default fnd_api.g_miss_char,
x_return_status      out   varchar2,
x_msg_count          out   number,
x_msg_data           out   varchar2
);

```

Current Version

1.0

Parameter Descriptions

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

Table 3–4 Update Resource IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.

Table 3–4 Update Resource IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_resource_id	jtf_rs_resource_extns.resource_id %type	Yes	This value is created through an internal call in the Create Resource API. The reference identifier is validated for existence in JTF_RS_RESOURCE_EXTNS.
p_resource_number		Yes	This value is created through an internal call in the Create Resource API. The reference number is validated for existence in JTF_RS_RESOURCE_EXTNS.
p_managing_emp_id	jtf_rs_resource_extns.managing_employee_id%type	No	Identifier for the manager of the resource.
p_managing_emp_num	per_employees_current_x.employee_num%type	No	Employee number of the resource's manager.
p_start_date_active	jtf_rs_resource_extns.start_date_active%type	Yes	Date on which the resource becomes active. This value can not be NULL, and the start date must be less than the end date.
p_end_date_active	jtf_rs_resource_extns.end_date_active%type	No	Date on which the resource is no longer active. If no end date is provided, the resource is active indefinitely.
p_time_zone	jtf_rs_resource_extns.time_zone %type	No	Time zone, this value must be a valid time zone as defined in table HZ_TIMEZONES .
p_cost_per_hr	jtf_rs_resource_extns.cost_per_hr %type	No	The salary cost per hour for this resource.
p_primary_language	jtf_rs_resource_extns.primary_language %type	No	The resource's primary language. This value must be a valid NLS language as defined in table FND_LANGUAGES .
p_secondary_language	jtf_rs_resource_extns.secondary_language %type	No	The resource's secondary language. This value must be a valid NLS language as defined in table FND_LANGUAGES .

Table 3–4 Update Resource IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_support_site_id	jtf_rs_resource_extns.support_site_id%type	No	Value used by Service applications.
p_ies_agent_login	jtf_rs_resource_extns.ies_agent_login%type	No	Value used by Interaction Center applications (if using Oracle Scripting).
p_server_group_id	jtf_rs_resource_extns.server_group_id%type	No	Value used by Interaction Center applications.
p_assigned_to_group_id	jtf_rs_resource_extns.assigned_to_group_id%type	No	The group to which this resource is assigned.
p_cost_center	jtf_rs_resource_extns.cost_center%type	No	The cost center to which this resource is assigned.
p_charge_to_cost_center	jtf_rs_resource_extns.charge_to_cost_center%type	No	Cost center to charge against, this may be different than the resources current cost center.
p_comp_currency_code	jtf_rs_resource_extns.compensation_currency_code	No	Compensation currency type, this value must be a valid currency code as listed in view FND_CURRENCIES_ACTIVE_MONET_V (from table FND_CURRENCIES) .
p_commissionable_flag	jtf_rs_resource_extns.commissionable_flag%type	No	Boolean value: <ul style="list-style-type: none"> ▪ Yes - This resource is eligible for a commission. ▪ No - This resource is not eligible for a commission. The default is Yes.
p_hold_reason_code	jtf_rs_resource_extns.hold_reason_code%type	No	The reason that compensation is being withheld. This value must be one of the lookup codes for JTF_RS_HOLD_REASON_TYPE in table FND_LOOKUPS.

Table 3–4 Update Resource IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_hold_payment	jtf_rs_resource_extns.hold_payment%type	No	Boolean value: <ul style="list-style-type: none"> ▪ Yes - Withhold compensation. ▪ No - Do not withhold compensation. The default is No.
p_comp_service_team_id	jtf_rs_resource_extns.comp_service_team_id%type	No	The identifier for the team to which this resource belongs.
p_user_id	jtf_rs_resource_extns.user_id%type	No	Specify this value only if the following categories are used: <ul style="list-style-type: none"> ▪ EMPLOYEE ▪ PARTY ▪ 'SUPPLIER_CONTACT' If a category other than these three is specified, the API exits with an unexpected error condition. <p>This value is validated against table FND_USERS.</p>
p_resource_name	jtf_rs_resource_extns.tl.resource_name%type	No	The calling application must pass the resource name. This value can not be NULL.
p_source_name	jtf_rs_resource_extns.source_name%type	Yes	The calling application must pass the resource name. This value can not be NULL. <p>See Resource Information versus Source Information.</p>
p_source_number	jtf_rs_resource_extns.source_number%type	No	See Resource Information versus Source Information.
p_source_job_title	jtf_rs_resource_extns.source_job_title%type	No	See Resource Information versus Source Information.
p_source_email	jtf_rs_resource_extns.source_email%type	No	See Resource Information versus Source Information.

Table 3–4 Update Resource IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_source_phone	jtf_rs_resource_extns.source_phone%type	No	See Resource Information versus Source Information.
p_source_org_id	jtf_rs_resource_extns.source_org_id%type	No	See Resource Information versus Source Information.
p_source_org_name	jtf_rs_resource_extns.source_org_name%type	No	See Resource Information versus Source Information.
p_source_address1	jtf_rs_resource_extns.source_address1%type	No	See Resource Information versus Source Information.
p_source_address2	jtf_rs_resource_extns.source_address2%type	No	See Resource Information versus Source Information.
p_source_address3	jtf_rs_resource_extns.source_address3%type	No	See Resource Information versus Source Information.
p_source_address4	jtf_rs_resource_extns.source_address4%type	No	See Resource Information versus Source Information.
p_source_city	jtf_rs_resource_extns.source_city%type	No	See Resource Information versus Source Information.
p_source_postal_code	jtf_rs_resource_extns.source_postal_code%type	No	See Resource Information versus Source Information.
p_source_state	jtf_rs_resource_extns.source_state%type	No	See Resource Information versus Source Information.
p_source_province	jtf_rs_resource_extns.source_province%type	No	See Resource Information versus Source Information.
p_source_county	jtf_rs_resource_extns.source_county%type	No	See Resource Information versus Source Information.
p_source_country	jtf_rs_resource_extns.source_country%type	No	See Resource Information versus Source Information.
p_source_mgr_id	jtf_rs_resource_extns.source_mgr_id%type	No	See Resource Information versus Source Information.
p_source_mgr_name	jtf_rs_resource_extns.source_mgr_name%type	No	See Resource Information versus Source Information.
p_source_business_grp_id	jtf_rs_resource_extns.source_business_grp_id%type	No	See Resource Information versus Source Information.
p_source_business_grp_name	jtf_rs_resource_extns.source_business_grp_name%type	No	See Resource Information versus Source Information.

Table 3–4 Update Resource IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_source_first_name	jtf_rs_resource_extns.source_first_name%type	No	See Resource Information versus Source Information.
p_source_last_name	jtf_rs_resource_extns.source_last_name%type	No	See Resource Information versus Source Information.
p_source_middle_name	jtf_rs_resource_extns.source_middle_name%type	No	See Resource Information versus Source Information.
p_source_category	jtf_rs_resource_extns.source_category%type	No	See Resource Information versus Source Information.
p_source_status	jtf_rs_resource_extns.source_status%type	No	See Resource Information versus Source Information.
p_source_office	jtf_rs_resource_extns.source_office%type	No	See Resource Information versus Source Information.
p_source_location	jtf_rs_resource_extns.source_location%type	No	See Resource Information versus Source Information.
p_source_mailstop	jtf_rs_resource_extns.source_mailstop%type	No	See Resource Information versus Source Information.
p_address_id	jtf_rs_resource_extns.address_id%type	No	See Resource Information versus Source Information.
p_object_version_num	jtf_rs_resource_extns.object_version_number%type,	Yes	This parameter is for internal use only. Do not modify or alter in any way.
p_user_name	VARCHAR2	Yes	The name of the person entering values into the source.

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

Table 3–5 Update Resource OUT Parameters

Parameter	Data Type	Descriptions
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

3.3 Package JTF_RS_GROUPS_PUB

This package contains the following procedures:

- Create Resource Group
- Update Resource Group

3.3.1 Create Resource Group

Use this API to create a Resource Group. It also generates the *group_id* number and calls *create_group_members*.

Note: The table *group_memb_tbl* is of type *jtf_rs_group_members%row-type*.

Procedure Specification

```
PROCEDURE create_resource_group
(
  p_api_version      in  number,
  p_init_msg_list    in  varchar2  default fnd_api.g_false,
  p_commit           in  varchar2  default fnd_api.g_false,
  p_group_name       in  jtf_rs_groups_vl.group_name%type,
  p_group_desc       in  jtf_rs_groups_vl.group_desc%type      default null,
  p_exclusive_flag   in  jtf_rs_groups_vl.exclusive_flag%type  default 'n',
  p_email_address    in  jtf_rs_groups_vl.email_address%type   default null,
  p_start_date_active in jtf_rs_groups_vl.start_date_active%type,
  p_end_date_active  in  jtf_rs_groups_vl.end_date_active%type  default null,
  p_accounting_code  in  jtf_rs_groups_vl.accounting_code%type  default null,
  x_return_status    out  varchar2,
  x_msg_count        out  number,
  x_msg_data         out  varchar2,
  x_group_id         out  jtf_rs_groups_vl.group_id%type,
  x_group_number     out  jtf_rs_groups_vl.group_number%type
);
```

Current Version

1.0

Parameter Descriptions

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

Table 3–6 Create Resource Group IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_group_name	jtf_rs_groups_vl.group_name%type	Yes	The name of the resource group.
p_group_desc	jtf_rs_groups_vl.group_desc%type	No	A description of the resource group.
p_exclusive_flag	jtf_rs_groups_vl.exclusive_flag%type	No	<p>Boolean value:</p> <ul style="list-style-type: none"> ■ Yes - Assign resources only to this group with a particular member role and group usage that is not assigned to any other exclusive group with the same role and usage in the same time frame. ■ No - Disable this feature. <p>If p_exclusive_flag is set to yes, then you can assign resources only to this group with a particular member role and group usage that is not assigned to any other exclusive group with the same role and usage in the same time frame.</p> <p>Because you specify the resource in this group exclusively, the same resource with the same member roles cannot be assigned to another group during the overlapping time frame.</p>

Table 3–6 Create Resource Group IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_email_address	jtf_rs_groups_vl.email_address%type	No	The email address of the group owner.
p_start_date_active	jtf_rs_groups_vl.start_date_active%type	Yes	Date on which the resource group becomes active. This value can not be NULL, and the start date must be less than the end date.
p_end_date_active	jtf_rs_groups_vl.end_date_active%type	No	Date on which the resource group is no longer active. If no end date is provided, the group is active indefinitely.
p_accounting_code	jtf_rs_groups_vl.accounting_code%type	No	Account code, for internal use only.

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

Table 3–7 Create Resource OUT Parameters

Parameter	Data Type	Descriptions
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_group_id	jtf_rs_groups_vl.group_id%type,	The automatically generated group identifier that is created through an internal call to JTF_RS_GROUPS_S.
x_group_number	jtf_rs_groups_vl.group_number%type	The automatically generated group number that is created through an internal call to JTF_RS_GROUP_NUMBER_S.

3.3.2 Update Resource Group

Use this API to update resource group attributes like Group Name, Group Description, Start and End Date effectivity.

Procedure Specification

```
PROCEDURE update_resource_group
(
```

```

p_api_version      in number,
p_init_msg_list    in varchar2                default fnd_api.g_false,
p_commit           in varchar2                default fnd_api.g_false,
p_group_id         in jtf_rs_groups_vl.group_id%type,
p_group_number     in jtf_rs_groups_vl.group_number%type,
p_group_name       in jtf_rs_groups_vl.group_name%type default fnd_api.g_miss_char,
p_group_desc       in jtf_rs_groups_vl.group_desc%type default fnd_api.g_miss_char,
p_exclusive_flag   in jtf_rs_groups_vl.exclusive_flag%type default fnd_api.g_miss_char,
p_email_address    in jtf_rs_groups_vl.email_address%type default fnd_api.g_miss_char,
p_start_date_active in jtf_rs_groups_vl.start_date_active%type default fnd_api.g_miss_date,
p_end_date_active  in jtf_rs_groups_vl.end_date_active%type default fnd_api.g_miss_date,
p_accounting_code  in jtf_rs_groups_vl.accounting_code%type default fnd_api.g_miss_char,
p_object_version_num in out jtf_rs_groups_vl.object_version_number%type,
x_return_status    out varchar2,
x_msg_count        out number,
x_msg_data         out varchar2
);

```

Current Version

1.0

Parameter Descriptions

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

Table 3–8 Update Resource Group IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_group_id	jtf_rs_groups_vl.group_id%type	Yes	The value is created through an internal call in the Create Resource API. This parameter is validated for existence in table JTF_RS_GROUPS_B.
p_group_number	jtf_rs_groups.group_id%type	No	The value is created through an internal call in the Create Resource API.

Table 3–8 Update Resource Group IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_group_name	jtf_rs_groups_vl. group_name%type	Yes	The name of the resource group.
p_group_desc	jtf_rs_groups_vl. group_desc%type	No	A description of the resource group.
p_exclusive_flag	jtf_rs_groups_vl. exclusive_flag%type	No	<p>Boolean value:</p> <ul style="list-style-type: none"> ■ Yes - Assign resources only to this group with a particular member role and group usage that is not assigned to any other exclusive group with the same role and usage in the same time frame. ■ No - Disable this feature. <p>If p_exclusive_flag is set to yes, then you can assign resources only to this group with a particular member role and group usage that is not assigned to any other exclusive group with the same role and usage in the same time frame.</p> <p>Because you specify the resource in this group exclusively, the same resource with the same member roles cannot be assigned to another group during the overlapping time frame.</p> <p>The default is No.</p>
p_email_address	jtf_rs_groups_vl. email_address%type	No	The email address of the group owner.
p_start_date_active	jtf_rs_groups_vl. start_date_active%type	Yes	Date on which the resource group becomes active. This value can not be NULL, and the start date must be less than the end date.

Table 3–8 Update Resource Group IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_end_date_active	jtf_rs_groups_vl.end_date_active%type	No	Date on which the resource group is no longer active. If no end date is provided, the resource is active indefinitely.
p_accounting_code	jtf_rs_groups_vl.accounting_code%type	No	Account Code, for internal use only.
p_object_version_num	jtf_rs_groups_vl.object_version_number%type	Yes	This parameter is for internal use only. Do not modify or alter in any way.

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

Table 3–9 Update Resource Group OUT Parameters

Parameter	Data Type	Descriptions
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

3.4 Package JTF_RS_SALESREPS_PUB

This package contains the following procedures:

- Create SalesRep
- Update SalesRep

3.4.1 Create SalesRep

Use this API to create a resource of type SalesRep that can be used by resources created using the Create Resource API.

Procedure Specification

```
PROCEDURE create_salesrep
(
  p_api_version          in    number,
  p_init_msg_list       in    varchar2  default fnd_api.g_false,
  p_commit              in    varchar2  default fnd_api.g_false,
```

```

p_resource_id          in  jtf_rs_salesreps.resource_id%type,
p_sales_credit_type_id in  jtf_rs_salesreps.sales_credit_type_id%type,
p_name                 in  jtf_rs_salesreps.name%type                default null,
p_status               in  jtf_rs_salesreps.status%type             default null,
p_start_date_active   in  jtf_rs_salesreps.start_date_active%type    default null,
p_end_date_active      in  jtf_rs_salesreps.end_date_active%type     default sysdate,
p_gl_id_rev            in  jtf_rs_salesreps.gl_id_rev%type           default null,
p_gl_id_freight        in  jtf_rs_salesreps.gl_id_freight%type       default null,
p_gl_id_rec            in  jtf_rs_salesreps.gl_id_rec%type           default null,
p_set_of_books_id     in  jtf_rs_salesreps.set_of_books_id%type      default null,
p_salesrep_number      in  jtf_rs_salesreps.salesrep_number%type     default null,
p_email_address        in  jtf_rs_salesreps.email_address%type       default null,
p_wh_update_date       in  jtf_rs_salesreps.wh_update_date%type     default null,
p_sales_tax_geocode    in  jtf_rs_salesreps.sales_tax_geocode%type    default null,
p_sales_tax_inside_city_limits in jtf_rs_salesreps.sales_tax_inside_city_limits%type
                                                                default null,

x_return_status        out  varchar2,
x_msg_count            out  number,
x_msg_data             out  varchar2,
x_salesrep_id          out  jtf_rs_salesreps.salesrep_id%type
);

```

Current Version

1.0

Parameter Descriptions

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

Table 3–10 Create SalesRep IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.

Table 3–10 Create SalesRep IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_resource_id	jtf_rs_salesreps.resource_id%type	Yes	This value is created through an internal call in the Create Resource API. The reference identifier is validated for existence in JTF_RS_RESOURCE_EXTNS.
p_sales_credit_type_id	jtf_rs_salesreps.sales_credit_type_id%type	Yes	This value is validated against table OE_SALES_CREDIT_TYPES.
p_name	jtf_rs_salesreps.name%type	No	The sales person's name.
p_status	jtf_rs_salesreps.status%type	No	The status of this salesperson. For example, this could be set to Active.
p_start_date_active	jtf_rs_salesreps.start_date_active%type	No	Date on which the salesperson becomes active. This value can not be NULL, and the start date must be less than the end date.
p_end_date_active	jtf_rs_salesreps.end_date_active%type	No	The effective end date for the salespersons. If no end date is provided, the salesperson is active indefinitely.
p_gl_id_rev	jtf_rs_salesreps.gl_id_rev%type	No	Accounting flexfield used for Revenue accounts. This value is used by Oracle Accounts Receivables only to determine the revenue accounts for invoices assigned to this salesperson.
p_gl_id_freight	jtf_rs_salesreps.gl_id_frieght%type	No	Accounting flexfield used for Freight accounts. This value is used by Oracle Accounts Receivables only to determine the freight accounts for invoices assigned to this salesperson.

Table 3–10 Create SalesRep IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_gl_id_rec	jtf_rs_salesreps.gl_id_rec%type	No	Accounting flexfield used for Receivables accounts. This value is used by Oracle Accounts Receivables only to determine the receivable accounts for invoices assigned to this salesperson.
p_set_of_books_id	jtf_rs_salesreps.set_of_books_id%type	No	Set of books identifier, used by Oracle Accounts Receivables.
p_salesrep_number	jtf_rs_salesreps.salesrep_number%type	No	Salesperson number, typically an alphanumeric designation that can be the same value as p_resource_id.
p_email_address	jtf_rs_salesreps.email_address%type	No	Email address of the salesperson.
p_wh_update_date	jtf_rs_salesreps.wh_update_date%type	No	This date is sent to the data warehouse. This parameter is used for backwards compatibility with Oracle Accounts Receivables and is written to table RA_SALESREPS_ALL.
p_sales_tax_geocode	jtf_rs_salesreps.sales_tax_geocode%type	No	Sales tax code, it associates the salesperson with a unique tax jurisdiction. Use only if a sales tax vendor is also installed.
p_sales_tax_inside_city_limits	jtf_rs_salesreps.sales_tax_inside_city_limits%type	No	Indicates that the tax jurisdiction for this address is within city limits. Use only if a value for p_sales_tax_geocode is supplied.

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

Table 3–11 Create SalesRep OUT Parameters

Parameter	Data Type	Descriptions
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_salesrep_id	jtf_rs_salesrep.salesrep_id%type	The automatically generated salesperson identifier that is created through an internal call to JTF_RS_SALESREPS_S.

3.4.2 Update SalesRep

Use this API to update SalesRep attributes like SaleRep Number, Sales Credit Type, Start and End Date effectively.

Procedure Specification

PROCEDURE update_salesrep

```
(
  p_api_version          in    number,
  p_init_msg_list        in    varchar2                                default fnd_api.g_false,
  p_commit               in    varchar2                                default fnd_api.g_false,
  p_salesrep_id          in    jtf_rs_salesreps.salesrep_id%type,
  p_sales_credit_type_id in    jtf_rs_salesreps.sales_credit_type_id%type,
  p_name                 in    jtf_rs_salesreps.name%type              default null,
  p_status               in    jtf_rs_salesreps.status%type           default null,
  p_start_date_active    in    jtf_rs_salesreps.start_date_active%type default null,
  p_end_date_active      in    jtf_rs_salesreps.end_date_active%type   default sysdate,
  p_gl_id_rev            in    jtf_rs_salesreps.gl_id_rev%type         default null,
  p_gl_id_freight        in    jtf_rs_salesreps.gl_id_freight%type     default null,
  p_gl_id_rec            in    jtf_rs_salesreps.gl_id_rec%type         default null,
  p_set_of_books_id      in    jtf_rs_salesreps.set_of_books_id%type   default null,
  p_salesrep_number      in    jtf_rs_salesreps.salesrep_number%type   default null,
  p_email_address        in    jtf_rs_salesreps.email_address%type    default null,
  p_wh_update_date       in    jtf_rs_salesreps.wh_update_date%type    default null,
  p_sales_tax_geocode    in    jtf_rs_salesreps.sales_tax_geocode%type default null,
  p_sales_tax_inside_city_limits in jtf_rs_salesreps.sale s_tax_inside_city_limits%type
                                     default null,
  p_org_id               in    jtf_rs_salesreps.org_id%type           default null,
```

