KINTANA™

Kintana Open Interface

Version 5.0.0

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Kintana Version 5.0.0

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Chapter 1 Introduction

In addition to the Web-based user interface for processing Requests, Packages, Workflows, Users, and Organizations, Kintana includes an open interface for performing key Kintana transactions. This API uses interface tables within the Kintana database instance. Data added to these interface tables is validated and eventually imported into standard Kintana tables. This generates Kintana entities that can be processed using the Kintana Product Suite.

The Kintana Open Interface allows integration of non-Kintana products with key Kintana entities. Relevant information from these products can be used to generate Kintana Requests and Packages, perform Workflow transactions for Packages Lines and Requests, generate or update Kintana Users from a database or LDAP server, or import an organization model into Kintana.

This document discusses the following topics:

- *Kintana User Open Interface*
- *Organization Unit Open Interface*
- *Kintana Request Open Interface*
- *Kintana Package Open Interface*
- *Workflow Transaction Open Interface*

Note

Integration between the products in Kintana is automatic and does not require user development or user customization involving the Open Interface. For example, no customization work needs to be done to support the creation of Kintana Deliver Packages from Kintana Create Requests.

Who should read this guide

This document provides details for integrating non-Kintana products with Kintana entities. This external system integration guide is used primarily by:

- Administrators responsible for importing users into Kintana from another data source.
- Administers responsible for importing organization models into Kintana.
- Advanced configuration experts who wish to process Kintana transactions using the API, rather than use the Kintana interface.
- Advanced users who wish to import legacy information into Kintana.

Note

You must have a Power license to access the screens and windows described in this document.

How to use this guide

This document provides information and details for using the Kintana Open Interface. Navigate to the desired topic using the Table of Contents or use the Index to find information related to key words.

If viewing this guide online, you can use the Kintana Library page's search functionality to quickly locate desired topics in this and other Kintana publications.

What this guide is NOT

This external system integration guide is not meant to provide detailed information on every screen and field in Kintana. For detailed screen and field information refer to the Kintana Application Reference Guides, accessible from the Kintana Library. See *"Additional Resources"* on page 7 for a list of the most relevant documents.

Additional Resources

Kintana provides the following additional resources to help you successfully implement, configure, maintain and fully utilize your Kintana installation:

- *Kintana Documentation*
- *Kintana Services*
- *Kintana Education*
- *Kintana Support*

Kintana Documentation

Kintana product documentation is linked from the Kintana Library page. This page is accessed by:

- Selecting **HELP > KINTANA LIBRARY** from the Kintana Workbench menu.
- Selecting **HELP > CONTENTS AND INDEX** from the menu bar on the HTML interface. You can then click the **KINTANA LIBRARY** link to load the full list of product documents.

Kintana organizes their documents into a number of user-based categories. The following section defines the document categories and lists the documents currently available in each category.

- *Kintana Business Application Guides*
- *User Guides*
- *Kintana Application Reference Guides*
- *Kintana Instance Administration Guides*
- *External System Integration Guides:*
- *Kintana Solution Guides*
- *Kintana Accelerator Guides*

Kintana Business Application Guides

Provides instructions for modeling your business processes in Kintana. These documents contain process overviews, implementation instructions, and detailed examples.

- Configuring a Request Resolution System (Create)
- Configuring a Deployment and Distribution System (Deliver)
- Configuring a Release Management System
- Configuring the Kintana Dashboard
- Managing Your Resources with Kintana
- Kintana Reports

User Guides

Provides end-user instructions for using the Kintana products. These documents contain comprehensive processing instructions.

- Processing Packages (Deliver) User Guide
- Processing Requests (Create) User Guide
- Processing Projects (Drive) User Guide
- Navigating the Kintana Workbench:
  Provides an overview of using the Kintana Workbench
- Navigating Kintana:
  Provides an overview of using the Kintana (HTML) interface

Kintana Application Reference Guides

Provides detailed reference information on other screen groups in the Kintana Workbench. Also provides overviews of Kintana's command usage and security model.

- Reference: Using Commands in Kintana
- Reference: Kintana Security Model

- Workbench Reference: Deliver
- Workbench Reference: Configuration
- Workbench Reference: Create
- Workbench Reference: Dashboard

- Workbench Reference: Sys Admin
- Workbench Reference: Drive
- Workbench Reference: Environments

Kintana Instance Administration Guides

Provides instructions for administrating the Kintana instances at your site. These documents include information on user licensing and archiving your Kintana configuration data.

- Kintana Migration
- Kintana Licensing and Security Model

External System Integration Guides:

Provides information on how to use Kintana's open interface (API) to access data in other systems. Also discusses Kintana's Reporting meta-layer which can be used by third party reporting tools to access and report on Kintana data.

- Kintana Open Interface

Kintana Solution Guides

Provides information on how to configure and use functionality associated with the Kintana Solutions. Each Kintana Solution provides a User Guide for instructions on end-use and a Configuration Guide for instructions on installing and configuring the Solution.

Kintana Accelerator Guides

Provides information on how to configure and use the functionality associated with each Kintana Accelerator. Kintana Accelerator documents are only provided to customers who have purchased a site-license for that Accelerator.

Note

Kintana provides documentation updates in the Download Center section of the Kintana Web site (http://www.kintana.com/support/download/download_center.htm).

A username and password is required to access the Download Center. These were given to your Kintana administrator at the time of product purchase. Contact your administrator for information on Kintana documentation or software updates.