```

p_object_version_number in out jtf_rs_salesreps.object_version_number%type default null,
x_return_status          out  varchar2,
x_msg_count              out  number,
x_msg_data               out  varchar2,
);

```

Current Version

1.0

Parameter Descriptions

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

Table 3–12 Update SalesRep IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_salesrep_id	jtf_rs_salesreps.salesrep_id%type	Yes	This value is created through an internal call in the Create SalesRep API. If a valid value is not supplied, the API exits with an unexpected error condition.
p_sales_credit_type_id	jtf_rs_salesreps.sales_credit_type_id%type	Yes	This value is validated against table OE_SALES_CREDIT_TYPES.
p_name	jtf_rs_salesreps.name%type	No	The sales person's name.
p_status	jtf_rs_salesreps.status%type	No	The status of this salesperson. For example, this could be set to Active.
p_start_date_active	jtf_rs_slasreps.start_date_active%type	No	Date on which the salesperson becomes active. This value can not be NULL, and the start date must be less than the end date.

Table 3–12 Update SalesRep IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_end_date_active	jtf_rs_salesreps.end_date_active%type	No	The effective end date for the salesperson. If no end date is provided, the salesperson is active indefinitely.
p_gl_id_rev	jtf_rs_salesreps.gl_id_freight%type	No	Accounting flexfield used for Revenue accounts. This value is used by Oracle Accounts Receivables only to determine the revenue accounts for invoices assigned to this salesperson.
p_gl_id_freight	jtf_rs_salesreps.gl_id_freight%type	No	Accounting flexfield used for Freight accounts. This value is used by Oracle Accounts Receivables only to determine the freight accounts for invoices assigned to this salesperson.
p_gl_id_rec	jtf_rs_salesreps.gl_id_rec%type	No	Accounting flexfield used for Receivables accounts. This value is used by Oracle Accounts Receivables only to determine the receivable accounts for invoices assigned to this salesperson.
p_set_of_books_id	jtf_rs_salesreps.set_of_books_id%type	No	Parameter used by Oracle Accounts Receivables.
p_salesrep_number	jtf_rs_salesreps.salesrep_number%type	No	Salesperson number, typically an alphanumeric designation that can be the same value as p_resource_id.
p_email_address	jtf_rs_salesreps.email_address%type	No	Email address of the salesperson.

Table 3–12 Update SalesRep IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_wh_update_date	jtf_rs_salesreps.wh_update_date%type	No	This date is sent to the data warehouse. This parameter is used for backwards compatibility with Oracle Accounts Receivables and is written to table RS_SALESREPS_ALL.
p_sales_tax_geocode	jtf_rs_salesreps.sales_tax_geocode%type	No	Sales tax code, it associates the salesperson with a unique tax jurisdiction. Use only if a sales tax vendor is also installed.
p_sales_tax_inside_city_limits	jtf_rs_salesreps.sales_tax_inside_city_limits%type	No	Indicates that the tax jurisdiction for this address is within city limits. Use only if a value for p_sales_tax_geocode is supplied.
p_org_id	jtf_rs_salesreps.org_id%type	No	Organization Identifier
p_object_version_number	jtf_rs_salesreps.object_version_number%type	No	This parameter is for internal use only. Do not modify or alter in any way.

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

Table 3–13 Update SalesRep OUT Parameters

Parameter	Data Type	Descriptions and Validations
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

3.5 Messages and Notifications

There are three public Resource Manager packages:

- JTF_RS_RESOURCE_PUB
- JTF_RS_GROUP_PUB

- JTF_RS_SALESREPS_PUB

The messages and notifications generated by APIs contained in each public package are described in the following sections.

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

3.5.1 JTF_RS_RESOURCE_PUB

The following APIs contained in package JTF_RS_RESOURCE_PUB generate messages and notifications as needed:

- Update Resource
- Create Resource

3.5.1.1 Create Resource

The following table lists the messages and notifications that the Create Resource API can generate.

Table 3–14 Create Resource Messages

Number	Type	Name	Text
210224	U	JTF_RS_SOURCE_ID_NULL	Source Identifier should not be NULL.
210229	U	JTF_RS_EMP_IDS_NOT_NULL	For Resource Category EMPLOYEE address_id and contact_id should be NULL.
210230	U	JTF_RS_ERR_ASSIGN_TO_GRP_ID	Assigned To Group ID, p_assigned_to_group_id is not Valid.
210231	U	JTF_RS_INVALID_FLAG_VALUE	Flag value should either be "Y" or "N."
210328	U	JTF_RS_USERID_ERROR	For the specified Category, User ID should be NULL.
210378	E	JTF_RS_ROLE_NOTFOUND	The Workflow role is not present for the resource.
210379	E	JTF_RS_MORE_WF_ROLES	There are more than one workflow roles mapped for the resource.
210380	E	JTF_RS_RESOURCE_GET_ROLE_ERR	Error in function GET_WF_ROLE.

Table 3–14 Create Resource Messages

Number	Type	Name	Text
210383	U	JTF_RS_ERR_PARTNER_ADDRESS_ID	Partner address identifier p_address_id is not valid.
210207	U	JTF_RS_RESOURCE_NULL	Resource identifier and Resource Number are NULL.
210219	U	JTF_RS_START_DATE_NULL	Start Date Active cannot be NULL.
210220	U	JTF_RS_OTHER_IDS_NOT_NULL	For Resource Category OTHER/TBH the Source identifier, Address identifier, Contact identifier, and Managing Emp identifier should be NULL.
210221	U	JTF_RS_PARTNER_IDS_NULL	For Resource Category PARTNER the Source_id should not be NULL.
210222	U	JTF_RS_INVALID_PARTNER_IDS	Partner does not exist for the passed Source_id.
210223	U	JTF_RS_ERR_PARTNER_CONTACT_ID	Partner contact id p_contact_id is not valid.
210225	U	JTF_RS_INVALID_SOURCE_ID	Source identifier p_source_id is not valid.
210226	U	JTF_RS_INVALID_PARTY_ADDRESS	Party Address identifier <Address_id> is Not Valid.
210227	U	JTF_RS_ERR_PARTY_CONTACT_ID	Party Contact identifier <Contact_id> is Not Valid.
210228	U	JTF_RS_SC_IDS_NOT_NULL	For Resource Category SUPPLIER_CONTACT Address_id and Contact_id should be NULL.
210374	U	JTF_RS_ERR_DUPLICATE_USER_ID	The user identifier <User_id> already exist.

3.5.1.2 Update Resource

The following table lists the messages and notifications that the Update Resource API can generate.

Table 3–15 Update Resource Messages

Number	Type	Name	Text
210204	U	JTF_RS_INVALID_RESOURCE	Resource identifier <Resource_id> is not valid or is inactive.
210208	U	JTF_RS_INVALID_RESOURCE_NUMBER	Resource Number <Resource_number> is not valid or the resource is inactive.
210231	U	JTF_RS_INVALID_FLAG_VALUE	Flag value should either be "Y" or "N."

Table 3–15 Update Resource Messages

Number	Type	Name	Text
210381	U	JTF_RS_NOT_TBH	Delete is applicable for category TBH only.
210207	U	JTF_RS_RESOURCE_NULL	Resource identifier and Resource Number are NULL.
210219	U	JTF_RS_START_DATE_NULL	Start Date Active cannot be NULL.
210230	U	JTF_RS_ERR_ASSIGN_TO_GRP_ID	Assigned To Group identifier <Assigned_to_group_id> is not valid.
210328	U	JTF_RS_USERID_ERROR	For the specified Category, User identifier should be NULL.
210374	U	JTF_RS_ERR_DUPLICATE_USER_ID	The user identifier <User_id> already exist.

3.5.2 JTF_RS_GROUP_PUB

The following APIs contained in package JTF_RS_PUB generate messages and notifications as needed:

- Create Resource Group
- Update Resource Group

3.5.2.1 Create Resource Group

The following table lists the messages and notifications that the Create Resource Group API can generate.

Table 3–16 Create Resource Group Messages

Number	Type	Name	Text
210201	U	JTF_RS_GROUP_NAME_NULL	Group Name cannot be NULL.
210219	U	JTF_RS_START_DATE_NULL	Start Date Active cannot be NULL.

3.5.2.2 Update Resource Group

The following table lists the messages and notifications that the Update Resource Group API can generate.

Table 3–17 Update Resource Group Messages

Number	Type	Name	Text
210201	U	JTF_RS_GROUP_NAME_NULL	Group Name cannot be NULL.
210219	U	JTF_RS_START_DATE_NULL	Start Date Active cannot be NULL.

3.5.3 JTF_RS_SALESREPS_PUB

The following APIs contained in package JTF_IH_PUB generate messages and notifications as needed:

- Create SalesRep
- Update SalesRep

3.5.3.1 Create SalesRep

The following table lists the messages and notifications that the Create Resource API can generate.

Table 3–18 Create SalesRep Messages

Number	Type	Name	Text
210204	E	JTF_RS_INVALID_RESOURCE	Resource identifier <Resource_id> is not valid or is inactive.
210207	U	JTF_RS_RESOURCE_NULL	Resource identifier and Resource Number are NULL.
210208	E	JTF_RS_INVALID_RESOURCE_NUMBER	Resource Number <Resource_number> is not valid or the resource is inactive.
210285	E	JTF_RS_ERR_SALES_CREDIT_TYPE	Sales Credit Type identifier <Sales_credit_type_id> is invalid.
210286	E	JTF_RS_SALES_CREDIT_TYPE_NULL	Sales Credit Type identifier cannot be NULL.

3.5.3.2 Update SalesRep

The following table lists the messages and notifications that the Update SalesRep API can generate.

Table 3–19 Update SalesRep Messages

Number	Type	Name	Text
210315	E	JTF_RS_SALESREP_ID_NULL	Salesperson identifier cannot be NULL.
210316	E	JTF_RS_INVALID_SALESREP_ID	Salesperson identifier <Salesrep_id> is invalid.
210285	E	JTF_RS_ERR_SALES_CREDIT_TYPE	Sales Credit Type identifier <Sales_credit_type_id> is invalid.
210286	E	JTF_RS_SALES_CREDIT_TYPE_NULL	Sales Credit Type identifier cannot be NULL.

Task Manager Public APIs

Task Manager is a core component module of Oracle CRM products. All products use Tasks to provide task management capabilities.

Task Manager can be accessed several ways. Typically, users access Task Manager directly to create personal tasks or view tasks assigned to them. Task Manager can also be called from other modules to provide integrated solutions. Task Manager can be invoked in different states according to the parameters passed to it. For example, when a task needs to be created to resolve a Service Request, the Service Request number, customer, contact, and other related information will be passed from the Service Request to the Task Manager and the corresponding fields in Task Manager will be automatically populated with those values.

Other modules use Task Manager public APIs to insert, update, delete, and query task records programmatically. They are implemented in the `JTF_TASKS_PUB`, `JTF_TASK_REFERENCES_PUB`, and `JTF_TASK_ASSIGNMENT_PUB` database packages.

4.1 Task Manager Public Packages

All public procedures (APIs) relating to creating, updating, or deleting tasks, task references, or task assignments are stored in the following public packages:

- `JTF_TASKS_PUB`, see Table 4-1, "Tasks APIs".
- `JTF_TASK_ASSIGNMENT_PUB`, see Table 4-2, "Tasks Assignment APIs".
- `JTF_TASK_REFERENCES_PUB`, see Table 4-3, "Tasks Reference APIs".

The following three tables describe public APIs, which are discussed in this chapter.

Table 4–1 Tasks APIs

Name	Description
Create Task	This procedure creates a task with the given specifications. It also creates the dependencies, resource requirements, assignments, references, dates, recurrences, and contacts.
Update Task	This procedure updates a task with the given specifications.
Delete Task	This procedure soft deletes a task with the given specifications.

Table 4–2 Tasks Assignment APIs

Name	Description
Create Task Assignment	This procedure creates a task assignment for a given task with the following specifications. For each resource assigned to the task, the actual effort can be specified.
Update Task Assignment	This procedure updates a task assignment for a given task. For each resource assigned to the task, the actual effort can be specified.
Delete Task Assignment	This procedure deletes a task assignment for a given task.

Table 4–3 Tasks Reference APIs

Name	Description
Create Reference	This API establishes references to a task. For example, a task created for a service request can establish reference to an inventory part number using references.
Update Reference	This API is used to update references to a task.
Delete Reference	This API is used to delete references to a task.

Note:

The following are referenced throughout the table's "Validations and Descriptions" column in all of the Task APIs.

1. The Task APIs support calls by values (as against internal IDs). For example, the Account Number can be passed to the API instead of the Account ID. However, the APIs will have a better performance by using IDs.
2. The customer account should belong to the same customer which is specified for the task.
3. The address (*party_site_id* and *party_site_number*) specified for the task, should be the address registered for the customer in the TCA schema. The address can only be specified if the customer for the task is specified. In addition, the customer address specified for the task must be specified for the same customer at the task level.
4. To specify the unit of measure (UOM) for the effort and duration fields, the profile *jtf_time_uom_class* must be populated with the unit of measure class. For example, the customer can create a unit of measure class called TIME. The profile must be populated with this value. Further, the customer should create unit of measure codes such as minutes, hours, and days for the Time class. While specifying values to the APIs, the customer can pass values for these unit of measure codes.
5. Child and Parent tasks must have the same source. For example, the child task cannot have the source as Lead and the Parent task cannot have the source as Service Request.
6. Each task must have an owner associated with it. The owner for a task can be populated with the following two fields:
 - * *Owner_type_code* (for example *rs_employee*)
 - * *Owner_id* (for example *resource_id* of the employee)

The *owner_type_code* is a Foreign Key to *jtf_objects_vl* for objects with a usage of "Resources." The object definition in *jtf_objects* contains all the relevant information to create a PL/SQL statement. Using this PL/SQL statement, the *owner_id* is validated.

For example, for *rs_employee*, the SELECT statement that is created at run time is:

```
SELECT resource_id, full_name from JTF_RS_EMP_DTLS_VL
```

Owner IDs passed to this API are validated against resources in the system.

7. Every task is associated with a source. Some examples of sources are: Service Requests, Leads, Opportunity, Campaigns, Defects, and Contracts. The source of a task drives most of the business rules for the task.

For example, Service Request #100 is the source for Task #101, Task #105, and Task #107. Therefore, the parent entity, Service Request #100, can create multiple tasks with the same source.

To create a source, the entity must be defined in JTF_OBJECTS. This can be accomplished by logging into **CRM Administrator Responsibility > Task and Escalation Manager > Setups > Objects Meta > Data**.

Continuing with the previous example, you will have the values of the parameters to create a task with a source of Service Request # 100.

```
p_source_object_type_code = SR
```

```
p_source_object_id = 100
```

```
p_source_object_name = A101
```

Source_object_type_code is a Foreign Key to the JTF_OBJECTS with a usage of Task.

The *source_object_id* is the internal identifier which represents the instance of the source, in this case, service request identifier. This is generally the Primary Key of the "Source table," in this case, service request table.

The *p_source_object_name* is the external identifier which represents the instance of the source, in this case, service request number. The source object name is displayed on the user interface.

The same concept is used to established references to a task.

8. While updating or deleting any of the three public packages: tasks, task assignments, or task references, the *object_version_number* must be passed to the APIs. If the *object_version_number* that is passed into the API is the same as in the tables (tasks, assignments, and references), then the attempt is made to update or delete the record. Otherwise, an error is returned. You

should get the *object_version_number* when selecting the record, then pass it to the update and delete APIs.

4.2 Package JTF_TASKS_PUB

The Task APIs consist of the following three procedures:

- Create Task
- Update Task
- Delete Task

4.2.1 Create Task

This procedure creates a task with the given specifications. Also, it creates the dependencies, resource requirements, assignments, references, dates, recurrences, and contacts for the task created.

Procedure Specification

```
PROCEDURE create_task
(
  p_api_version           in number,
  p_init_msg_list         in varchar2 default fnd_api.g_false,
  p_commit                in varchar2 default fnd_api.g_false,
  p_task_id               in number   default null,
  p_task_name             in varchar2,
  P_task_type_name        in varchar2           default null,
  p_task_type_id          in number           default null,
  p_description            in varchar2         default null,
  p_task_status_name      in varchar2         default null,
  p_task_status_id        in number           default null,
  p_task_priority_name    in archar2          default null
  p_task_priority_id      in number           default null,
  p_owner_type_name       in varchar2         default null,
  p_owner_type_code       in varchar2         default null,
  p_owner_id              in number           default null,
  p_owner_territory_id    in number           default null,
  p_assigned_by_name      in varchar2         default null,
  p_assigned_by_id        in number           default null,
  p_customer_number       in varchar2         default null,
  p_customer_id           in number           default null,
  p_cust_account_number   in varchar2         default null,
  p_cust_account_id       in number           default null,
```

p_address_id	in	number	default null,
p_address_number	in	varchar2	default null,
p_planned_start_date	in	date	default null,
p_planned_end_date	in	date	default null,
p_scheduled_start_date	in	date	default null,
p_scheduled_end_date	in	date	default null,
p_actual_start_date	in	date	default null,
p_actual_end_date	in	date	default null,
p_timezone_id	in	number	default null,
p_timezone_name	in	varchar2	default null
p_source_object_type_code	in	varchar2	default null,
p_source_object_id	in	number	default null,
p_source_object_name	in	varchar2	default null,
p_duration	in	number	default null,
p_duration_uom	in	varchar2	default null,
p_planned_effort	in	number	default null,
p_planned_effort_uom	in	varchar2	default null,
p_actual_effort	in	number	default null,
p_actual_effort_uom	in	varchar2	default null,
p_percentage_complete	in	number	default null,
p_reason_code	in	varchar2	default null,
p_private_flag	in	varchar2	default null,
p_publish_flag	in	varchar2	default null,
p_restrict_closure_flag	in	varchar2	default null,
p_multi_booked_flag	in	varchar2	default null,
p_milestone_flag	in	varchar2	default null,
p_holiday_flag	in	varchar2	default null,
p_billable_flag	in	varchar2	default null,
p_bound_mode_code	in	varchar2	default null,
p_soft_bound_flag	in	varchar2	default null,
p_workflow_process_id	in	number	default null,
p_notification_flag	in	varchar2	default null,
p_notification_period	in	number	default null,
p_notification_period_uom	in	varchar2	default null,
p_parent_task_number	in	varchar2	default null,
p_parent_task_id	in	number	default null,
p_alarm_start	in	number	default null,
p_alarm_start_uom	in	varchar2	default null,
p_alarm_on	in	varchar2	default null,
p_alarm_count	in	number	default null,
p_alarm_interval	in	number	default null,
p_alarm_interval_uom	in	varchar2	default null,
p_palm_flag	in	varchar2	default null,
p_wince_flag	in	varchar2	default null,
p_laptop_flag	in	varchar2	default null,

```

p_device1_flag      in      varchar2      default null,
p_device2_flag      in      varchar2      default null,
p_device3_flag      in      varchar2      default null,
p_costs             in      number         default null,
p_currency_code     in      varchar2      default null,
p_escalation_level  in      varchar2      default null,
p_task_assign_tbl   in      task_assign_tbl default g_miss_task_assign_tbl,
p_task_depends_tbl  in      task_depends_tbl default g_miss_task_depends_tbl,
p_task_rsrc_req_tbl in      task_rsrc_req_tbl default g_miss_task_rsrc_req_tbl,
p_task_refer_tbl    in      task_refer_tbl  default g_miss_task_refer_tbl,
p_task_dates_tbl    in      task_dates_tbl  default g_miss_task_dates_tbl,
p_task_notes_tbl    in      task_notes_tbl  default g_miss_task_notes_tbl,
p_task_recur_rec    in      task_recur_rec  default g_miss_task_recur_rec,
p_task_contacts_tbl in      task_contacts_tbl default g_miss_task_contacts_tbl,
x_return_status     out      varchar2,
x_msg_count         out      number,
x_msg_data          out      varchar2,
x_task_id           out      number,
p_attribute1        in      varchar2      default null,
p_attribute2        in      varchar2      default null,
p_attribute3        in      varchar2      default null,
p_attribute4        in      varchar2      default null,
p_attribute5        in      varchar2      default null,
p_attribute6        in      varchar2      default null,
p_attribute7        in      varchar2      default null,
p_attribute8        in      varchar2      default null,
p_attribute9        in      varchar2      default null,
p_attribute10       in      varchar2      default null,
p_attribute11       in      varchar2      default null,
p_attribute12       in      varchar2      default null,
p_attribute13       in      varchar2      default null,
p_attribute14       in      varchar2      default null,
p_attribute15       in      varchar2      default null,
p_attribute_category in      varchar2      default null,
);

```

Current Version

1.0

Parameter Descriptions

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

Table 4-4 Create Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_task_id	NUMBER		Unique task identifier (Primary Key). If <i>task_id</i> is not specified, then the <i>task_id</i> is automatically generated and passed as an out parameter <i>x_task_id</i> .
p_task_name	VARCHAR2	Yes	Task name
p_task_type_name	VARCHAR	Yes	Task type name
p_task_type_id	NUMBER	Yes	Task type identifier
p_description	VARCHAR2	No	Task description
p_task_status_name	VARCHAR2		Task status name
p_task_status_id	NUMBER		Unique task status identifier.
p_task_priority_name	VARCHAR2		Currently not supported.
p_task_priority_id	NUMBER		Task priority (Foreign Key to JTF_TASK_PRIORITIES).
p_owner_type_code	VARCHAR2	Yes	Owner type of the task (Foreign Key to JTF_OBJECTS_VL for an object with a usage of "Resources").
p_owner_id	NUMBER	Yes	Owner of the task (resource ID of the task owner. Foreign key to JTF_RS_RESOURCE_EXTNS_VL, JTF_RS_GROUPS_VL, JTF_RS_TEAMS_VL depending on the value of <i>owner_type_code</i>).
p_owner_territory_id	NUMBER		Territory of the owner. Currently not supported.

Table 4-4 Create Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_assigned_by_name	VARCHAR2		Currently not supported.
p_assigned_by_id	NUMBER		User who assigned the task, (Foreign Key to FND_USER).
p_customer_number	VARCHAR2		Customer number (Foreign Key to <i>hz_parties.party_number</i>).
p_customer_id	NUMBER		Customer identifier (Foreign Key to <i>hz_parties.party_id</i>).
p_cust_account_number	VARCHAR2		Customer account number (Foreign Key to <i>hz_cust_accounts.cust_account_number</i>).
p_cust_account_id	NUMBER		Customer account identifier (Foreign Key to <i>hz_cust_accounts.cust_account_id</i>). The customer account should belong to the same customer which is specified for the task.
p_address_id	NUMBER		Address identifier (Foreign Key to <i>hz_party_sites.party_site_id</i>). See Note: 3 on page 4-3.
p_address_number	VARCHAR2		Address number (Foreign Key to <i>hz_party_sites.party_site_number</i>). See Note: 3 on page 4-3.
p_planned_start_date	DATE		Planned Start Date
p_planned_end_date	DATE		Planned End Date
p_scheduled_start_date	DATE		Scheduled Start Date
p_scheduled_end_date	DATE		Scheduled End Date
p_actual_start_date	DATE		Actual Start Date
p_actual_end_date	DATE		Actual End Date

Table 4–4 Create Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_timezone_id	NUMBER		Time zone identifier (timezone for the planned, scheduled, and actual dates.) Foreign Key to <i>hz_timezones.timezone_id</i> .
p_timezone_name	VARCHAR2		Currently not supported.
p_source_object_type_code	VARCHAR2		Source object code for the task. (Foreign Key to JTF_OBJECTS_VL for objects with a usage of "Task").
p_source_object_id	NUMBER		Internal ID of source object. Validated from the table registered in JTF_OBJECTS_VL for the <i>object_type_code</i> .
p_source_object_name	VARCHAR2		User-visible source object identifier. Validated from the table registered in JTF_OBJECTS_VL for the <i>object_type_code</i> .
p_duration	NUMBER		Duration of task
p_duration_uom	VARCHAR2		Unit of measure for duration. See Note: 5 on page 4-3.
p_planned_effort	NUMBER		Planned effort
p_planned_effort_uom	VARCHAR2		Unit of measure for planned effort.
p_actual_effort	NUMBER		Actual amount of effort spent on a task by all assignees.
p_actual_effort_uom	VARCHAR2		Unit of measure for actual work. See Note: 5 on page 4-3.
p_percentage_complete	NUMBER		Percentage of completion of task.
p_reason_code	VARCHAR2		Reason for rejecting a task, reassigning a task, etc.
p_private_flag	VARCHAR2		Indicates whether the task is private or public. Checks if the value is Y or N.

Table 4-4 Create Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_publish_flag	VARCHAR2		Indicates whether the task should be published. Checks if the value is Y or N.
p_restrict_closure_flag	VARCHAR2		Indicates whether completing the task is necessary for the source object to be deemed complete. Checks if the value is Y or N.
p_multi_booked_flag	VARCHAR2		Indicates whether the task can book resources that are already assigned to other tasks. Checks if the value is Y or N.
p_milestone_flag	VARCHAR2		Indicates whether the task is a milestone delivery date. Checks if the value is Y or N.
p_holiday_flag	VARCHAR2		Indicates whether the task can be performed on holidays. Checks if the value is Y or N.
p_billable_flag	VARCHAR2		Indicates whether the task is billable. Checks if the value is Y or N.
p_bound_mode_code	VARCHAR2		For internal use only.
p_soft_bound_flag	VARCHAR2		For internal use only.
p_workflow_process_id	NUMBER		Identifier of last workflow process launched for this task.
p_notification_flag	VARCHAR2		Flag indicating whether notification workflow will be automatically launched.
p_notification_period	NUMBER		Time before the scheduled start date that a notification is sent to the assignees.
p_notification_period_uom	VARCHAR2		Unit of measure for notification period.
p_parent_task_number	VARCHAR2		Task number of the parent task.
p_parent_task_id	NUMBER		Task identifier of the parent task.

Table 4–4 Create Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_alarm_start	NUMBER		Indicates when the first alarm should be fired. This parameter is currently not supported.
p_alarm_start_uom	VARCHAR2		Unit of measure for <i>alarm_start</i> . This parameter is currently not supported.
p_alarm_on	VARCHAR2		Indicates whether the alarm is on. This parameter is currently not supported.
p_alarm_count	NUMBER		Total number of alarms to fire. This parameter is currently not supported.
p_alarm_interval	NUMBER		Alarm interval. This parameter is currently not supported.
p_alarm_interval_uom	VARCHAR2		Unit of measure for alarm interval. This parameter is currently not supported.
p_palm_flag	VARCHAR2		Used by mobile devices. Checks if the value is Y or N.
p_wince_flag	VARCHAR2		Used by mobile devices. Checks if the value is Y or N.
p_laptop_flag	VARCHAR2		Used by mobile devices. Checks if the value is Y or N.
p_device1_flag	VARCHAR2		Used by mobile devices. Checks if the value is Y or N.
p_device2_flag	VARCHAR2		Used by mobile devices. Checks if the value is Y or N.
p_device3_flag	VARCHAR2		Used by mobile devices. Checks if the value is Y or N.
p_costs	NUMBER		For internal use only.
p_currency_code	VARCHAR2		For internal use only.
p_escalation_level	VARCHAR2		Escalation level. This parameter is not used for the Task Module.
p_task_assign_tbl	TASK_ASSIGN_TBL		Table of PL/SQL records to specify the assignment specifications of the task.
p_task_depends_tbl	TASK_DEPENDS_TBL		Table of PL/SQL records to specify the task dependencies.

Table 4–4 Create Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_task_rsrc_req_tbl	TASK_RSRC_REQ_TBL		Table of PL/SQL records to specify the resource requirements. This is not supported.
p_task_refer_tbl	TASK_REFER_TBL		Table of PL/SQL records to specify the task references.
p_task_dates_tbl	TASK_DATES_TBL		Table of PL/SQL records to specify the task dates. Currently not supported.
p_task_notes_tbl	TASK_NOTES_TBL		Table of PL/SQL records to specify the notes.
p_task_recur_rec	TASK_RECUR_REC		Table of PL/SQL records to specify the task recurrences.
p_task_contacts_tbl	TASK_CONTACTS_TBL		Table of PL/SQL records to specify the task contacts.
p_attribute1	VARCHAR2		Descriptive flexfield segment column.
p_attribute2	VARCHAR2		Descriptive flexfield segment column.
p_attribute3	VARCHAR2		Descriptive flexfield segment column.
p_attribute4	VARCHAR2		Descriptive flexfield segment column.
p_attribute5	VARCHAR2		Descriptive flexfield segment column.
p_attribute6	VARCHAR2		Descriptive flexfield segment column.
p_attribute7	VARCHAR2		Descriptive flexfield segment column.
p_attribute8	VARCHAR2		Descriptive flexfield segment column.
p_attribute9	VARCHAR2		Descriptive flexfield segment column.
p_attribute10	VARCHAR2		Descriptive flexfield segment column.
p_attribute11	VARCHAR2		Descriptive flexfield segment column.
p_attribute12	VARCHAR2		Descriptive flexfield segment column.
p_attribute13	VARCHAR2		Descriptive flexfield segment column.
p_attribute14	VARCHAR2		Descriptive flexfield segment column.
p_attribute15	VARCHAR2		Descriptive flexfield segment column.
p_attribute_category	VARCHAR2		Descriptive flexfield structure defining column.

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

Table 4–5 Create Task Out Parameters

Parameter	Data Type	Descriptions
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_task_id	NUMBER	Task identifier

4.2.2 Update Task

This procedure updates a task with the given specifications.

While calling the Update Task API, *task_id* and *task_number* should be input to the API.

The *task_id* or *task_number* must be specified to indicate the task that is being updated.

Procedure Specification

```
PROCEDURE update_task
```

```
(
  p_api_version          in          number
  p_init_msg_list        in          varchar2  default fnd_api.g_false,
  p_commit               in          varchar2  default fnd_api.g_false,
  p_object_version_number in out    number,
  p_task_id              in          number     default fnd_api.g_miss_num,
  p_task_number          in          varchar2   default fnd_api.g_miss_char,
  p_task_name            in          varchar2   default fnd_api.g_miss_char,
  p_task_type_name       in          varchar2   default fnd_api.g_miss_char,
  p_task_type_id         in          number     default fnd_api.g_miss_num,
  p_description          in          varchar2   default fnd_api.g_miss_char,
  p_task_status_name     in          varchar2   default fnd_api.g_miss_char,
  p_task_status_id      in          number     default fnd_api.g_miss_num,
  p_task_priority_name   in          varchar2   default fnd_api.g_miss_char,
  p_task_priority_id    in          number     default fnd_api.g_miss_num,
  p_owner_type_name      in          varchar2   default fnd_api.g_miss_char,
  p_owner_type_code      in          varchar2   default fnd_api.g_miss_char,
  p_owner_id             in          number     default fnd_api.g_miss_num,
  p_owner_territory_id   in          number     default fnd_api.g_miss_num,
  p_assigned_by_name     in          varchar2   default fnd_api.g_miss_char,
  p_assigned_by_id       in          number     default fnd_api.g_miss_num,
```

p_customer_number	in	varchar2	default fnd_api.g_miss_char,
p_customer_id	in	number	default fnd_api.g_miss_num,
p_cust_account_number	in	varchar2	default fnd_api.g_miss_char,
p_cust_account_id	in	number	default fnd_api.g_miss_num,
p_address_id	in	number	default fnd_api.g_miss_num,
p_address_number	in	varchar2	default fnd_api.g_miss_char,
p_planned_start_date	in	date	default fnd_api.g_miss_date,
p_planned_end_date	in	date	default fnd_api.g_miss_date,
p_scheduled_start_date	in	date	default fnd_api.g_miss_date,
p_scheduled_end_date	in	date	default fnd_api.g_miss_date,
p_actual_start_date	in	date	default fnd_api.g_miss_date,
p_actual_end_date	in	date	default fnd_api.g_miss_date,
p_timezone_id	in	number	default fnd_api.g_miss_num,
p_timezone_name	in	varchar2	default fnd_api.g_miss_char,
p_source_object_type_code	in	varchar2	default fnd_api.g_miss_char,
p_source_object_id	in	number	default fnd_api.g_miss_num,
p_source_object_name	in	varchar2	default fnd_api.g_miss_char,
p_duration	in	number	default fnd_api.g_miss_num,
p_duration_uom	in	varchar2	default fnd_api.g_miss_char,
p_planned_effort	in	number	default fnd_api.g_miss_num,
p_planned_effort_uom	in	varchar2	default fnd_api.g_miss_char,
p_actual_effort	in	number	default fnd_api.g_miss_num,
p_actual_effort_uom	in	varchar2	default fnd_api.g_miss_char,
p_percentage_complete	in	number	default fnd_api.g_miss_num,
p_reason_code	in	varchar2	default fnd_api.g_miss_char,
p_private_flag	in	varchar2	default fnd_api.g_miss_char,
p_publish_flag	in	varchar2	default fnd_api.g_miss_char,
p_restrict_closure_flag	in	varchar2	default fnd_api.g_miss_char,
p_multi_booked_flag	in	varchar2	default fnd_api.g_miss_char,
p_milestone_flag	in	varchar2	default fnd_api.g_miss_char,
p_holiday_flag	in	varchar2	default fnd_api.g_miss_char,
p_billable_flag	in	varchar2	default fnd_api.g_miss_char,
p_bound_mode_code	in	varchar2	default fnd_api.g_miss_char,
p_soft_bound_flag	in	varchar2	default fnd_api.g_miss_char,
p_workflow_process_id	in	number	default fnd_api.g_miss_num,
p_notification_flag	in	varchar2	default fnd_api.g_miss_char,
p_notification_period	in	number	default fnd_api.g_miss_num,
p_notification_period_uom	in	varchar2	default fnd_api.g_miss_char,
p_alarm_start	in	number	default fnd_api.g_miss_num,
p_alarm_start_uom	in	varchar2	default fnd_api.g_miss_char,
p_alarm_on	in	varchar2	default fnd_api.g_miss_char,
p_alarm_count	in	number	default fnd_api.g_miss_num,
p_alarm_fired_count	in	number	default fnd_api.g_miss_num,
p_alarm_interval	in	number	default fnd_api.g_miss_num,
p_alarm_interval_uom	in	varchar2	default fnd_api.g_miss_char,

```

p_palm_flag          in          varchar2    default fnd_api.g_miss_char,
p_wince_flag        in          varchar2    default fnd_api.g_miss_char,
p_laptop_flag       in          varchar2    default fnd_api.g_miss_char,
p_device1_flag      in          varchar2    default fnd_api.g_miss_char,
p_device2_flag      in          varchar2    default fnd_api.g_miss_char,
p_device3_flag      in          varchar2    default fnd_api.g_miss_char,
p_costs             in          number       default fnd_api.g_miss_num,
p_currency_code     in          varchar2    default fnd_api.g_miss_char,
p_escalation_level  in          varchar2    default fnd_api.g_miss_char,
x_return_status     out          varchar2
x_msg_count         out          number
x_msg_data          out          varchar2
p_attribute1        in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute2        in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute3        in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute4        in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute5        in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute6        in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute7        in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute8        in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute9        in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute10       in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute11       in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute12       in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute13       in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute14       in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute15       in          varchar2    default jtf_task_utl.g_miss_char,
p_attribute_category in          varchar2    default jtf_task_utl.g_miss_char
);

```

Current Version

1.0

Parameter Descriptions

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

Table 4–6 Update Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.

Table 4–6 Update Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_object_version_number	NUMBER	Yes	This parameter is for internal use only. Do not modify in any way.
p_task_id	NUMBER		Unique task identifier (Primary Key). If <i>task_id</i> is not specified, then the <i>task_id</i> is automatically generated and passed as an OUT parameter <i>x_task_id</i> .
p_task_number	VARCHAR2		Task number
p_task_name	VARCHAR2	Yes	Task name
p_task_type_name	VARCHAR2		Task type name
p_task_type_id	NUMBER	Yes	Task type identifier
p_description	VARCHAR2	No	Task description
p_task_status_name	VARCHAR2		Task status name
p_task_status_id	NUMBER		Unique task status identifier.
p_task_priority_name	VARCHAR2		Currently not supported.
p_task_priority_id	NUMBER		Task priority (Foreign Key to JTF_TASK_PRIORITIES).
p_owner_type_name	VARCHAR2		Currently not supported.
p_owner_type_code	VARCHAR2	Yes	Owner type of the task (Foreign Key to JTF_OBJECTS_VL for an object with a usage of "Resources").
p_owner_id	NUMBER	Yes	Owner of the task (resource ID of the task owner. Foreign Key to JTF_RS_RESOURCE_EXTNS_VL, JTF_RS_GROUPS_VL, JTF_RS_TEAMS_VL depending on the value of <i>owner_type_code</i>).

Table 4–6 Update Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_owner_territory_id	NUMBER		Territory identifier of the owner.
p_assigned_by_name	VARCHAR2		Currently not supported.
p_assigned_by_id	NUMBER		User who assigned the task, (Foreign Key to FND_USER).
p_customer_number	VARCHAR2		Customer number (Foreign Key to <i>hz_parties.party_number</i>).
p_customer_id	NUMBER		Customer identifier (Foreign Key to <i>hz_parties.party_id</i>).
p_cust_account_number	VARCHAR2		Customer account number (Foreign Key to <i>hz_cust_accounts.cust_account_number</i>).
p_cust_account_id	NUMBER		Customer account identifier (Foreign Key to <i>hz_cust_accounts.cust_account_id</i>). The customer account should belong to the same customer who is specified for the task.
p_address_id	NUMBER		Address identifier
p_address_number	VARCHAR2		Address number (Foreign key to <i>hz_party_sites.party_site_number</i>). See Note: 3 on page 4-3.
p_planned_start_date	DATE		Planned start date
p_planned_end_date	DATE		Planned end date
p_scheduled_start_date	DATE		Scheduled start date
p_scheduled_end_date	DATE		Scheduled end date
p_actual_start_date	DATE		Actual start date
p_actual_end_date	DATE		Actual end date

Table 4–6 Update Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_timezone_id	NUMBER		Time zone identifier (timezone for the planned, scheduled, and actual dates.) Foreign Key to <i>hz_timezones.timezone_id</i> .
p_timezone_name	VARCHAR2		Currently not supported.
p_source_object_type_code	VARCHAR2		Only supported in Create Tasks.
p_source_object_id	NUMBER		Only supported in Create Tasks.
p_source_object_name	VARCHAR2		Only supported in Create Tasks.
p_duration	NUMBER		Duration of task
p_duration_uom	VARCHAR2		Unit of measure for duration. See Note: 5 on page 4-3.
p_planned_effort	NUMBER		Planned effort
p_planned_effort_uom	VARCHAR2		Unit of measure for planned effort.
p_actual_effort	NUMBER		Actual amount of effort spent on a task by all assignees.
p_actual_effort_uom	VARCHAR2		Unit of measure for actual work. See Note: 5 on page 4-3.
p_percentage_complete	NUMBER		Percentage completion of task.
p_reason_code	VARCHAR2		Reason for rejecting a task, reassigning a task, etc.
p_private_flag	VARCHAR2		Indicates whether the task is private or public. Checks if the value is Y or N.
p_publish_flag	VARCHAR2		Indicates whether the task should be published. Checks if the value is Y or N.
p_restrict_closure_flag	VARCHAR2		Indicates whether completing the task is necessary for the source object to be deemed complete. Checks if the value is Y or N.

Table 4–6 Update Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_multi_booked_flag	VARCHAR2		Indicates whether the task can book resources that are already assigned to other tasks. Checks if the value is Y or N.
p_milestone_flag	VARCHAR2		Indicates whether the task is a milestone delivery date. Checks if the value is Y or N.
p_holiday_flag	VARCHAR2		Indicates whether the task can be performed on holidays. Checks if the value is Y or N.
p_billable_flag	VARCHAR2		Indicates whether the task is billable. Checks if the value is Y or N.
p_bound_mode_code	VARCHAR2		For internal use only.
p_soft_bound_flag	VARCHAR2		For internal use only.
p_workflow_process_id	NUMBER		Identifier of last workflow process launched for this task.
p_notification_flag	VARCHAR2		Flag indicating whether notification workflow will be automatically launched.
p_notification_period	NUMBER		Time before the scheduled start date that a notification is sent to the assignees.
p_notification_period_uom			Unit of measure for notification period.
p_alarm_start	NUMBER		Indicates when the first alarm should be fired. This parameter is currently not supported.
p_alarm_start_uom	VARCHAR2		Unit of measure for <i>alarm_start</i> . This parameter is currently not supported.
p_alarm_on	VARCHAR2		Indicates whether the alarm is on. This parameter is currently not supported.
p_alarm_count	NUMBER		Total number of alarms to fire. This parameter is currently not supported.

Table 4-6 Update Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_alarm_fired_count	NUMBER		Number of times the alarm has been fired.
p_alarm_interval	NUMBER		Alarm interval. This parameter is currently not supported.
p_alarm_interval_uom	VARCHAR2		Unit of measure for alarm interval. This parameter is currently not supported.
p_palm_flag	VARCHAR2		Used by mobile devices. Checks if the value is Y or N.
p_wince_flag	VARCHAR2		Used by mobile devices. Checks if the value is Y or N.
p_laptop_flag	VARCHAR2		Used by mobile devices. Checks if the value is Y or N.
p_device1_flag	VARCHAR2		Used by mobile devices. Checks if the value is Y or N.
p_device2_flag	VARCHAR2		Used by mobile devices. Checks if the value is Y or N.
p_device3_flag	VARCHAR2		Used by mobile devices. Checks if the value is Y or N.
p_costs	NUMBER		For internal use only.
p_currency_code	VARCHAR2		For internal use only.
p_escalation_level	VARCHAR2		Escalation level. This parameter is not used for the Task Module.
p_attribute1	VARCHAR2		Descriptive flexfield segment column.
p_attribute2	VARCHAR2		Descriptive flexfield segment column.
p_attribute3	VARCHAR2		Descriptive flexfield segment column.
p_attribute4	VARCHAR2		Descriptive flexfield segment column.
p_attribute5	VARCHAR2		Descriptive flexfield segment column.
p_attribute6	VARCHAR2		Descriptive flexfield segment column.
p_attribute7	VARCHAR2		Descriptive flexfield segment column.
p_attribute8	VARCHAR2		Descriptive flexfield segment column.
p_attribute9	VARCHAR2		Descriptive flexfield segment column.

Table 4–6 Update Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_attribute10	VARCHAR2		Descriptive flexfield segment column.
p_attribute11	VARCHAR2		Descriptive flexfield segment column.
p_attribute12	VARCHAR2		Descriptive flexfield segment column.
p_attribute13	VARCHAR2		Descriptive flexfield segment column.
p_attribute14	VARCHAR2		Descriptive flexfield segment column.
p_attribute15	VARCHAR2		Descriptive flexfield segment column.
p_attribute_ category	VARCHAR2		Descriptive flexfield structure defining column.

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

Table 4–7 Update Tasks OUT Parameters

Parameter	Data Type	Descriptions
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

4.2.3 Delete Task

This procedure soft deletes a task with the given specifications. It marks the task as deleted and does not physically remove the record from the table.

If the recurring task is created, then all the future tasks can be deleted by making the value of the parameter *p_delete_future_reurrences* to *fnf_api.g_true*.

Procedure Specification

```
PROCEDURE delete_task
(
  p_api_version          in number,
  p_init_msg_list       in varchar2 default fnf_api.g_false,
  p_commit              in varchar2 default fnf_api.g_false,
  p_object_version_number in number,
```

```

p_task_id          in number default null,
p_task_number     in varchar2 default null,
p_delete_future_reurrences in varchar2 default fnd_api.g_false,
x_return_status   out varchar2,
x_msg_count       out number,
x_msg_data        out varchar2
);

```

Current Version

1.0

Parameter Descriptions

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

Table 4–8 Delete Task IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_object_version_number	NUMBER		This parameter is for internal use only. Do not modify in any way.
p_task_id	NUMBER		Unique task identifier (Primary Key). If <i>task_id</i> is not specified, then the <i>task_id</i> is automatically generated and passed as an out parameter <i>x_task_id</i> .
p_task_number	VARCHAR2		Task number
p_delete_future_reurrences	VARCHAR2		Used for recurring tasks. If the value of the parameter is set to: <i>fnd_api.g_true</i> , then all the future recurring tasks are deleted.

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

Table 4–9 Delete Task OUT Parameters

Parameter	Data Type	Descriptions
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

4.3 Package JTF_TASKS_ASSIGNMENTS_PUB

The Task Assignment APIs consist of the following three procedures:

- Create Task Assignment
- Update Task Assignment
- Delete Task Assignment

4.3.1 Create Task Assignment

This procedure creates a task assignment for a given task with the following specifications. Each task has a single owner, however, the task can have multiple assignees. For each resource assigned to the task, the actual effort can be specified. The task identifier **or** the task number for which the assignments are being created must be specified.

Before continuing, you may reference the documentation for Create Task.

Procedure Specification

```
PROCEDURE create_task_assignment
(
  p_api_version          in          number,
  p_init_msg_list       in          varchar2 default fnd_api.g_false,
  p_commit              in          varchar2 default fnd_api.g_false,
  p_task_assignment_id  in          number          default null,
  p_task_id             in          number          default null,
  p_task_number        in          varchar2        default null,
  p_resource_type_code  in          varchar2,
  p_resource_id        in          number,
  p_actual_effort      in          number          default null,
  p_actual_effort_uom  in          varchar2        default null,
  p_schedule_flag      in          varchar2        default null,
  p_alarm_type_code    in          varchar2        default null,
  p_alarm_contact      in          varchar2        default null,
```

```

p_sched_travel_distance in number default null,
p_sched_travel_duration in number default null,
p_sched_travel_duration_uom in varchar2 default null,
p_actual_travel_distance in number default null,
p_actual_travel_duration in number default null,
p_actual_travel_duration_uom in varchar2 default null,
p_actual_start_date in date default null,
p_actual_end_date in date default null,
p_palm_flag in varchar2 default null,
p_wince_flag in varchar2 default null,
p_laptop_flag in varchar2 default null,
p_device1_flag in varchar2 default null,
p_device2_flag in varchar2 default null,
p_device3_flag in varchar2 default null,
p_resource_territory_id in number, default null,
p_assignment_status_id in number,
p_shift_construct_id in number default null,
x_return_status out varchar2,
x_msg_count out number,
x_msg_data out varchar2,
x_task_assignment_id out number,
p_attribute1 in varchar2 default null,
p_attribute2 in varchar2 default null,
p_attribute3 in varchar2 default null,
p_attribute4 in varchar2 default null,
p_attribute5 in varchar2 default null,
p_attribute6 in varchar2 default null,
p_attribute7 in varchar2 default null,
p_attribute8 in varchar2 default null,
p_attribute9 in varchar2 default null,
p_attribute10 in varchar2 default null,
p_attribute11 in varchar2 default null,
p_attribute12 in varchar2 default null,
p_attribute13 in varchar2 default null,
p_attribute14 in varchar2 default null,
p_attribute15 in varchar2 default null,
p_attribute_category in varchar2 default null
);

```

Current Version

1.0

Parameter Descriptions

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

Table 4–10 Create Task Assignment IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_task_assignment_id	NUMBER	Yes	For internal use only.
p_task_id	NUMBER		Unique task identifier (Primary Key). If <i>task_id</i> is not specified, then the <i>task_id</i> is automatically generated and passed as an out parameter <i>x_task_id</i> . See Note: 1 on page 4-3.
p_task_number	VARCHAR2		Task number See Note: 1 on page 4-3.
p_resource_type_code	VARCHAR2	Yes	Assignee type of the task. (Foreign Key to JTF_OBJECTS_VL for a object with a usage of "Resources").
p_resource_id	NUMBER	Yes	Assignee of the task. Resource identifier of the task owner. (Foreign Key to JTF_RS_RESOURCE_EXTNS_VL, JTF_RS_GROUPS_VL, JTF_RS_TEAMS_VL depending on the value of <i>resource_type_code</i>).
p_actual_effort	NUMBER		Actual amount of effort spent on a task by the assignees.
p_actual_effort_uom	VARCHAR2		Unit of measure for actual work. See Note: 5 on page 4-3.
p_schedule_flag	VARCHAR2		Indicates whether the resource should be scheduled by the Scheduler. The value must be Y, N, or NULL.

Table 4–10 Create Task Assignment IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_alarm_type_code	VARCHAR2		A lookup code that indicates how alarms should be sent to the resource. For example, e-mail, pager, phone. Not supported.
p_alarm_contact	VARCHAR2		Contact information for sending alarms. This field may store e-mail address, pager number, or phone number. Not supported.
p_sched_travel_distance	NUMBER		Scheduled travel distance. Not supported.
p_sched_travel_duration	NUMBER		Scheduled travel duration. Not supported.
p_sched_travel_duration_uom	VARCHAR2		Unit of measure for scheduled travel duration. Not supported.
p_actual_travel_distance	NUMBER		Actual travel duration. Not supported.
p_actual_travel_duration	NUMBER		Actual travel duration. Not supported.
p_actual_travel_duration_uom	VARCHAR2		Unit of measure for actual travel duration. Not supported.
p_actual_start_date	DATE		Actual start date
p_actual_end_date	DATE		Actual end date
p_palm_flag	VARCHAR2		Used by mobile devices. Not supported.
p_wince_flag	VARCHAR2		Used by mobile devices. Not supported.
p_laptop_flag	VARCHAR2		Used by mobile devices. Not supported.
p_device1_flag	VARCHAR2		Used by mobile devices. Not supported.
p_device2_flag	VARCHAR2		Used by mobile devices. Not supported.
p_device3_flag	VARCHAR2		Used by mobile devices. Not supported.
p_resource_territory_id	NUMBER		Currently not supported.

Table 4–10 Create Task Assignment IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_assignment_status_id	NUMBER		Status identifier of the assignee. (Foreign Key to JTF_TASK_STATUSES_VL).
p_shift_construct_id	NUMBER		Shift construct identifier for the assignment.
p_attribute1	VARCHAR2		Descriptive flexfield segment column.
p_attribute2	VARCHAR2		Descriptive flexfield segment column.
p_attribute3	VARCHAR2		Descriptive flexfield segment column.
p_attribute4	VARCHAR2		Descriptive flexfield segment column.
p_attribute5	VARCHAR2		Descriptive flexfield segment column.
p_attribute6	VARCHAR2		Descriptive flexfield segment column.
p_attribute7	VARCHAR2		Descriptive flexfield segment column.
p_attribute8	VARCHAR2		Descriptive flexfield segment column.
p_attribute9	VARCHAR2		Descriptive flexfield segment column.
p_attribute10	VARCHAR2		Descriptive flexfield segment column.
p_attribute11	VARCHAR2		Descriptive flexfield segment column.
p_attribute12	VARCHAR2		Descriptive flexfield segment column.
p_attribute13	VARCHAR2		Descriptive flexfield segment column.
p_attribute14	VARCHAR2		Descriptive flexfield segment column.
p_attribute15	VARCHAR2		Descriptive flexfield segment column.
p_attribute_category	VARCHAR2		Descriptive flexfield structure defining column.

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

Table 4–11 Create Task Assignment OUT Parameters

Parameter	Data Type	Descriptions
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.

Table 4–11 Create Task Assignment OUT Parameters

Parameter	Data Type	Descriptions
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_task_assignment_id	NUMBER	Unique task assignment identifier.

4.3.2 Update Task Assignment

This procedure updates a task assignment for a given task. The *resource_type_code* indicates the type of resource. *Resource_id* indicates an actual identifier. For each resource assigned to the task, the actual effort can be specified.

The task assignment identifier must be specified.

Procedure Specification

PROCEDURE update_task_assignment

```
(
  p_api_version           in      number,
  p_object_version_number in out  number,
  p_init_msg_list        in      varchar2 default fnd_api.g_false,
  p_commit               in      varchar2 default fnd_api.g_false,
  p_task_assignment_id   in      number,
  p_task_id              in      number default fnd_api.g_miss_num,
  p_task_number          in      varchar2 default fnd_api.g_miss_char,
  p_task_name            in      varchar2 default fnd_api.g_miss_char,
  p_resource_type_code   in      varchar2 default fnd_api.g_miss_char,
  p_resource_id          in      number default fnd_api.g_miss_num,
  p_actual_effort        in      number default fnd_api.g_miss_num,
  p_actual_effort_uom    in      varchar2 default fnd_api.g_miss_char,
  p_schedule_flag        in      varchar2 default fnd_api.g_miss_char,
  p_alarm_type_code      in      varchar2 default fnd_api.g_miss_char,
  p_alarm_contact        in      varchar2 default fnd_api.g_miss_char,
  p_sched_travel_distance in      number default fnd_api.g_miss_num,
  p_sched_travel_duration in      number default fnd_api.g_miss_num,
  p_sched_travel_duration_uom in  varchar2 default fnd_api.g_miss_char,
  p_actual_travel_distance in      number default fnd_api.g_miss_num,
  p_actual_travel_duration in      number default fnd_api.g_miss_num,
  p_actual_travel_duration_uom in  varchar2 default fnd_api.g_miss_char,
  p_actual_start_date    in      date default fnd_api.g_miss_date,
  p_actual_end_date      in      date default fnd_api.g_miss_date,
  p_palm_flag            in      varchar2 default fnd_api.g_miss_char,
  p_wince_flag           in      varchar2 default fnd_api.g_miss_char,
```

```

p_laptop_flag          in          varchar2 default    fnd_api.g_miss_char,
p_device1_flag         in          varchar2 default    fnd_api.g_miss_char,
p_device2_flag         in          varchar2 default    fnd_api.g_miss_char,
p_device3_flag         in          varchar2 default    fnd_api.g_miss_char,
p_resource_territory_id in          number default    fnd_api.g_miss_num,
p_assignment_status_id in          number default    fnd_api.g_miss_num,
p_shift_construct_id   in          number default    fnd_api.g_miss_num,
x_return_status        out          varchar2,
x_msg_count            out          number,
x_msg_data             out          varchar2,
p_attribute1           in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute2           in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute3           in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute4           in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute5           in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute6           in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute7           in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute8           in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute9           in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute10          in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute11          in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute12          in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute13          in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute14          in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute15          in          varchar2 default    jtf_task_utl.g_miss_char,
p_attribute_category   in          varchar2 default    jtf_task_utl.g_miss_char
);

```

Current Version

1.0

Parameter Descriptions

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

Table 4–12 Update Task Assignment IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.

Table 4–12 Update Task Assignment IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_object_version_number	NUMBER		This parameter is for internal use only. Do not modify in any way.
p_task_assignment_id	NUMBER		Unique task assignment identifier.
p_task_id	NUMBER		Unique task identifier (Primary Key). If <i>task_id</i> is not specified, then the <i>task_id</i> is automatically generated and passed as an OUT parameter <i>x_task_id</i> .
p_task_number	VARCHAR2		Task number
p_task_name	VARCHAR2		Task name
p_resource_type_code	VARCHAR2		Resource type identifier
p_resource_id	NUMBER		Resource Identifier.
p_actual_effort	NUMBER		Actual amount of effort spent on a task by all assignees.
p_actual_effort_uom	VARCHAR2		Unit of measure for actual work. See Note: 5 on page 4-3.
p_schedule_flag	VARCHAR2		Indicates whether the resource should be scheduled by the Scheduler.
p_alarm_type_code	VARCHAR2		A lookup code that indicates how alarms should be sent to the resource. For example, e-mail, pager, phone.
p_alarm_contact	VARCHAR2		Contact information for sending alarms. This field may store an e-mail address, pager number, or phone number.
p_sched_travel_distance	NUMBER		Scheduled travel distance.
p_sched_travel_duration	NUMBER		Scheduled travel duration.
p_sched_travel_duration_uom	VARCHAR2		Unit of measure for scheduled travel duration.

Table 4–12 Update Task Assignment IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_actual_travel_distance	NUMBER		Actual travel duration.
p_actual_travel_duration	NUMBER		Actual travel duration.
p_actual_travel_duration_uom	VARCHAR2		Unit of measure for actual travel duration.
p_actual_start_date	DATE		Actual start date.
p_actual_end_date	DATE		Actual end date.
p_palm_flag	VARCHAR2		Used by mobile devices.
p_wince_flag	VARCHAR2		Used by mobile devices.
p_laptop_flag	VARCHAR2		Used by mobile devices.
p_device1_flag	VARCHAR2		Used by mobile devices.
p_device2_flag	VARCHAR2		Used by mobile devices.
p_device3_flag	VARCHAR2		Used by mobile devices.
p_resource_territory_id	NUMBER		Currently not supported.
p_assignment_status_id	NUMBER		Status identifier of the assignee.
p_shift_construct_id	NUMBER		Shift construct identifier for the assignment.
p_attribute1	VARCHAR2		Descriptive flexfield segment column.
p_attribute2	VARCHAR2		Descriptive flexfield segment column.
p_attribute3	VARCHAR2		Descriptive flexfield segment column.
p_attribute4	VARCHAR2		Descriptive flexfield segment column.
p_attribute5	VARCHAR2		Descriptive flexfield segment column.
p_attribute6	VARCHAR2		Descriptive flexfield segment column.
p_attribute7	VARCHAR2		Descriptive flexfield segment column.
p_attribute8	VARCHAR2		Descriptive flexfield segment column.

Table 4–12 Update Task Assignment IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_attribute9	VARCHAR2		Descriptive flexfield segment column.
p_attribute10	VARCHAR2		Descriptive flexfield segment column.
p_attribute11	VARCHAR2		Descriptive flexfield segment column.
p_attribute12	VARCHAR2		Descriptive flexfield segment column.
p_attribute13	VARCHAR2		Descriptive flexfield segment column.
p_attribute14	VARCHAR2		Descriptive flexfield segment column.
p_attribute15	VARCHAR2		Descriptive flexfield segment column.
p_attribute_category	VARCHAR2		Descriptive flexfield structure defining column.

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

Table 4–13 Update Task Assignment OUT Parameters

Parameter	Data Type	Descriptions and Validations
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

4.3.3 Delete Task Assignment

This procedure deletes a task assignment for a given task.

The task assignment must be specified.

Procedure Specification

```
PROCEDURE delete_task_assignment
```

```
(
  p_api_version          in          number,
  p_object_version_number in          number,
  p_init_msg_list        in          varchar2 default fnd_api.g_false,
  p_commit               in          varchar2 default fnd_api.g_false,
  p_task_assignment_id   in          number,
  x_return_status        out         varchar2,
  x_msg_count            out         number,
```

```
x_msg_data          out          varchar2
);
```

Current Version

1.0

Parameter Descriptions

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

Table 4–14 Delete Task Assignment IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_object_version_number	NUMBER	Yes	This parameter is for internal use only. Do not modify in any way.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_task_assignment_id	NUMBER		Unique task assignment identifier.

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

Table 4–15 Delete Task Assignment OUT Parameters

Parameter	Data Type	Descriptions
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

4.4 Package JTF_TASKS_REFERENCES_PUB

The Task Reference APIs consist of the following three procedures:

- Create Task Reference
- Update Task Reference

- Delete Task Reference

4.4.1 Create Task Reference

This API establishes references to a task. For example, a task created for a service request can establish reference to an inventory part number using references.

Every task is associated with a source. It can also be associated with multiple references.

Task_id or *task_number* must be passed.

If the API successfully executes, then the output parameter is *task_reference_id*.

Procedure Specification

PROCEDURE create_references

```
(
  p_api_version      in      number,
  p_init_msg_list    in      varchar2 default fnd_api.g_false,
  p_commit           in      varchar2 default fnd_api.g_false,
  p_task_id          in      number      default null,
  p_task_number      in      varchar2    default null,
  p_object_type_code in      varchar2    default null,
  p_object_name      in      varchar2,
  p_object_id        in      number,
  p_object_details   in      varchar2    default null,
  p_reference_code    in      varchar2    default null,
  p_usage            in      varchar2    default null,
  x_return_status    out     varchar2,
  x_msg_data         out     varchar2,
  x_msg_count        out     number,
  x_task_reference_id out     number,
  p_attribute1       in      varchar2    default null,
  p_attribute2       in      varchar2    default null,
  p_attribute3       in      varchar2    default null,
  p_attribute4       in      varchar2    default null,
  p_attribute5       in      varchar2    default null,
  p_attribute6       in      varchar2    default null,
  p_attribute7       in      varchar2    default null,
  p_attribute8       in      varchar2    default null,
  p_attribute9       in      varchar2    default null,
  p_attribute10      in      varchar2    default null,
  p_attribute11      in      varchar2    default null,
  p_attribute12      in      varchar2    default null,
  p_attribute13      in      varchar2    default null,
```

```

    p_attribute14      in      varchar2      default null,
    p_attribute15      in      varchar2      default null,
    p_attribute_category in      varchar2      default null
);

```

Current Version

1.0

Parameter Descriptions

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

Table 4–16 Create Task Reference IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_task_id	NUMBER		Unique task identifier (Primary Key) If <i>task_id</i> is not specified, then the <i>task_id</i> is automatically generated and passed as an out parameter <i>x_task_id</i> .
p_task_number	VARCHAR2		Task number
p_object_type_code	VARCHAR2		Reference object type code (Foreign Key to JTF_OBJECTS_VL for objects with a usage of "Task".)
p_object_name	VARCHAR2		Name of reference object. Validated from the table registered in JTF_OBJECTS_VL for the <i>object_type_code</i> .
p_object_id	NUMBER		Internal identifier of reference object. Validated from the table registered in <i>jtf_objects_vl</i> for the <i>object_type_code</i> .
p_object_details	VARCHAR2		Additional information of the reference object.

Table 4–16 Create Task Reference IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_reference_code	VARCHAR2		Lookup code indicating the context of the reference. Not supported and not used in the context of the Tasks module.
p_usage	VARCHAR2		User comment on the usage of the reference.
p_attribute1	VARCHAR2		Descriptive flexfield segment column.
p_attribute2	VARCHAR2		Descriptive flexfield segment column.
p_attribute3	VARCHAR2		Descriptive flexfield segment column.
p_attribute4	VARCHAR2		Descriptive flexfield segment column.
p_attribute5	VARCHAR2		Descriptive flexfield segment column.
p_attribute6	VARCHAR2		Descriptive flexfield segment column.
p_attribute7	VARCHAR2		Descriptive flexfield segment column.
p_attribute8	VARCHAR2		Descriptive flexfield segment column.
p_attribute9	VARCHAR2		Descriptive flexfield segment column.
p_attribute10	VARCHAR2		Descriptive flexfield segment column.
p_attribute11	VARCHAR2		Descriptive flexfield segment column.
p_attribute12	VARCHAR2		Descriptive flexfield segment column.
p_attribute13	VARCHAR2		Descriptive flexfield segment column.
p_attribute14	VARCHAR2		Descriptive flexfield segment column.
p_attribute15	VARCHAR2		Descriptive flexfield segment column.
p_attribute_category	VARCHAR2		Descriptive flexfield structure defining column.

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

Table 4–17 CreateTask Reference OUT Parameters

Parameter	Data Type	Descriptions
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

Table 4–17 CreateTask Reference OUT Parameters

Parameter	Data Type	Descriptions
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_task_reference_id	NUMBER	Unique task reference identifier.

4.4.2 Update Task Reference

This API is used to update references to a task.

Task_reference_id must be an input parameter.

Procedure Specification

PROCEDURE update_references

```
(
  p_api_version          in          number,
  p_init_msg_list       in          varchar2 default fnd_api.g_false,
  p_commit              in          varchar2 default fnd_api.g_false,
  p_object_version_number in out    number,
  p_task_reference_id   in          number,
  p_object_type_code    in          varchar2 default fnd_api.g_miss_char,
  p_object_name         in          varchar2 default fnd_api.g_miss_char,
  p_object_id          in          number default fnd_api.g_miss_num,
  p_object_details     in          varchar2 default fnd_api.g_miss_char,
  p_reference_code      in          varchar2 default fnd_api.g_miss_char,
  p_usage              in          varchar2 default fnd_api.g_miss_char,
  x_return_status      out         varchar2,
  x_msg_data           out         varchar2,
  x_msg_count          out         number,
  p_attribute1         in          varchar2 default jtf_task_utl.g_miss_char,
  p_attribute2         in          varchar2 default jtf_task_utl.g_miss_char,
  p_attribute3         in          varchar2 default jtf_task_utl.g_miss_char,
  p_attribute4         in          varchar2 default jtf_task_utl.g_miss_char,
  p_attribute5         in          varchar2 default jtf_task_utl.g_miss_char,
  p_attribute6         in          varchar2 default jtf_task_utl.g_miss_char,
  p_attribute7         in          varchar2 default jtf_task_utl.g_miss_char,
  p_attribute8         in          varchar2 default jtf_task_utl.g_miss_char,
  p_attribute9         in          varchar2 default jtf_task_utl.g_miss_char,
  p_attribute10        in          varchar2 default jtf_task_utl.g_miss_char,
  p_attribute11        in          varchar2 default jtf_task_utl.g_miss_char,
  p_attribute12        in          varchar2 default jtf_task_utl.g_miss_char,
  p_attribute13        in          varchar2 default jtf_task_utl.g_miss_char,
  p_attribute14        in          varchar2 default jtf_task_utl.g_miss_char,
```

```

    p_attribute15          in          varchar2 default    jtf_task_utl.g_miss_char,
    p_attribute_category in          varchar2 default    jtf_task_utl.g_miss_char
);

```

Current Version

1.0

Parameter Descriptions

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

Table 4–18 Update Task Reference IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_object_version_number	NUMBER		This parameter is for internal use only. Do not modify in any way.
p_task_reference_id	NUMBER		Unique task reference identifier.
p_object_type_code	VARCHAR2		Reference object type code (Foreign Key to JTF_TASK_OBJECT_TYPES).
p_object_name	VARCHAR2		Name of reference object.
p_object_id	NUMBER		Internal identifier of reference object.
p_object_details	VARCHAR2		Additional information of the reference object.
p_reference_code	VARCHAR2		Lookup code indicating the context of the reference.
p_usage	VARCHAR2		User comment on the usage of the reference.
p_attribute1	VARCHAR2		Descriptive flexfield segment column.
p_attribute2	VARCHAR2		Descriptive flexfield segment column.
p_attribute3	VARCHAR2		Descriptive flexfield segment column.

Table 4–18 Update Task Reference IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_attribute4	VARCHAR2		Descriptive flexfield segment column.
p_attribute5	VARCHAR2		Descriptive flexfield segment column.
p_attribute6	VARCHAR2		Descriptive flexfield segment column.
p_attribute7	VARCHAR2		Descriptive flexfield segment column.
p_attribute8	VARCHAR2		Descriptive flexfield segment column.
p_attribute9	VARCHAR2		Descriptive flexfield segment column.
p_attribute10	VARCHAR2		Descriptive flexfield segment column.
p_attribute11	VARCHAR2		Descriptive flexfield segment column.
p_attribute12	VARCHAR2		Descriptive flexfield segment column.
p_attribute13	VARCHAR2		Descriptive flexfield segment column.
p_attribute14	VARCHAR2		Descriptive flexfield segment column.
p_attribute15	VARCHAR2		Descriptive flexfield segment column.
p_attribute_category	VARCHAR2		Descriptive flexfield structure defining column.

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

Table 4–19 Update Task Reference OUT Parameters

Parameter	Data Type	Descriptions
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

4.4.3 Delete Task Reference

This API is used to delete references to a task.

Task_reference_id must be an input parameter.

Procedure Specification

```

PROCEDURE delete_references
(
  p_api_version          in      number,
  p_init_msg_list       in      varchar2 default fnd_api.g_false,
  p_commit              in      varchar2 default fnd_api.g_false,
  p_object_version_number in    number,
  p_task_reference_id   in      number          default null,
  x_return_status       out     varchar2,
  x_msg_data           out     varchar2,
  x_msg_count          out     number
);

```

Current Version

1.0

Parameter Descriptions

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

Table 4–20 Delete Task Reference IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_object_version_number	NUMBER		This parameter is for internal use only. Do not modify in any way.
p_task_reference_id	NUMBER		Unique task reference identifier.

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

Table 4–21 Delete Task Reference OUT Parameters

Parameter	Data Type	Descriptions
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.

Table 4–21 Delete Task Reference OUT Parameters

Parameter	Data Type	Descriptions
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

4.5 Data Structure Specifications

The following data structures are used in the Create Task API:

- Task Assign Record Type
- Task Dependency Record Type
- Task Reference Record Type
- Task Recurrence Record Type
- Task Dates Record Type
- Task Contact Record Type

4.5.1 Task Assign Record Type

Record Specification

```

TYPE task_assign_rec IS RECORD.
(
  resource_id                number,
  actual_start_datee         date := null ,
  actual_end_date            date := null ,
  actual_effort_duration     number := null,
  actual_effort_dur_uom      varchar2(3) := null,
  scheduled_travel_distance  number :=null,
  scheduled_travel_duration  number :=null,
  scheduled_travel_duration_uom varchar2(3) :=null,
  actual_travel_distance     number :=null,
  actual_travel_duration     number :=null,
  scheduled_travel_duration_uom varchar2(3) :=null,
  schedule_flag              varchar2(1) := null,
  alarm_type_code            varchar2(30) := null,
  alarm_contact              varchar2(200) := null
);

```

4.5.2 Task Dependency Record Type

JTF_TASK_DEPENDS stores the dependency information between the two tasks. If *template_flag* = 'Y', then the dependency is between the templates or else the dependency is between the tasks.

Adjustment_time and *adjustment_time_uom* together indicate the lead or lag time between the two tasks.

Record Specification

```
TYPE task_depend_rec IS RECORD.
(
  dependent_on_task_id    number,
  dependency_type_code    varchar2(30) ,
  adjustment_time        number := null,
  adjustment_time_uom    varchar2(3) := null
);
```

4.5.3 Task Reference Record Type

JTF_TASK_REFERENCES stores the reference details for a given task. *reference_code* gets the value from Lookup code JTF_TASK_REFERENCE_CODES.

Record Specification

```
TYPE task_refer_rec IS RECORD.
(
  object_type_code       varchar2(10),
  object_name            varchar2(80),
  object_id              number,
  object_details         varchar2(2000),
  usage                  varchar2(2000)
);
```

4.5.4 Task Recurrence Record Type

This record type should be used while creating repeating tasks.

Record Specification

```
TYPE task_recur_rec IS RECORD.
(
```

```
    occurs_which      number,  
    day_of_week      number,  
    date_of_month    number,  
    occurs_month     number,  
    occurs_uom       varchar2(3),  
    occurs_every     number,  
    occurs_number    number  
);
```

4.5.5 Task Dates Record Type

JTF_TASK_DATES stores the actual date values for a task. *Date_type_id* is a Foreign Key to JTF_TASK_DATE_TYPES.

Record Specification

```
TYPE task_dates_rec IS RECORD.  
(  
    date_type      varchar2(30) ,  
    date_value     date,  
    alarm_set      number := null,  
    alarm_set_uom  varchar2(3) := null  
);
```

4.5.6 Task Contact Record Type

JTF_TASK_CONTACTS stores the contact information for a given customer.

Record Specification

```
TYPE task_cont_rec IS RECORD.  
(  
    contact_id      number := null,  
    last_name       varchar2(50),  
    first_name      varchar2(50),  
    email_address   varchar2(240) := null  
);
```

4.6 Messages and Notifications

The status messages associated with the Task Manager public APIs are divided into the following categories:

- Common Messages
- JTF_TASK_ASSIGNMENTS_PUB
- JTF_TASK_REFERENCES_PUB
- JTF_TASKS_PUB

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

4.6.1 Common Messages

The following table describes a lists of common error messages and notifications that the Task API can generate. Note that not all messages are returned by all APIs.

Table 4–22 Common Task API Messages

Number	Type	Name	Text
	E	JTF_TASK_DISTANCE_UNITS	Quantity for p_distance_tag is invalid.
	E	JTF_TASK_INVALID_CONTACT	Contacts details are invalid.
	E	JTF_TASK_INVALID_DEFAULT_OWNER	Default owner for the task is not setup correctly.
	E	JTF_TASK_INVALID_PHONE_ID	Phone details are invalid. (Contact point identifier = p_phone_id).
	E	JTF_TASK_MISSING_CONTACT	Contact details are missing.
	E	JTF_TASK_MISSING_PHONE	Phone details are missing.
	E	JTF_TASK_MISSING_USER_MAPPING	User is not mapped to a resource.
210000	E	JTF_TASK_MISSING_UOM	Unit of measure for p_tag should be specified.
210001	E	JTF_TASK_INVALID_PRIORITY_ID	Task Priority p_task_priority_id is either disabled or invalid.
210002	E	JTF_TASK_INVALID_PRIORITY_NAME	Task Priority p_task_priority_name is either disabled or invalid.

Table 4–22 Common Task API Messages

Number	Type	Name	Text
210003	E	JTF_TASK_INVALID_TYPE_ID	Task Type p_task_type_id is either disabled or invalid.
210004	E	JTF_TASK_INVALID_UOM	Unit of Measure p_uom_code is either disabled or invalid.
210005	E	JTF_TASK_INVALID_DEPENDS_CODE	Currency Code p_dependency_code is either disabled or invalid.
210006	E	JTF_TASK_INVALID_TEMP_NUMBER	Task Template p_task_template_number is invalid.
210008	E	JTF_TASK_INVALID_TEMP_ID	Task Template p_task_template_id is invalid.
210012	E	JTF_TASK_INVALID_CUST_ACCT_ID	Customer Account p_cust_account_id is invalid or disabled.
210013	E	JTF_TASK_INVALID_PARTY_ID	Customer p_party_id is invalid or disabled.
210014	E	JTF_TASK_INVALID_PARTY_NUMBER	Customer party_number is invalid or disabled.
210015	E	JTF_TASK_INVALID_SITE_ID	Address p_party_site_id is invalid or disabled.
210016	E	JTF_TASK_INVALID_SITE_NUMBER	Address p_party_site_number is invalid or disabled.
210018	E	JTF_TASK_INVALID_FLAG	P_flag_name must be Yes or No.
210020	E	JTF_TASK_INVALID_DEPENDS_ID	Dependency p_dependency_id does not exist.
210021	E	JTF_TASK_INVALID_ASSIGNED_NAME	User p_assigned_by_name is invalid or disabled.
210022	E	JTF_TASK_INVALID_CURRENCY_CODE	Currency p_currency_code is invalid or disabled.
210023	E	JTF_TASK_MISSING_CURRENCY_CODE	P_cost, currency code should be present. Cause: both cost currency code should be present.
210024	E	JTF_TASK_MISSING_COST	For p_currency_code, cost should be present. Cause: both cost currency code should be present.
210026	E	JTF_TASK_INVALID_TIMEZONE_NAME	Timezone for p_timezone_name is either disabled or invalid.
210027	E	JTF_TASK_INVALID_TIMEZONE_ID	Timezone for p_timezone_id is either disabled or invalid.

Table 4–22 Common Task API Messages

Number	Type	Name	Text
210029	U	JTF_TASK_UNKNOWN_ERROR	Error text.
210031	E	JTF_TASK_INVALID_OBJECT_NAME	P_object_type_code p_object_name is either disabled or invalid.
210032	E	JTF_TASK_INVALID_OBJECT_CODE	P_object_code is either disabled or invalid.
210034	E	JTF_TASK_INVALID_QUANTITY	Value for p_tag should be greater than 0.
210035	E	JTF_TASK_MISSING_QUANTITY	Quantity for p_tag should be specified.
210037	E	JTF_TASK_INVALID_STATUS_NAME	Task status p_task_status_name is either disabled or invalid.
210039	E	JTF_TASK_INVALID_TYPE_NAME	Task type p_task_type_name is either disabled or invalid.
210041	E	JTF_TASK_INVALID_STATUS_ID	Status p_task_status_id is either disabled or invalid.
210046	E	JTF_TASK_INVALID_DATES	P_date_tag start date cannot be greater than p_date_tag end date.
210047	E	JTF_TASK_INVALID_SOURCE_DTLS	Invalid source object details provided.
210048	E	JTF_TASK_INVALID_TEMP_GRP_NAME	Task template group p_task_template_group_name is either disabled or invalid.
210049	E	JTF_TASK_INVALID_TEMP_GRP_ID	Task template group p_task_template_group_id is either disabled or invalid.
210051	E	JTF_TASK_INVALID_TASK_ID	Task p_task_id is invalid.
210052	E	JTF_TASK_INVALID_TASK_NUMBER	Task number p_task_number is invalid.
210055	E	JTF_TASK_MISSING_TASK	Task is missing.
210056	E	JTF_TASK_INVALID_DATE_TYPE_ID	Date type p_date_type_id is invalid.
210065	E	JTF_TASK_INVALID_TERR_ID	Territory p_terr_id is disabled or invalid.
210066	E	JTF_TASK_INVALID_TERR_NAME	Territory is disabled or invalid.
210067	E	JTF_TASK_INVALID_ESC_DTLS	Invalid escalation details.
210068	E	JTF_TASK_INVALID_OWNER_ID	Owner p_owner_id is invalid.
210069	E	JTF_TASK_PARENT_TYPE_CODE	Parent task should have the same source document types as the given task.
210069	E	JTF_TASK_PARENT_TYPE_CODE	Parent task should have the same source document types as the given task.

Table 4–22 Common Task API Messages

Number	Type	Name	Text
210070	E	JTF_TASK_PARENT	Parent task does not have the same source object details as the given task.
210118	E	JTF_TASK_MISSING_RETURN_STATUS	Return status from internal API hook is missing.
210120	E	JTF_TASK_MISSING_LOOKUP	Lookup code (p_lookup_code) is not defined for lookup type p_lookup_type.

4.6.2 JTF_TASK_ASSIGNMENTS_PUB

The following table describes a list of messages and notifications that the APIs in package JTF_TASK_ASSIGNMENTS_PUB can generate.

Table 4–23 JTF_TASK_ASSIGNMENTS_PUB API Messages

Number	Type	Name	Text
210055	E	JTF_TASK_MISSING_TASK	Task is missing.
210082	E	JTF_TASK_INV_RES_TYP_COD	Resource type code is invalid or disabled. This feature is currently not enabled in the API. This error should never occur.
210080	E	JTF_TASK_NULL_RES_ID	Resource identifier is missing.
		JTF_TASK_MISSING_TASK_STATUS	Task status is missing or invalid.
210085	E	JTF_TASK_INV_ALA_TYPE	Alarm type code is invalid or disabled.
210086	E	JTF_TASK_INV_ALA_CON	Alarm contact is invalid or disabled. This feature is currently not enabled in the API. This error should never occur.
210117	E	JTF_TASK_RESOURCE_LOCKED	Resource is locked or deleted.
210113	E	JTF_TASK_NULL_TK_ASS	Task assignment is missing.
210114	E	JTF_TASK_INV_TK_ASS	Task assignment identifier is invalid or missing.
210115	E	JTF_TASK_DELETING_TK_ASS	Error deleting task assignment.

4.6.3 JTF_TASK_REFERENCES_PUB

The following table describes a list of messages and notifications that the APIs in package JTF_TASK_REFERENCES_PUB can generate.

Table 4–24 JTF_TASK_REFERENCES_PUB API Messages

Number	Type	Name	Text
210025	E	JTF_TASK_MISSING_OBJECT_NAME	Object name is missing.
210028	E	JTF_TASK_MISSING_OBJECT_CODE	Source object type code is missing.
210031	E	JTF_TASK_INVALID_OBJECT_NAME	Object code object name is either disabled or invalid.
210032	E	JTF_TASK_INVALID_OBJECT_CODE	Object code is either disabled or invalid.
210038	E	JTF_TASK_INVALID_REFERER	Task reference identifier is invalid.
210042	E	JTF_TASK_MISSING_REFERER	Task reference is missing.
210044	E	JTF_TASK_INVALID_OBJECT_ID	Object identifier is invalid.
210050	E	JTF_TASK_INVALID_REFERER_CODE	Reference code is either disabled or invalid.
210053	E	JTF_TASK_INVALID_REFERER_DETAILS	Invalid reference details.
210055	E	JTF_TASK_MISSING_TASK	Task is missing.
210117	E	JTF_TASK_RESOURCE_LOCKED	Resource is locked or deleted.

4.6.4 JTF_TASKS_PUB

The following table describes a list of messages and notifications that the APIs in package JTF_TASK_ASSIGNMENTS_PUB can generate.

Table 4–25 Task API Messages

Number	Type	Name	Text
21002	E	JTF_TASK_INVALID_PRIORITY_NAME	Task priority is either disabled or invalid.
210007	E	JTF_TASK_MISSING_TEMP_GRP	Task template group is missing.
210011	E	JTF_TASK_INVALID_CUST_ACCT_NUM	Customer account number is disabled or invalid.
210021	E	JTF_TASK_INVALID_ASSIGNED_NAME	User assigned by name is invalid or disabled.
210029	U	JTF_TASK_UNKNOWN_ERROR	Returns the unhandled error text.

Table 4–25 Task API Messages

Number	Type	Name	Text
210036	E	JTF_TASK_MISSING_STATUS	Task status is missing.
210040	E	JTF_TASK_MISSING_TYPE	Task type is missing.
210046	E	JTF_TASK_INVALID_DATES	<i>Date start date cannot be greater than date end date.</i>
210051	E	JTF_TASK_INVALID_TASK_ID	Task identifier is invalid.
210052	E	JTF_TASK_INVALID_TASK_NUMBER	Task number is invalid.
210055	E	JTF_TASK_MISSING_TASK	Task is missing.
210060	E	JTF_TASK_CONVERTING_NUMBER	Error converting template number to task number.
210098	E	JTF_TK_INV_QRY_NXT	Invalid value query or next code can be Q or N.
210099	E	JTF_TK_INV_SHOW_ALL	Invalid value show all can be Y or N.
210100	E	JTF_TK_NULL_STRT_PTR	Start record number cannot be NULL.
210101	E	JTF_TK_NULL_REC_WANT	Number of records wanted cannot be NULL.
210103	E	JTF_TASK_INV_TK_NAME	Invalid task name.
210104	E	JTF_TK_OBJECT_TYPE_ID_RQD	Both object identifier and object type code are required if one is present.
210105	E	JTF_TK_QRY_NXT_INV_QRY_TYP	Invalid query type.
210106	E	JTF_TK_QRY_NXT_INV_DT_TYPE	Invalid date type.
210107	E	JTF_TK_QRY_NXT_NUL_ASGND_BY	Assigned by identifier is NULL.
210108	E	JTF_TK_QRY_NXT_NUL_	Owner identifier or type is NULL.
210109	E	JTF_TK_EXP_FILE_NAME_NULL	Output file name cannot be NULL.
210110	E	JTF_TK_EXP_TABLE_EMPTY	Task table input table is NULL.
210111	E	JTF_TK_QRY_NXT_INV_STRT_END_DT	Invalid value for start or end date query parameter.
210112	E	JTF_TK_NO_DATE	Created date field for current task identifier is NULL.
210117	E	JTF_TASK_RESOURCE_LOCKED	Resource is locked or deleted.

Fulfillment Engine Public APIs

Fulfillment is defined as an automated way to send information to customers. It provides the ability to immediately satisfy a customer's requests for information, literature, and other correspondence or collateral. Customer Service Representatives handle a variety of requests ranging from product and service inquiries, pricing questions, billing inquiries, and general customer care issues. Many of these requests result in some dissemination of literature, collateral, forms of application, letters, or correspondence to the customer.

Fulfillment provides the ability for call center administrators, mobile field representatives, marketing managers, customer care representatives, and other service agents to respond to different customer needs quickly and easily using e-mail.

5.1 Package JTF_FM_REQUEST_GRP

Package JTF_FM_REQUEST_GRP contains procedures that you use to form an XML fulfillment request and submit it to the Fulfillment engine for processing. It also includes APIs to cancel, and resubmit a fulfillment request. The following table describe the public APIs that are discussed in this chapter.

Table 5–1 Fulfillment APIs

Procedure	Description
Start_Request	Generates the history request identifier.
Get_Content_XML	Forms the <item> element of the XML request.
Submit_Request	Initiates the fulfillment submission process.
Send_Request	Sends a fulfillment request to the Fulfillment Request queue.

Table 5–1 Fulfillment APIs

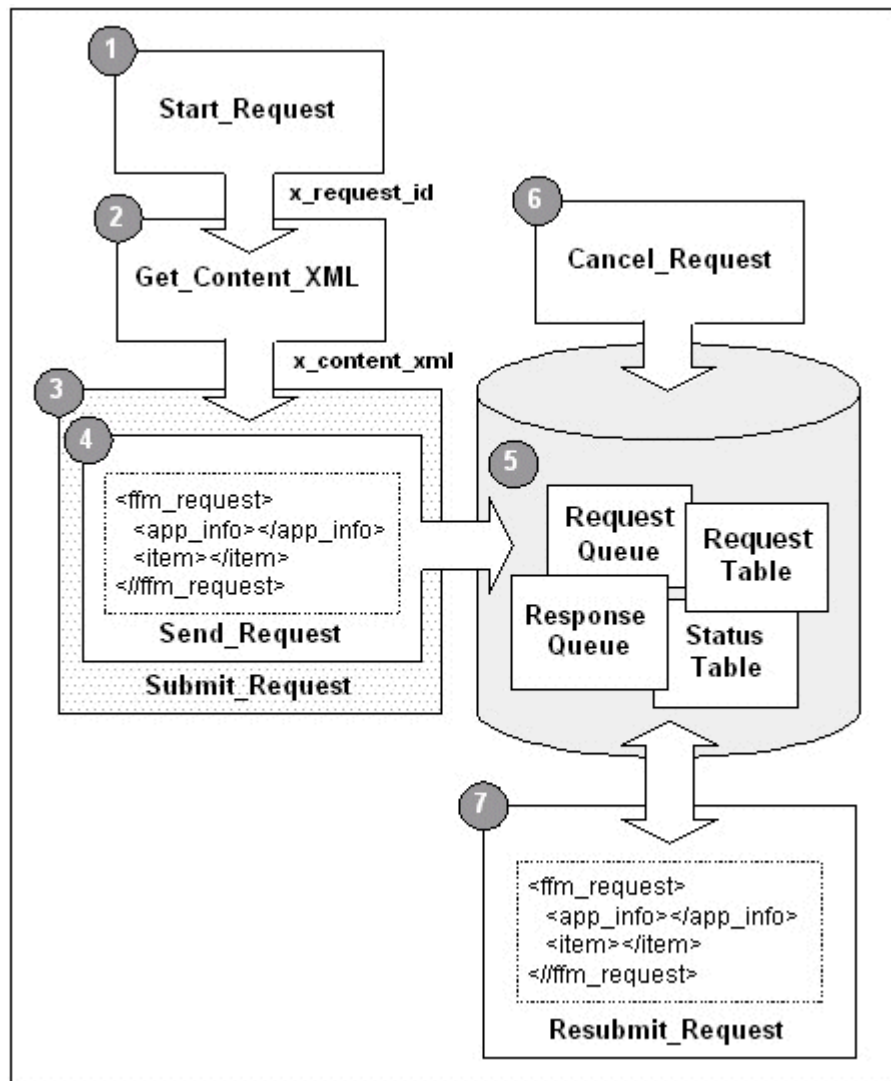
Procedure	Description
Cancel_Request	Cancels a fulfillment request that is already in the system.
Resubmit_Request	Resubmits an existing fulfillment request to the Fulfillment engine.

5.2 Submitting a Fulfillment Request

Figure 5–1, "The Fulfillment APIs" illustrates the process flow for submitting a fulfillment request.

1. The Start_Request API generates the history request identifier (x_hist_id), used as the tracking identifier for the fulfillment request.
2. The Get_Content_XML API forms the XML <item> element. You can call this API as many times as necessary.
3. The Submit_Request API formally starts the fulfillment request process.
4. The Send_Request API is called internally by the Submit_Request API, but can be called explicitly if you want to submit a document for previewing.
5. The Send_Request API places the fulfillment request onto the Request queue and writes to the status and history tables in the database.
6. The Cancel_Request API removes the fulfillment request from the Request queue, and updates the status and history tables in the database.
7. The Resubmit_Request API retrieves an existing fulfillment request from the database, resubmits it to the Request queue, and updates the status and history tables in the database.

Figure 5-1 The Fulfillment APIs



5.3 Forming an XML Request

Warning: Oracle does not recommend, nor does it support, the creation of XML fulfillment requests by any other means than through these published APIs.

Information on how the XML request is formed is provided solely to facilitate understanding of the fulfillment request process.

The XML fulfillment request is built up through calls to several different APIs. It contains the root element `<ffm_request>`, and two first generation child elements:

- `<app_info>`
- `<item>`

The following table lists the DTD (Document Type Definition) main elements and the Fulfillment API in which that element is created or formed.

Table 5–2 The Fulfillment Request XML Elements

Element	Occurs	Required	Formed In
<code><ffm_request></code>	Once	Yes	Send_Request
<code><app_info></code>	Once	Yes	Send_Request
<code><item></code>	At least once	Yes	Get_Content_XML

5.3.1 The `<ffm_request>` Root Element

The `<ffm_request>` root element for the fulfillment document contains two top level child elements:

- `<app_info>`
- `<item>`

The `<app_info>` element and at least one `<item>` element are mandatory.

The XML request is validated against the fulfillment request DTD (Document Type Definition) after it is sent to the Fulfillment server for processing.

5.3.1.1 The <app_info> Element

The <app_info> element is formed by the Send_Request API. It has one optional child element, <extended_header>, that can occur multiple times. This element has a number of mandatory and optional attributes, or options, that further define the behavior of the <app_info> element.

The <app_info> Element Attributes The following table lists the <app_info> attributes and indicates whether or not each attribute is optional or mandatory. For an explanation of these parameters, see the discussion on parameters for the individual APIs.

Table 5–3 The <app_info> Element Attributes

Attribute	Required
user_id	Yes
party_id	No
party_name	No
subject	No
source_code_id	No
source_code	No
object_type	No
object_id	No
order_id	No
doc_id	Yes
doc_ref	Yes
app_id	Yes
login_id	Yes
resp_id	Yes

The Optional <extended_header> Element If used, the calling application must provide the extended_header string. This optional element contains two additional child elements:

- <header_name>
- <header_value>

The following table lists the <extended_header> attribute and indicates whether or not the attribute is optional or mandatory. The default value for this attribute is EMAIL.

Table 5-4 The <extended_header> Element Attribute

Attribute	Required	Values
media_type	Yes, if the <extended_header> element is used.	<ul style="list-style-type: none"> ■ EMAIL ■ FAX ■ PRINTER ■ FILE

Example <app_info> Element The following code example shows the <app_info> element and sample attribute and values.

```
<app_info user_id="1000196" subject="OMO Fulfillment"
  doc_id="10022" doc_ref="JFUF" app_id="690"
  login_id="555248" resp_id="21706">
  <extended_header media_type="EMAIL">
    <header_name>Request ID</header_name>
    <header_value>10281</header_value>
  </extended_header>
</app_info>
```

5.3.1.2 The <item> Element

The <item> element is formed by the Send_Request API. It must occur at least once. This element has two mandatory child elements:

- <item_destination>
- <item_content>

The <item_destination> Element The <item_destination> element has one child element, <media_type>. The following table lists the allowable values for this element. For an explanation of these values, see the discussion on parameters for the individual APIs.

Table 5–5 Values for <media_type>

Element	Values
<media_type>	<ul style="list-style-type: none"> ▪ PRINTER ▪ PATH ▪ EMAIL ▪ FAX

The <item_content> Element Valid content types are:

- query
- data
- collateral
- attachment

The following table lists the <item_content> attributes and indicates whether or not each attribute is optional or mandatory. For an explanation of these parameters, see the discussion on parameters for the individual APIs.

Table 5–6 The <item_content> Attributes

Attribute	Required
content_id	Yes
content_nm	No
quantity	Yes, the default is 1
mime_type	No
user_note	No

The default value for the quantity attribute is one (1). This value refers to the number of times the content is to be repeated (similar to the number of copies, when printing). This value can be overridden by passing a different value during the call to the Get_Content_XML API. Oracle recommends, however, that you do **not** change this value.

Both the query and data (record) content types must have an additional `<bind_var>` element defined.

The `<bind_var>` Element Within Fulfillment, SQL queries are used for generating and populating data within the fulfillment request. Dynamic information comes from the query and the associated bind variables.

- Both the data and query content types can have zero or more bind variables associated with them.
- While legitimate, it is not meaningful to have a data request without associated bind variables.
- With a query request, the query is extracted from the database based on the content ID.
- The extracted query may or may not have bind variables associated with it.

Example `<item>` Element The following code example shows the `<item>` element and sample attribute and values.

```
<item>
  <item_destination>
    <media_type>
      <email>John.Smith@xyz.com</email>
    </media_type>
  </item_destination>
  <item_content content_id="10057" quantity="1"
    user_note="VIP Customer">
    <data>
      <record>
        <bind_var bind_type="VARCHAR2"
          bind_object="firstname">John</bind_var>
        <bind_var bind_type="VARCHAR2"
          bind_object="number">7</bind_var>
        <bind_var bind_type="VARCHAR2"
          bind_object="sr_number">1234</bind_var>
      </record>
    </data>
  </item_content>
</item>
```

5.3.2 The Fulfillment Request Document Type Definition (DTD)

The following DTD (Document Type Definition) is used by the Fulfillment APIs to create well formed XML. The main XML element are shown in bold in the following DTD for enhanced readability.

Fulfillment Request DTD

```
<?xml version="1.0" standalone="no"?>
<!DOCTYPE ffm_request
[<!-- This File contains the Document Type Definition for FFM Requests. -->
<!ELEMENT ffm_request (app_info, item*)>
<!ATTLIST ffm_request id          CDATA #REQUIRED
                    submit_time   CDATA #REQUIRED
                    status         (NEW_REQUEST | RESUBMITTED_REQUEST |
                    PREVIEW | PREVIEWED) "NEW_REQUEST"
                    template       CDATA #IMPLIED
                    priority       CDATA #REQUIRED
                    user_history   (YES | NO) "YES"
                    queue_response (YES | NO) "NO"
                    api_version    CDATA #REQUIRED
                    batch_number   CDATA #REQUIRED>

<!ELEMENT app_info (extended_header*)>
<!ATTLIST app_info user_id        CDATA #REQUIRED
                    party_id      CDATA #IMPLIED
                    party_name     CDATA #IMPLIED
                    subject        CDATA #IMPLIED
                    source_code_id CDATA #IMPLIED
                    source_code    CDATA #IMPLIED
                    object_type    CDATA #IMPLIED
                    object_id      CDATA #IMPLIED
                    order_id       CDATA #IMPLIED
                    doc_id         CDATA #REQUIRED
                    doc_ref        CDATA #REQUIRED
                    app_id         CDATA #REQUIRED
                    login_id       CDATA #REQUIRED
                    resp_id        CDATA #REQUIRED>
    <!ELEMENT extended_header (header_name, header_value)* >
    <!ATTLIST extended_header media_type (EMAIL | FAX | PRINTER | FILE) "EMAIL" >
        <!ELEMENT header_name (#PCDATA)>
        <!ELEMENT header_value (#PCDATA)>

<!ELEMENT item (item_destination, item_content)>
<!ELEMENT item_destination (media_type)>
```

```

<!ELEMENT item_content (query | data | collateral | attachment)>
<!--ATTLIST item_content content_id CDATA #REQUIRED
                        content_nm CDATA #IMPLIED
                        quantity CDATA #REQUIRED
                        mime_type CDATA #IMPLIED
                        user_note CDATA #IMPLIED-->
  <!--ELEMENT query (bind_var*)-->
  <!--ELEMENT data (record*)-->
  <!--ELEMENT collateral (#PCDATA)-->
  <!--ELEMENT attachment (#PCDATA)-->
  <!--ELEMENT bind_var (#PCDATA)-->
  <!--ATTLIST bind_var bind_type (VARCHAR2 | NUMBER | DATE) #REQUIRED
                bind_object CDATA #REQUIRED-->
  <!--ELEMENT record (bind_var*)-->
]>

```

5.3.3 Example XML Fulfillment Request

The following table lists the parameters used to create an example XML Fulfillment request. These parameters are passed to the Submit_Request API and are used to generate the well formed XML request.

Table 5–7 Example Submit_Request Parameters

Parameter	Value
p_api_version	1
p_init_msg_list	Optional, if not provided, set to FND_API.G_FALSE
p_commit	Optional, if not provided, set to FND_API.G_FALSE
p_validation_level	Optional, if not provided, set to FND_API.G_VALID_LEVEL_FULL
p_template_id	Optional, if not provided, set to FND_API.G_MISS_NUM
p_subject	Optional, if not provided, set to FND_API.G_MISS_CHAR
p_party_id	-229929
p_party_name	Optional, if not provided, set to FND_API.G_MISS_CHAR
p_user_id	1000858
p_priority	7
p_source_code_id	Optional, if not provided, set to FND_API.G_MISS_NUM

Table 5-7 Example Submit_Request Parameters

Parameter	Value
p_source_code	Optional, if not provided, set to FND_API.G_MISS_CHAR
p_object_type	Optional, if not provided, set to FND_API.G_MISS_CHAR
p_object_id	Optional, if not provided, set to FND_API.G_MISS_NUM
p_order_id	Optional, if not provided, set to FND_API.G_MISS_NUM
p_doc_id	Optional, if not provided, set to p_request_id
p_doc_ref	Optional, if not provided, set to JFUF (1-to-1 Fulfillment)
p_server_id	10000
p_queue_response	Optional, if not provided, set to FND_API.G_FALSE
p_extended_header	Optional, if not provided, set to FND_API.G_MISS_CHAR
p_content_xml	Generated by the Get_Content_XML API
p_request_id	10281

The Submit_Request API Call

The parameter values listed in Table 5-7, "Example Submit_Request Parameters" were used to generate the following Submit_Request API call.

```
Submit_Request(1,,,,,-229929,,1000858,7,,,,,,10000,,,<p_content_xml>,10281)
```

The Resulting XML Request

```
<?xml version="1.0" standalone="no" ?>
<!DOCTYPE ffm_request (View Source for full doctype...)>
  <ffm_request
    id="10041"
    submit_time="2000-10-04 14:37:21"
    status="NEW_REQUEST"
    priority="7"
    user_history="YES"
    api_version="1"
    queue_response="NO"
    batch_number="1">
    <app_info
      user_id="1000858"
      subject="Created Service Request"
      doc_id="10041"
      doc_ref="JFUF"
```

```
app_id="690"
login_id="-1"
resp_id="-1" />
<item>
  <item_destination>
    <media_type><email>ranjan.smith@xyz.com</email></media_type>
  </item_destination>
  <item_content content_id="10057" quantity="1" user_note="VIP Account">
    <data>
      <record>
        <bind_var bind_type="VARCHAR2"
          bind_object="firstname">ranjan</bind_var>
        <bind_var bind_type="VARCHAR2"
          bind_object="number">7</bind_var>
        <bind_var bind_type="VARCHAR2"
          bind_object="sr_number">1234</bind_var>
      </record>
    </data>
  </item_content>
</item>
</ffm_request>
```

5.4 The Fulfillment APIs

The following public Fulfillment APIs are discussed in this section. They are described in the approximate order of use.

- Start_Request
- Get_Content_XML
- Submit_Request
- Send_Request
- Cancel_Request
- Resubmit_Request

Priority Levels

The following table lists the priority levels defined as global constants in package JTF_FM_REQUEST_GRP. The default is G_PRIORITY_REGULAR. Unused priority numbers are reserved for future use.

Table 5–8 Priority Levels

Level	Number
G_PRIORITY_HIGHEST	1
G_PRIORITY_SPECIALITY_FLAG	6
G_PRIORITY_REGULAR	7

5.4.1 Start_Request

Call the Start_Request first to generate the history request identifier (x_request_id) that is used as the tracking identifier for the fulfillment request.

Procedure Specification

```
PROCEDURE Start_Request
( 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,
  x_return_status    OUT VARCHAR2,
  x_msg_count        OUT NUMBER,
  x_msg_data         OUT VARCHAR2,
  x_request_id       OUT NUMBER
);
```

Parameter Descriptions

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

Table 5–9 Start Request IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.

Table 5–9 Start Request IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_commit	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_validation_level	NUMBER	No	This values determines whether validation should occur or not. This variable is checked against FND_API.G_VALID_LEVEL_NONE and if it is greater than the latter, validation occurs.

Parameter Descriptions

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

Table 5–10 Start Request OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_request_id	VARCHAR2	The fulfillment request identifier.

5.4.2 Get_Content_XML

Warning: Oracle does not recommend, nor does it support, the creation of XML fulfillment requests by any other means than through these published APIs.

Information on how the XML request is formed is provided solely to facilitate understanding of the fulfillment request process.

Use the Get_Content_XML API to generate one, or more, XML <item> elements for a fulfillment request. The content is formed based on the parameters passed to the API, and the API returns the XML <item> as parameter x_content_xml.

This API performs the following tasks:

- It verifies that the `p_content_id`, `p_media_type`, `p_content_type` and `p_request_id` parameters were passed to it. If not supplied, the API exits with an unexpected error condition.
- It forms the XML `<item>` element using the parameters passed to it.
- It passes the `<item>` element back to the calling application using the `x_content_xml` output parameter.

Note: The `Get_Content_XML` API generates only one `<item>` parameter for each API call. If you want to submit multiple content items for a single fulfillment request, then you must do the following:

- append the `x_content_xml` content from the previous calls to the current one
- submit the resulting concatenated `x_content_xml` string

The `Send_Request` API takes this parameter and merges it with the XML request that it forms, submitting the complete request to the Request queue.

Fulfillment Requests

You must use one of the following content types (`p_content_type`) in creating a valid fulfillment request:

- QUERY
- COLLATERAL
- ATTACHMENT
- DATA

If any other value than these are passed to it, the `Get_Content_XML` API exits with an unexpected error.

The following table lists example values for the `p_content_id` and the `p_content_nm` parameters used with query and collateral fulfillment requests.

Table 5–11 Example Parameter Values for Query and Collateral Requests

<code>p_content_id</code>	<code>p_content_nm</code>
7008	ADDRESS SELECT
7009	ORDER SHIP HEADER
7010	ORDER INVOICE HEADER
7011	ORDER CONFIRM
7012	ORDER SHIP LINE
7013	ORDER EDIT
7014	ORDER EDIT PROCESS
7015	ORDER SHIP LINE PROCESS
7016	ORDER SHIP HEADER PROCESS

The following table lists example values for the `p_content_id` and the `p_content_nm` parameters used with attachment fulfillment requests.

Table 5–12 Example Parameter Values for Attachment Requests

<code>p_content_id</code>	<code>p_content_nm</code>
20281	/appltop02/115/ar/11.5.0/help/US/AR00062648.htm
25567	/appltop02/115/gmd/11.5.0/help/US/FMrchrplz.htm
25570	/appltop02/115/gmd/11.5.0/help/US/FMsuce.htm
25573	/appltop02/115/gmd/11.5.0/help/US/FMsuerau.htm

An Example `<item>` XML Element

The `Get_Content_XML` API forms the `<item>` element in the XML fulfillment request. Following is an example of an `<item>` element generated as part of an attachment fulfillment request, with an email media type. The `content_id` parameter is required for this API. The `<item>` element is passed back to the calling application as output parameter `x_content_xml`.

```
<item>
  <item_destination>
    <media_type>
```

```

        <email>janesmith@xyz.com</email>
    </media_type>
</item_destination>
<item_content content_id="25570"
    content_nm="/applt02/115/gmd/11.5.0/help/US/FMsuce.htm"
    quantity="1"
    usernote="As requested.">
    <attachment></attachment>
</item_content>
</item>

```

Procedure Specification

PROCEDURE Get_Content_XML

```

( 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,
  x_return_status        OUT VARCHAR2,
  x_msg_count            OUT NUMBER,
  x_msg_data             OUT VARCHAR2,
  p_content_id           IN NUMBER,
  p_content_nm           IN VARCHAR2 := FND_API.G_MISS_CHAR,
  p_document_type        IN VARCHAR2 := FND_API.G_MISS_CHAR, -- deprecated
  p_quantity             IN NUMBER   := 1,
  p_media_type           IN VARCHAR2,
  p_printer              IN VARCHAR2 := FND_API.G_MISS_CHAR,
  p_email                IN VARCHAR2 := FND_API.G_MISS_CHAR,
  p_fax                  IN VARCHAR2 := FND_API.G_MISS_CHAR,
  p_file_path            IN VARCHAR2 := FND_API.G_MISS_CHAR,
  p_user_note            IN VARCHAR2 := FND_API.G_MISS_CHAR,
  p_content_type         IN VARCHAR2,
  p_bind_var             IN G_VARCHAR_TBL_TYPE := L_VARCHAR_TBL,
  p_bind_val             IN G_VARCHAR_TBL_TYPE := L_VARCHAR_TBL,
  p_bind_var_type        IN G_VARCHAR_TBL_TYPE := L_VARCHAR_TBL,
  p_request_id           IN NUMBER,
  x_content_xml          OUT VARCHAR2
);

```

Current Version

1.0

Parameter Descriptions

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

Table 5–13 Get Content XML IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_validation_level	NUMBER	No	This values determines whether validation should occur or not. This variable is checked against FND_API.G_VALID_LEVEL_NONE and if it is greater than the latter, validation is performed.
p_content_id	NUMBER	Yes	This is a unique numeric identifier associated with p_content_nm. If not provided in the current API call, an error message is generated and the API exits. The content_id attribute is used by the <item><item_content> element. See Fulfillment Requests on page 5-15 for details.
p_content_nm	VARCHAR2	No	One of the following: <ul style="list-style-type: none"> ▪ Order information for query and collateral requests ▪ Path and file name for attachment requests The content_nm attribute is used by the <item><item_content> element. See Fulfillment Requests on page 5-15 for details.
p_document_type	VARCHAR2	No	Deprecated, currently unused.
p_quantity	NUMBER	Yes	Quantity of the content to be sent (set always to 1). The quantity attribute is used by the <item><item_content> element.

Table 5–13 Get Content XML IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_media_type	VARCHAR2	Yes	Media type of the content generated by the Get_Content_XML API: <ul style="list-style-type: none"> ▪ FAX ▪ EMAIL ▪ PRINTER ▪ PATH If not provided in the current API call, an error message is generated and the API exits.
p_printer	VARCHAR2	No	Supplied printer address, if p_media_type is PRINTER.
p_email	VARCHAR2	No	Supplied email address, if p_media_type is EMAIL.
p_fax	VARCHAR2	No	Supplied fax address, if p_media_type is FAX.
p_file_path	VARCHAR2	No	Supplied file path, if p_media_type is PATH.
p_user_note	VARCHAR2	No	Any note that the agent wants to attach: the user_note attribute is used by the <item><item_content> element.
p_content_type	VARCHAR2	Yes	Valid content types are: <ul style="list-style-type: none"> ▪ QUERY ▪ COLLATERAL ▪ ATTACHMENT ▪ DATA If not provided in the current API call, an error message is generated and the API exits. This parameter is used to select the content type for the <item><item_content> element.
p_bind_var	G_VARCHAR_TBL_TYPE := L_VARCHAR_TBL	No	Used with QUERY and DATA fulfillment requests. The <bind_var> element is a sub element of the <item> element.

Table 5–13 Get Content XML IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_bind_val	G_VARCHAR_TBL_TYPE := L_VARCHAR_TBL	No	Used with QUERY and DATA fulfillment requests. The bind_object attribute is used by the <item><bind_var> element.
p_bind_var_type	G_VARCHAR_TBL_TYPE := L_VARCHAR_TBL	No	Used with QUERY and DATA fulfillment requests. The bind_var attribute is used by the <item><bind_var> element.
p_request_id	NUMBER	Yes	This unique identifier for the fulfillment request is generated by the Start_Request API. If not provided in the current API call, an error message is generated and the API exits. The request_id attribute is used by the <ffm_request> element.

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

Table 5–14 Get Content XML OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_content_xml	VARCHAR2	Output content XML (one, or more <item> elements).

5.4.3 Submit_Request

Use the Submit_Request procedure to submit a single new fulfillment request to the Fulfillment engine. This API calls the Send_Request API.

- See Section 5.4.4, "Send_Request" on page 5-24 for details of that API.
- See Section 5.3, "Forming an XML Request" on page 5-4 for details on creating the XML fulfillment request.

Procedure Specification

```

PROCEDURE Submit_Request
(
  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,
  x_return_status    OUT VARCHAR2,
  x_msg_count        OUT NUMBER,
  x_msg_data         OUT VARCHAR2,
  p_template_id      IN NUMBER    := FND_API.G_MISS_NUM,
  p_subject          IN VARCHAR2  := FND_API.G_MISS_CHAR,
  p_party_id         IN NUMBER    := FND_API.G_MISS_NUM,
  p_party_name       IN VARCHAR2  := FND_API.G_MISS_CHAR,
  p_user_id          IN NUMBER,
  p_priority         IN NUMBER    := G_PRIORITY_REGULAR,
  p_source_code_id   IN NUMBER    := FND_API.G_MISS_NUM,
  p_source_code      IN VARCHAR2  := FND_API.G_MISS_CHAR,
  p_object_type      IN VARCHAR2  := FND_API.G_MISS_CHAR,
  p_object_id        IN NUMBER    := FND_API.G_MISS_NUM,
  p_order_id         IN NUMBER    := FND_API.G_MISS_NUM,
  p_doc_id           IN NUMBER    := FND_API.G_MISS_NUM,
  p_doc_ref          IN VARCHAR2  := FND_API.G_MISS_CHAR,
  p_server_id        IN NUMBER    := FND_API.G_MISS_NUM,
  p_queue_response   IN VARCHAR2  := FND_API.G_FALSE,
  p_extended_header  IN VARCHAR2  := FND_API.G_MISS_CHAR,
  p_content_xml      IN VARCHAR2,
  p_request_id       IN NUMBER
);

```

Current Version

1.0

Parameter Descriptions

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

Table 5–15 *Submit Request IN Parameters*

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	The api_version attribute is used by the <ffm_request> element. See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.

Table 5–15 Submit Request IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_validation_level	NUMBER		This values determines whether validation should occur or not. This variable is checked against FND_API.G_VALID_LEVEL_NONE and if it is greater than the latter, validation occurs.
p_template_id	VARCHAR2	No	The Fulfillment request template identifier, (request templates are predefined and stored in the database). This value is NULL if the request does not correspond to a predefined template. The template attribute is used by the <ffm_request> element.
p_subject	VARCHAR2	Yes	The subject attribute is used by the <app_info> element.
p_party_id	NUMBER	Yes	The customer numeric identifier: the party_id attribute is used by the <app_info> element.
p_party_name	VARCHAR2	Yes	Customer name: the party_name attribute is used by the <app_info> element.
p_user_id	NUMBER	Yes	Agent or user identifier: the user_id attribute is used by the <app_info> element.
p_priority	NUMBER	Yes	The priority for this fulfillment request: the priority attribute is used by the <ffm_request> element. See The Fulfillment APIs, on page 5-12.
p_source_code_id	VARCHAR2	No	Campaign or promotion field: the source_code_id attribute is used by the <app_info> element.
p_source_code	VARCHAR2	No	Campaign or promotion field: the source_code attribute is used by the <app_info> element.
p_object_type	VARCHAR2	No	Campaign or promotion field: the object_type attribute is used by the <app_info> element.
p_object_id	VARCHAR2	No	Campaign or promotion field: the object_id attribute is used by the <app_info> element.
p_order_id	VARCHAR2	No	Unique identifier of the field: the order_id attribute is used by the <app_info> element.
p_doc_id	NUMBER	No	Document identifier, if not provided, set to p_request_id: the doc_id attribute is used by the <app_info> element.

Table 5–15 Submit Request IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_doc_ref	VARCHAR2	No	Document reference, if not provided, set to JFUF (1-to-1 Fulfillment): the doc_ref attribute is used by the <app_info> element.
p_server_id	VARCHAR2	Yes	Unique identifier of the Fulfillment server. It is the primary key of table JTF_FM_SERVICE. This value determines the queue into which the request is to be placed.
p_queue_response	VARCHAR2	No	Boolean value: Used to specify if the response needs to be queued in the Response queue: <ul style="list-style-type: none"> ▪ TRUE: Put the response for this request on the response queue. Applications listening for a response on the AQ response queue can use this feature. ▪ FALSE: (Default) Do not put information on the response queue. The queue_response attribute is used by the <ffm_request> element.
p_extended_header	VARCHAR2	No	Use to insert a character string in the form of one or more <extended_header> elements into the XML request. The <extended_header> element is used by the <app_info> element.
p_content_xml	VARCHAR2	Yes	The XML content formed by calling the Get_Content_XML API. This content is merged with that generated by the Send_Request API to create the final XML request. The p_content_xml parameters forms the <item> element.
p_request_id	NUMBER	Yes	This unique identifier for the fulfillment request is generated by the Start_Request API. If not provided in the current API call, an error message is generated and the API exits. The request_id attribute is used by the <ffm_request> element.

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

Table 5–16 *Submit Request OUT Parameters*

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

5.4.4 Send_Request

The Send_Request procedure is called internally by the Submit_Request API. It creates the final XML document. New for release 11.5.6 is parameter p_preview.

Parameter p_preview

The p_preview parameter provides the ability to preview a fulfillment request before sending it to its destination. You can preview a fulfillment request through the Fulfillment Administrator Console. You can also submit or delete the request through the Administrator Console.

Previewing allows for a visual inspection of a fulfillment request prior to deciding to send or cancel it. Viewing the preview through a browser also gives the option of printing through the browser. Printing a previewed request through a browser does not remove the request from the status table.

The value of p_preview determines whether the request is to be immediately dispatched, or stored in the database to be visually inspected.

- If p_preview is set to TRUE, then the request is marked as PREVIEW, and written to the Request queue, but not dispatched.
- If p_preview is set to FALSE, then the request is written to the Request queue, and dispatched in the usual fashion.

Note: The fulfillment request is written to the Request queue regardless of the value set for parameter p_preview.

Submitting a Fulfillment Request

When a fulfillment request is submitted by the Submit_Request API, the Send_Request API performs the following tasks:

- It forms the <ffm_request> and <app_info> XML request elements.
- It merges the <item> element (the p_content_xml parameter) into the fulfillment request.
- It sends the fully formed XML request to the Request queue.
- It updates the history and status tables in the database.

Note: The content generated by the Get_Content_XML is inserted into the final XML document formed by the Send_Request API, and then placed on the Advanced Queue.

See Section 5.3, "Forming an XML Request" on page 5-4 for details on how XML requests are formed.

Procedure Specification

PROCEDURE Send_Request

```
( 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,
  x_return_status    OUT VARCHAR2,
  x_msg_count        OUT NUMBER,
  x_msg_data         OUT VARCHAR2,
  p_template_id     IN  NUMBER    := FND_API.G_MISS_NUM,
  p_subject          IN  VARCHAR2 := FND_API.G_MISS_CHAR,
  p_party_id        IN  NUMBER    := FND_API.G_MISS_NUM,
  p_party_name      IN  VARCHAR2 := FND_API.G_MISS_CHAR,
  p_user_id         IN  NUMBER,
  p_priority        IN  NUMBER    := G_PRIORITY_REGULAR,
  p_source_code_id  IN  NUMBER    := FND_API.G_MISS_NUM,
  p_source_code     IN  VARCHAR2 := FND_API.G_MISS_CHAR,
  p_object_type     IN  VARCHAR2 := FND_API.G_MISS_CHAR,
  p_object_id       IN  NUMBER    := FND_API.G_MISS_NUM,
  p_order_id       IN  NUMBER    := FND_API.G_MISS_NUM,
  p_doc_id          IN  NUMBER    := FND_API.G_MISS_NUM,
  p_doc_ref         IN  VARCHAR2 := FND_API.G_MISS_CHAR,
  p_server_id      IN  NUMBER    := FND_API.G_MISS_NUM,
```

```

p_queue_response    IN  VARCHAR2 := FND_API.G_FALSE,
p_extended_header  IN  VARCHAR2 := FND_API.G_MISS_CHAR,
p_content_xml      IN  VARCHAR2,
p_request_id       IN  NUMBER,
p_preview          IN  VARCHAR2 := FND_API.G_FALSE
);

```

Current Version

1.0

Parameter Descriptions

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

Table 5–17 Send Request IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_validation_level	NUMBER		This value determines whether validation should occur or not. This variable is checked against FND_API.G_VALID_LEVEL_NONE and if it is greater than the latter, validation is performed.
p_template_id	VARCHAR2		The Fulfillment request template identifier, (request templates are predefined and stored in the database). This value is null if the request does not correspond to a predefined template. The template attribute is used by the <ffm_request> element.
p_subject	VARCHAR2	Yes	The subject attribute is used by the <app_info> element.
p_party_id	NUMBER	Yes	The customer numeric identifier: the party_id attribute is used by the <app_info> element.

Table 5–17 Send Request IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_party_name	VARCHAR2	Yes	Customer name: the party_name attribute is used by the <app_info> element.
p_user_id	NUMBER	Yes	Agent or user identifier: the user_id attribute is used by the <app_info> element.
p_priority	NUMBER	No	The priority for this fulfillment request: the priority attribute is used by the <ffm_request> element. See The Fulfillment APIs, on page 5-12.
p_source_code_id	VARCHAR2	No	Campaign or promotion field: the source_code_id attribute is used by the <app_info> element.
p_source_code	VARCHAR2	No	Campaign or promotion field: the source_code attribute is used by the <app_info> element.
p_object_type	VARCHAR2	No	Campaign or promotion field: the object_type attribute is used by the <app_info> element.
p_object_id	VARCHAR2	No	Campaign or promotion field: the object_id attribute is used by the <app_info> element.
p_order_id	VARCHAR2	No	Unique identifier of the order: the order_id attribute is used by the <app_info> element.
p_doc_id	NUMBER	No	Document identifier, if not provided, set to p_request_id: the doc_id attribute is used by the <app_info> element.
p_doc_ref	VARCHAR2	No	Document reference, if not provided, set to JFUF (1-to-1 Fulfillment): the doc_ref attribute is used by the <app_info> element.
p_server_id	VARCHAR2	Yes	Unique identifier of the Fulfillment server. It is the primary key of table JTF_FM_SERVICE. This value determines the fulfillment request queue.

Table 5–17 Send Request IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_queue_response	VARCHAR2	No	<p>Boolean value: Used to specify if the response needs to be queued in the Response queue:</p> <ul style="list-style-type: none"> ▪ TRUE: Put the response for this request on the response queue. Applications listening for a response on the AQ response queue can use this feature. ▪ FALSE: (Default) Do not put information on the response queue. <p>The queue_response attribute is used by the <ffm_request> element.</p>
p_extended_header	VARCHAR2	No	<p>Use to insert a character string in the form of one or more <extended_header> elements into the XML request.</p> <p>The <extended_header> element is used by the <app_info> element.</p>
p_content_xml	VARCHAR2	Yes	<p>The XML content formed by calling the Get_Content_XML API. This content is merged with that generated by the Send_Request API to create the final XML request.</p> <p>The p_content_xml parameters forms the <item> element.</p>
p_request_id	NUMBER	Yes	<p>This unique identifier for the fulfillment request is generated by the Start_Request API. If not provided in the current API call, an error message is generated and the API exits.</p> <p>The request_id attribute is used by the <ffm_request> element.</p>
p_preview	VARCHAR2	Yes	<p>Boolean value: Used to specify whether or not this is a preview request:</p> <ul style="list-style-type: none"> ▪ TRUE: Preview this document. ▪ FALSE: Do not preview this document, instead send it to the Fulfillment Request queue.

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

Table 5–18 Send Requests OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

5.4.5 Cancel_Request

Use the Cancel_Request API to cancel a fulfillment request that is already in the system. Only messages that are still in the Request queue can be cancelled. Once the fulfillment engine dequeues the message from the queue, it is no longer possible to cancel the fulfillment request.

This API performs the following tasks:

- It determines the name of the request queue for the request to be canceled, based on the server identifier.
- It removes the fulfillment request from the request queue.
- It deletes the entry for that particular fulfillment request from the status table.
- It sets the outcome code in the fulfillment request history table to CANCELLED.

Procedure Specification

```
PROCEDURE Cancel_Request
(
  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,
  x_return_status    OUT VARCHAR2,
  x_msg_count        OUT NUMBER,
  x_msg_data         OUT VARCHAR2,
  p_request_id       IN  NUMBER,
  p_submit_dt_tm     IN  DATE      := FND_API.G_MISS_DATE
);
```

Current Version

1.0

Parameter Descriptions

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

Table 5–19 Cancel Request IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	No	See "Standard IN Parameters" on page 1-2.
p_validation_level	NUMBER	No	This values determines whether validation should occur or not. This variable is checked against FND_API.G_VALID_LEVEL_NONE and if it is greater than the latter, validation is performed.
p_request_id	VARCHAR2	Yes	This unique identifier for the fulfillment request is generated by the Start_Request API. If not provided in the current API call, an error message is generated and the API exits. The request_id attribute is used by the <ffm_request> element.
p_submit_dt_tm	DATE	No	Date and timestamp of the request submission.

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

Table 5–20 Cancel Request OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

5.4.6 Resubmit_Request

Use the Resubmit_Request procedure to resubmit a fulfillment request that failed due to a configuration or database error.

Note: As the API retrieves the XML request from the database, you cannot modify a fulfillment request and resubmit it. Use this API only to submit the same request again.

This API performs the following tasks:

- It verifies that the fulfillment request to be resubmitted exists in the system, and retrieves the fulfillment request from the request history table, based on the request identifier, p_request_id.
- It determines the name of the request queue for the request, based on the server identifier, p_server_id.
- It updates the time stamp (to SYSDATE), and sets the status to RESUBMITTED_REQUEST in the request XML.
- It sends the modified request to the Request queue.
- It sets the outcome code to RESUBMITTED, and increments by one the resubmit count in the request history record.
- It inserts new status and history records into the database.

Procedure Specification

```
PROCEDURE Resubmit_Request
( 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,
  x_return_status    OUT VARCHAR2,
  x_msg_count        OUT NUMBER,
  x_msg_data         OUT VARCHAR2,
  p_request_id       IN  NUMBER
);
```

Current Version

1.0

Parameter Descriptions

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

Table 5–21 Resubmit Request IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_validation_level	NUMBER	Yes	This value determines whether validation should occur or not. This variable is checked against FND_API.G_VALID_LEVEL_NONE and if it is greater than the latter, validation is performed.
p_request_id	NUMBER	Yes	This unique identifier for the fulfillment request is generated by the Start Request API. If not provided in the current API call, an error message is generated and the API exits. The request_id attribute is used by the <ffm_request> element.

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

Table 5–22 Resubmit Request OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

5.5 Data Structure Specifications

The Fulfillment APIs use several different PL/SQL tables structures to store information. The following table lists the PL/SQL tables and provides the SQL definition.

Table 5–23 Fulfillment PL/SQL Tables

Name	Definition
G_VARCHAR_TBL_TYPE	TYPE G_VARCHAR_TBL_TYPE IS TABLE OF VARCHAR2(1000) INDEX BY BINARY_INTEGER;
G_NUMBER_TBL_TYPE	TYPE B_NUMBER_TBL_TYPE IS TABLE OF NUMBER INDEX BY BINARY_INTEGER;

5.5.1 History Records

The Fulfillment APIs use the following parameters to construct a history record:

- OUTCOME_CODE
- SOURCE_CODE_ID
- SOURCE_CODE
- OBJECT_TYPE
- OBJECT_ID
- ORDER_ID
- RESUBMIT_COUNT
- OUTCOME_DESC
- REQUEST
- SUBMIT_DT_TM
- SERVER_ID
- TEMPLATE_ID
- APP_INFO
- GROUP_ID
- HIST_REQ_ID
- USER_ID

- PRIORITY
- PROCESSED_DT_TM
- MESSAGE_ID
- LAST_UPDATE_DATE
- LAST_UPDATED_BY
- CREATION_DATE
- CREATED_BY
- LAST_UPDATE_LOGIN
- ORD_ID
- F_DELETEDFLAG
- OBJECT_VERSION_NUMBER

5.5.2 Status Records

The Fulfillment APIs use the following parameters to construct a status record:

- ORDER_ID
- SOURCE_CODE_ID
- SOURCE_CODE
- OBJECT_TYPE
- OBJECT_ID
- REQUEST_ID
- REQUEST_STATUS
- REQUEST_MODE
- SUBMIT_DT_TM
- SERVER_ID
- TEMPLATE_ID
- USER_ID
- GROUP_ID
- PRIORITY

- MESSAGE_ID
- LAST_UPDATE_DATE
- LAST_UPDATED_BY
- CREATION_DATE
- CREATED_BY
- LAST_UPDATE_LOGIN
- ORG_ID
- F_DELETEDFLAG
- OBJECT_VERSION_NUMBER

5.6 Messages and Notifications

The APIs contained in package JTF_FM_REQUEST_GRP generate messages and notifications as needed. In addition, there are messages that are common to all of the Fulfillment APIs. These messages are detailed in the following sections.

- Common Status Messages
- Status Messages for Get_Content_XML
- Status Messages for Send_Request
- Status Messages for Cancel_Request

The messages and notifications generated by each API are described in the following sections.

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

5.6.1 Common Messages

The following table lists the messages and notifications that are common to many of the APIs contained in package JTF_FM_REQUEST_GRP.

Table 5–24 Common Status Messages

Number	Type	Name	Text
210925	E	JTF_FM_API_QUEUE_NOT_FOUND	Could not find queue names for Server ID &ARG1.
210927	E	JTF_FM_API_REQUEST_NOTFOUND	Could not find fulfillment request for Request ID &ARG1 in the database.
210932	E	JTF_FM_API_MISSING_REQUEST_ID	Value for Request ID cannot be NULL.
210939	E	JTF_FM_API_DEBUG_MESSAGE	1-to-1 Fulfillment API: &ARG1.
210940	S	JTF_FM_API_SUCCESS_MESSAGE	The &ARG1 API has completed successfully.

5.6.2 Get_Content_XML

The following table lists the messages and notifications that are used by the Get_Content_XML API.

Table 5–25 Status Messages for Get_Content_XML

Number	Type	Name	Text
210922	E	JTF_FM_API_INVALID_MEDIATYPE	Invalid media type &ARG1 passed for Content ID &ARG2. Allowed media types are EMAIL, FAX, PRINTER and PATH.
210923	E	JTF_FM_API_MULTIPLE_MEDIATYPE	Multiple media types were passed for Content ID = &ARG1. Only one media type is allowed for each content.
210924	E	JTF_FM_API_INVALID_CONTENT	Invalid content type &ARG1 passed for Content ID &ARG2. Allowed content types are QUERY, COLLATERAL, ATTACHMENT or DATA.
210929		JTF_FM_API_MISSING_CONTENT_ID	Value for Content ID cannot be NULL.
210930	E	JTF_FM_API_MISSING_MEDIA_TYPE	Value for Media Type cannot be NULL.
210931	E	JTF_FM_API_MISSING_CONTENTTYPE	Value for Content Type cannot be NULL.
210974	E	JTF_FM_DISP_CONTENT_NOT_FOUND	Cannot find document for Content ID &ARG1.

5.6.3 Send_Request

The following table lists the messages and notifications that are used by the Send_Request API.

Table 5–26 Status Messages for Send_Request

Number	Type	Name	Text
210933	E	JTF_FM_API_MISSING_USER_ID	Value for User ID cannot be NULL.
210934	E	JTF_FM_API_MISSING_SERVER_ID	Value for Server ID cannot be NULL.
210936	E	JTF_FM_API_MISSING_CONTENT_XML	Value for Content XML cannot be NULL.
210942	E	JTF_FM_API_REQUESTID_REUSED	Cannot use a previously submitted request ID to submit a new request.
210985	E	JTF_FM_API_NOT_PREVIEWED	The request submitted for preview has not been previewed.
210986	E	JTF_FM_API_ALREADY_PREVIEWED	The request submitted for preview has already been previewed.
210987	S	JTF_FM_API_PREVIEWED_SUBMITTED	The request for preview has been submitted.

5.6.4 Cancel_Request

The following table lists the messages and notifications that are used by Cancel_Request API.

Table 5–27 Status Messages for Cancel_Request

Number	Type	Name	Text
210928	E	JTF_FM_API_CANCEL_FAILED	The request could not be cancelled.
210943	S	JTF_FM_API_CANCEL_SUCCESS	The request(s) in the queue has been successfully cancelled.

Note Public APIs

A note is a record of descriptive information that has been generated by a user and which can be referenced. Notes can be used from different applications in the Oracle E-Business suite to access the comment log that relates to a specific transaction.

In various business transactions, such as service requests, customer orders, sales, and marketing transactions, an agent or customer support representative needs to record information about the transactions performed. Notes help to categorize these business transactions.

6.1 Package JTF_NOTES_PUB

All public procedures (APIs) relating to creating and updating notes are stored in the JTF_NOTES_PUB package. There are two public Note APIs:

- Create Notes
- Update Notes

6.1.1 Note Public APIs

The following table describe the public APIs which are discussed in this chapter.

Table 6–1 The Public Notes APIs

Procedure	Description
Create Note	Creates a note (record) and writes it to the database.
Update Note	Updates an existing note (record) and writes the updated version to the database.

6.1.2 Note Source and Note Context

The **note source** is a business object that owns the note. It is always one of the following:

- the creator of the note
- the initiator of the note
- the parent of the note

This could be a party, a service request, or an order, for example. In any case, the note does not make sense without the source. You must specify the source of a note when creating the note.

The **note context** is a business object that is related to the note, but is not its source. For example, a note is created for a task, but, in addition, it is related to a party, an opportunity and an employee. This information is useful, but not mandatory.

The following table describes some of the important parameters related to both note source and note context.

Table 6–2 Note Source and Context Parameters

Parameter	Description
p_source_object_code	This parameter contains (references) the source business object. For example, this could be a party, a task, or a service request. This parameter is not the software module that created the note. For example, it is not Customer Care, or the Contact Center.
p_source_object_id	This parameter relates to the business object specified in p_source_object_code, but refers to a particular instance of the business object. For example, this could be the party_id for a party, or the service_request_id of a service request.
p_context	This is a short description field for the context business object.
p_note_context_type	This value is passed as a parameter in the internal call to the Create_Note_Context API. It is the business object that is related to, but is not the source of, the note. It is similar to p_source_object_code.
p_note_context_type_id	This value is passed as a parameter in the internal call to the Create_Note_Context API. It is similar to p_source_object_id.

The p_note_context_type parameter and the p_note_context_type_id parameter are stored as data items in the p_jtf_note_contexts_tab record. See Section 6.2, "Data Structure Specifications" on page 6-12 for details of this data structure.

6.1.3 Party Relationships

For notes related to a party business object (no matter what party type), use **only** the PARTY type definition. That is, do not use:

- PARTY_PERSON
- PARTY_GROUP
- PARTY_RELEATIONSHIP
- PARTY_ORGANIZATION

You must define the note as type PARTY to be able to find, across the entire CRM suite, any note created for a specific party.

Note: It is not necessary to populate the source object into the notes context table. This action is performed automatically by the Notes APIs.

Note Contexts that Relate to a Customer

If you create a note for a source that contains customer information, then you **must** pass that customer information as part of the context for that note. This ensures that all notes relating to that customer can be viewed in a single place. To do this, set the value for p_note_context_type to PARTY.

Note Contexts that Relate to a Relationship

If you create a note for a source that contains customer information that includes relationship information (for example, a person at an organization), then you must create three separate instances of p_jtf_note_contexts_tab records (discussed in Section 6.2, "Data Structure Specifications" on page 6-12) that contain the following:

1. Information related to the organization in which the person works.
2. The party identifier for party of type "relationship." Do not use PARTY_RELATIONSHIP, instead use PARTY for the p_note_context_type parameter.
3. The party identifier (party_id) for the person.

Example of a Party Relationship

The following table lists information needed to specify the relationship of John Doe at Oracle (john.doe@oracle). It is stored in the PARTY tables in the database.

Party ID	Party Type	Party Name
1000	ORGANIZATION	Oracle
1100	PERSON	John Doe
1200	PARTY_RELATIONSHIP	John.Doe@Oracle

The following table lists the values for the context information needed to specify John.Doe@Oracle. The context business object is the `p_note_context_type` parameter. The context business object identifier is `p_context_type_id`.

<code>p_note_context_type</code>	<code>p_context_type_id</code>
PARTY	1000
PARTY	1100
PARTY	1200

6.1.4 Create Note

Use the `Create_Note` API to generate a text note. This API provides for the following functionality:

- It creates a note record and writes it to the database.
- It writes any related contexts to the database.
- It provides "hooks" to extend or customize the basic API functionality.

The User Hooks Functionality

User or customer hooks fall into two categories:

- Hooks for use by internal CRM applications or modules. These are known as "vertical" hooks.
- Hooks for use by those outside of Oracle. These are known as "user" hooks.

The `Create_Notes` API provides for both pre- and postprocessing of user code. Customers external to Oracle seeking to customize the API functionality should contact Oracle Consulting for assistance.

Example Note Parameter Values

The following table lists the important parameters associated with a note that was created and attached to service request 4039. This note was created as a private note, on September 2, 2000.

Table 6-1 Note Parameter Value Example

Parameter	Value
p_parent_note_id	NULL
p_jtf_note_id	209
p_source_object_id	4039
p_source_object_code	SR
p_note_status	E
p_entered_by	1000194
p_entered_date	09/02/2000 12:42:22 PM
p_last_update_date	09/02/2000 12:42:22 PM
p_last_updated_by	1000194
p_creation_date	09/02/2000 12:42:22 PM
p_created_by	1000194
p_last_update_login	519018
p_note_type	AS_USER

Procedure Specification

```

PROCEDURE Create_Note
(
  p_parent_note_id      IN NUMBER DEFAULT NULL,
  p_jtf_note_id        IN NUMBER DEFAULT NULL,
  p_api_version         IN NUMBER,
  p_init_msg_list       IN VARCHAR2  DEFAULT FND_API.G_FALSE,
  p_commit              IN VARCHAR2  DEFAULT FND_API.G_FALSE,
  p_validation_level    IN NUMBER     DEFAULT FND_API.G_VALID_LEVEL_FULL,
  x_return_status       OUT VARCHAR2,
  x_msg_count           OUT NUMBER,
  x_msg_data            OUT VARCHAR2,
  p_org_id              IN NUMBER     DEFAULT NULL,
  p_source_object_id    IN NUMBER,
  p_source_object_code  IN VARCHAR2,
  p_notes               IN VARCHAR2,

```

```

p_notes_detail          IN VARCHAR2 DEFAULT NULL,
p_note_status          IN VARCHAR2 DEFAULT 'I',
p_entered_by          IN NUMBER,
p_entered_date        IN DATE,
x_jtf_note_id          OUT NUMBER,
p_last_update_date    IN DATE,
p_last_updated_by     IN NUMBER,
p_creation_date       IN DATE,
p_created_by          IN NUMBER  DEFAULT FND_GLOBAL.USER_ID,
p_last_update_login   IN NUMBER  DEFAULT FND_GLOBAL.LOGIN_ID,
p_attribute1          IN VARCHAR2  DEFAULT NULL,
p_attribute2          IN VARCHAR2  DEFAULT NULL,
p_attribute3          IN VARCHAR2  DEFAULT NULL,
p_attribute4          IN VARCHAR2  DEFAULT NULL,
p_attribute5          IN VARCHAR2  DEFAULT NULL,
p_attribute6          IN VARCHAR2  DEFAULT NULL,
p_attribute7          IN VARCHAR2  DEFAULT NULL,
p_attribute8          IN VARCHAR2  DEFAULT NULL,
p_attribute9          IN VARCHAR2  DEFAULT NULL,
p_attribute10         IN VARCHAR2  DEFAULT NULL,
p_attribute11         IN VARCHAR2  DEFAULT NULL,
p_attribute12         IN VARCHAR2  DEFAULT NULL,
p_attribute13         IN VARCHAR2  DEFAULT NULL,
p_attribute14         IN VARCHAR2  DEFAULT NULL,
p_attribute15         IN VARCHAR2  DEFAULT NULL,
p_context             IN VARCHAR2  DEFAULT NULL,
p_note_type           IN VARCHAR2  DEFAULT NULL,
p_jtf_note_contexts_tab IN jtf_note_contexts_tbl_type
                                DEFAULT jtf_note_contexts_tab_dflt
);

```

Current Version

1.0

Parameter Descriptions

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

Table 6–3 Create Note IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_parent_note_id	NUMBER	No	Identifier of the parent note, if any.
p_jtf_note_id	NUMBER	No	Note identifier; this must be unique, if it is not, an error is raised. You must use the JTF_NOTES_S sequence to generate valid values.
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_validation_level	NUMBER	No	This values determines whether validation should occur or not. This variable is checked against FND_API.G_VALID_LEVEL_NONE and if it is greater than the latter, validation occurs.
p_org_id	NUMBER	No	An identifier for the organization.
p_source_object_id	NUMBER	Yes	Dependent on parameter p_source_object_code; for example, if the source business object is a service request, this is the service request number. See Section 6.1.2, "Note Source and Note Context" on page 6-2 for more details.
p_source_object_code	VARCHAR2	Yes	The source business object for the note; for example, this could be TASK if the source object is a task, or ESC if the source object is an escalated document. See Section 6.1.2, "Note Source and Note Context" on page 6-2 for more details.
p_notes	VARCHAR2	Yes	The actual note text, passed from the source application.
p_notes_detail	VARCHAR2	No	This parameter is used to store larger notes of up to 32k.

Table 6–3 Create Note IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_notes_status	VARCHAR2	No	Indicates the status of the note. Choices are: <ul style="list-style-type: none"> ▪ Private (E) ▪ Internal (I) ▪ Publish (P) This value must be either E, I, or P. If it is not, an error is raised. If none is provided, I is used.
p_entered_by	NUMBER	Yes	Identifies the Oracle Applications user who entered this record. If a valid user identifier is not provided, an error is raised.
p_entered_date	DATE	Yes	The date that the record was entered. If not provided, SYSDATE is used.
p_last_update_date	DATE	No	The date that this record was last updated. If not provided, SYSDATE is used.
p_last_updated_by	NUMBER	Yes	Identifies the Oracle Applications user who last updated this record.
p_creation_date	DATE	Yes	The date on which this note was first created. If not provided, SYSDATE is used.
p_created_by	NUMBER	Yes	Identifies the Oracle Applications user who first created this record.
p_last_update_login	NUMBER	Yes	Identifies the login session of the Oracle Applications user that last updated the note.
p_attribute1	VARCHAR2	No	Descriptive Flexfield Segment
p_attribute2	VARCHAR2	No	Descriptive Flexfield Segment
p_attribute3	VARCHAR2	No	Descriptive Flexfield Segment
p_attribute4	VARCHAR2	No	Descriptive Flexfield Segment
p_attribute5	VARCHAR2	No	Descriptive Flexfield Segment
p_attribute6	VARCHAR2	No	Descriptive Flexfield Segment
p_attribute7	VARCHAR2	No	Descriptive Flexfield Segment
p_attribute8	VARCHAR2	No	Descriptive Flexfield Segment
p_attribute9	VARCHAR2	No	Descriptive Flexfield Segment
p_attribute10	VARCHAR2	No	Descriptive Flexfield Segment

Table 6–3 Create Note IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_attribute11	VARCHAR2	No	Descriptive Flexfield Segment
p_attribute12	VARCHAR2	No	Descriptive Flexfield Segment
p_attribute13	VARCHAR2	No	Descriptive Flexfield Segment
p_attribute14	VARCHAR2	No	Descriptive Flexfield Segment
p_attribute15	VARCHAR2	No	Descriptive Flexfield Segment
p_context	VARCHAR2	No	This is a short description field.
p_note_type	VARCHAR2	No	The type of note, based on the source business object; for example, this could be SR_PROBLEM, if the note concerns a service request problem. If this value is not valid, an error is raised.
p_jtf_note_contexts_tab	jtf_note_contexts_tbl_type	No	Table of PL/SQL records used to specify the note context. See Section 6.1.2, "Note Source and Note Context" on page 6-2 and Section 6.3, "Messages and Notifications" on page 6-13 for more details.

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

Table 6–4 Create Interaction OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_jtf_note_id	NUMBER	The unique note identifier. This value is the same as p_jtf_note_id.

6.1.5 Update Note

Use the Update_Note API to modify an existing text note. This API provides for the following functionality:

- It update an existing note record and replaces the existing version in the database with the modified version.

- It updates any related context information in the database, if necessary.
- It provides "hooks" to extend or customize the basic API functionality.

Procedure Specification

```

PROCEDURE Update_note
(
  p_api_version          IN  NUMBER,
  p_init_msg_list       IN  VARCHAR2 DEFAULT fnd_api.g_false,
  p_commit              IN  VARCHAR2 DEFAULT fnd_api.g_false,
  p_validation_level    IN  NUMBER   DEFAULT fnd_api.g_valid_level_full,
  x_return_status       OUT VARCHAR2,
  x_msg_count           OUT  NUMBER,
  x_msg_data            OUT  VARCHAR2,
  p_jtf_note_id         IN  NUMBER,
  p_entered_by         IN  NUMBER,
  p_last_updated_by    IN  NUMBER,
  p_last_update_date   IN  DATE     DEFAULT Sysdate,
  p_last_update_login  IN  NUMBER   DEFAULT NULL,
  p_notes              IN  VARCHAR2 DEFAULT fnd_api.g_miss_char,
  p_notes_detail       IN  VARCHAR2 DEFAULT NULL,
  p_append_flag        IN  VARCHAR2 DEFAULT fnd_api.g_miss_char,
  p_note_status        IN  VARCHAR2 DEFAULT 'I',
  p_note_type          IN  VARCHAR2 DEFAULT fnd_api.g_miss_char,
  p_jtf_note_contexts_tab IN jtf_note_contexts_tbl_type
                                DEFAULT jtf_note_contexts_tab_dflt
);

```

Current Version

1.0

Parameter Descriptions

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

Table 6–5 Update Note IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_api_version	NUMBER	Yes	See "Standard IN Parameters" on page 1-2.
p_init_msg_list	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.
p_commit	VARCHAR2	Yes	See "Standard IN Parameters" on page 1-2.

Table 6–5 Update Note IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_validation_level	NUMBER	No	This value determines whether validation should occur or not. The variable is checked against FND_API.G_VALID_LEVEL_NONE and if it is greater than the latter, validation is performed.
p_jtf_note_id	NUMBER	Yes	Note identifier; this must be unique, if it is not, an error is raised. You must use the JTF_NOTES_S sequence to generate valid values.
p_entered_by	NUMBER	Yes	This is employee ID of the person who entered the note.
p_last_updated_by	NUMBER	Yes	Corresponds to the column USER_ID in the table FND_USER, and identifies the Oracle Applications user who updated this record.
p_last_update_date	DATE	No	The date on which this record was updated.
p_last_update_login	NUMBER	No	Corresponds to the column LOGIN_ID in the table FND_LOGINS, and identifies the login session of the user.
p_notes	VARCHAR2	Yes	The updated note text.
p_notes_detail	VARCHAR2	No	Used to create larger notes of up to 32K. If p_append_flag is set to Yes, then p_notes_detail is appended to p_notes.
p_append_flag	VARCHAR2	No	Boolean value: Used to specify if p_notes_detail is to be appended to the existing p_notes_detail: <ul style="list-style-type: none"> ▪ TRUE: Append p_notes_detail to p_notes_detail. ▪ FALSE: Do not append p_notes_detail to p_notes_detail.
p_note_status	VARCHAR2	No	Indicates the status of the note. Choices are: <ul style="list-style-type: none"> ▪ Private ▪ Internal (Default) ▪ Publish <p>Note that only the owner of the note can update the Private status of a note. The owner of the note is defined by the p_entered_by parameter.</p>

Table 6–5 Update Note IN Parameters

Parameter	Data Type	Required	Descriptions and Validations
p_note_type	VARCHAR2	No	This value must be one of the note types defined as lookup codes for JTF_NOTE_TYPE.
p_jtf_note_contexts_tab	jtf_note_contexts_tbl_type	Yes	Table of PL/SQL records to specify the note context. See Section 6.1.2, "Note Source and Note Context" on page 6-2 and Section 6.3, "Messages and Notifications" on page 6-13 for more details.

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

Table 6–6 Update Note OUT Parameters

Parameter	Data Type	Description
x_return_status	VARCHAR2	See "Standard OUT Parameters" on page 1-2.
x_msg_count	NUMBER	See "Standard OUT Parameters" on page 1-2.
x_msg_data	VARCHAR2	See "Standard OUT Parameters" on page 1-2.

6.2 Data Structure Specifications

Package JTF_NOTES_PUB only uses a single data structure. It is record `jtf_note_contexts_rec`. It is used to store information about the context (a related business object) for the note. This record type is used to create both of the following:

- `jtf_note_contexts_tab`
- `jtf_note_contexts_tab_dflt`

Record `jtf_note_contexts_rec_type`

```

TYPE jtf_note_contexts_rec_type IS RECORD
(
  note_context_id      NUMBER,
  jtf_note_id          NUMBER,
  note_context_type    VARCHAR2(240),
  note_context_type_id NUMBER,
  last_update_date     DATE,
  last_updated_by      NUMBER(15),
  creation_date        DATE,
  created_by           NUMBER,

```

```

        last_update_login    NUMBER
    );

```

These parameters have the same meaning as those defined for the individual Notes APIs.

6.3 Messages and Notifications

Package JTF_NOTES_PUB contains the following public APIs:

- Create Note
- Update Note

The messages and notifications generated by each API are described in the following sections.

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

6.3.1 JTF_NOTES_PUB

The following table lists the messages and notifications that the Create Note and Update Note APIs can generate.

Table 6–7 Create Note and Update Note Messages

Type	Name	Text
E	JTF_API_ERR_PRE_CUST_USR_HK	API Programming Error (&API_NAME): Returned Error Status from the Pre Customer User Hook.
E	JTF_API_ERR_PRE_VERT_USR_HK	API Programming Error (&API_NAME): Returned Error Status from the Pre Vertical User Hook.
E	JT_API_ERR_POST_CUST_USR_HK	API Programming Error (&API_NAME): Returned Error Status from the Post Customer User Hook.
E	JTF_API_ERR_POST_VERT_USR_HK	API Programming Error (&API_NAME): Returned Error Status from the Post Vertical User Hook.
E	JTF_API_ALL_INVALID_ARGUMENT	API Programming Error (&API_NAME): The value of "&VALUE" for &PARAMETER is invalid.
E	JTF_API_ALL_MISSING_PARM	API Programming Error (&API_NAME): Parameter &MISSING_PARAM is required and was not passed in.

Table 6–7 Create Note and Update Note Messages

Type	Name	Text
E	JTF_API_ALL_NULL_PARAMETER	API Programming Error (&API_NAME): The value of &NULL_PARAM cannot be NULL.
E	JTF_API_ALL_VALUE_TRUNCATED	API Programming Warning (&API_NAME): The parameter &TRUNCATED_PARAM was truncated because the character value (&VAL_LEN) is longer than the defined width of the VARCHAR2 column (&DB_LEN).

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