Kintana Services

Kintana is a strategic partner to its clients, assisting them in all aspects of implementing a Kintana technology chain - from pilot project to full implementation, education, project turnover, and ongoing support. Our Total Services Model tailors solution and service delivery to specific customer needs, while drawing on our own knowledgebank and best practices repository. Learn more about Kintana Services from our Web site:

http://www.kintana.com/services/services.shtml

Kintana Education

Kintana has created a complete product training curriculum to help you achieve optimal results from your Kintana applications. Learn more about our Education offering from our Web site:

http://www.kintana.com/services/education/index.shtml

Kintana Support

Kintana provides web-based interactive support for all products in the Kintana product suite via Contori.

http://www.contori.com

Login to Contori to enter and track your support issue through our quick and easy resolution system. To log in to Contori you will need a valid email address at your company and a password that will be set by you when you register at Contori.

Chapter 2

Kintana User Open Interface

For enterprises with a large number of users, Kintana includes an open interface for user creation. This API uses interface tables within the Kintana database instance. Data added to these interface tables is validated and eventually imported into standard Kintana tables, generating users that can be processed normally within Kintana.

Kintana also supports importing users from an LDAP server. The specifics surrounding user import from an LDAP server are also discussed in this chapter. The following sections detail the data model and process used to import users from an existing database:

- *Data Model*
- *Running the User Open Interface for a Simple Import*
- *Running the User Open Interface for an LDAP Import*
- *Post-Import Activities*

Data Model

The interface tables used by the Kintana user open interface closely relate to the standard tables used to store user and security information. The KNTA_USERS_INT table columns are listed and defined in *Table 2-1*. The KNTA_USER_SECURITY_INT table columns are defined in *Table 2-2*.

Note

Each table includes a “Required for Import” column. This column, and other related requirements are discussed in *“Loading Data into the Interface Tables”* on page 24.

Table 2-1. KNTA_USERS_INT

Column	Required for Import?	DataType	Description
TRANSACTION_ID	N	NUMBER	System-generated identifier.
GROUP_ID	Y	NUMBER	A value from KNTA_INTERFACE_GROUPS_S. This is used to group together all records that have to be processed together.
EXISTS_FLAG	N	VARCHAR2 (1)	Used to indicate if the user already exists in the system.
PROCESS_PHASE	N	NUMBER	Indicates the current stage of the record as it is being processed.
PROCESS_STATUS	N	NUMBER	Indicates the current disposition of the record. The value should initially be set to 1.
CREATED_BY	N	NUMBER	The USER_ID from the KNTA_USERS table for the user that is performing the transaction. If null, the column is derived from CREATED_BY_USERNAME or set to the user currently running the report.
CREATED_BY_USERNAME	N	VARCHAR2(30)	The USERNAME from the KNTA_USERS table for the user that is performing the transaction. This will only be used if the CREATED_BY is null.
CREATION_DATE	N	DATE	The date that the transaction is performed.
DEST_CREATED_BY	N	NUMBER	The USER_ID from the KNTA_USERS table for the user that is performing the transaction. If null, the column is derived from CREATED_BY_USERNAME or set to the user currently running the report.
DEST_CREATION_DATE	N	DATE	The date that the transaction is performed.
DEST_LAST UPDATED_BY	N	NUMBER	The USER_ID from the KNTA_USERS table for the user that last performed the transaction.

Table 2-1. KNTA_USERS_INT

Column	Required for Import?	DataType	Description
DEST_LAST_UPDATE_DATE	N	DATE	The date that the transaction was last updated.
DEST_ENTITY_UPD_DATE	N	DATE	The date that the transaction is performed.
USER_ID	N	NUMBER	Internal identifier for a user. This should normally be left blank and is defaulted from KNTA_USERS_S. If a value is entered, it should be derived from KNTA_USERS_S sequence.
DEST_USER_ID	N	NUMBER	Internal identifier for a user. This should normally be left blank and will be defaulted from KNTA_USERS_S. If a value is entered, it should be derived from KNTA_USERS_S sequence.
USERNAME	Y	VARCHAR2(30)	The username used to Logon.
LOGON_ID	Y (SEE NOTES)	VARCHAR2(30)	Need either this or the USERNAME.
DEST_USERNAME	Y	VARCHAR2(30)	The username that will be used to Logon.
PASSWORD	N	VARCHAR2(40)	The password for the user (defaulted from the report).
PASSWORD_EXPIRATION_DAYS	N (BUT YOU CAN)	NUMBER	Number of days in which the current password expires.
PASSWORD_EXPIRATION_DATE	N (BUT YOU CAN)	DATE	The effective date when the password for user id expires.
EMAIL_ADDRESS	N (BUT YOU CAN)	VARCHAR2(80)	The email address of the user.
FIRST_NAME	Y (IF NOT IN SYSTEM -- SEE DESCRIPTION)	VARCHAR2(30)	The user’s first name.

Table 2-1. KNTA_USERS_INT

Column	Required for Import?	DataType	Description
LAST_NAME	Y (IF NOT IN SYSTEM -- SEE DESCRIPTION)	VARCHAR2(30)	The user’s last name.
START_DATE	N (BUT YOU CAN)	DATE	The start date for the user.
END_DATE	N (BUT YOU CAN)	DATE	The end date for the user.
DEFAULT_ACCELERATOR_ID	N	NUMBER	Parameter set context identifier for the user data fields. Can be left blank.
SOURCE_TYPE_CODE	N	VARCHAR2(30)	For records that have been updated by an interface or migrator, indicates the type of external update (specific interface or migrator name, etc.)
SOURCE	N	VARCHAR2(100)	This is an optional, non-validated field that can be used to indicate the exact source of the User Information (the name of the Third Party Application, the text string “Conversion”, etc.)
USER_DATA_SET_CONTEXT_ID	N	NUMBER	Parameter set context identifier for the user data fields.
USER_DATA1.USER_DATA20	N	VARCHAR2(200)	These columns hold the user-defined fields attached to the user screen. Values should be entered only if User Data is defined. These columns will not be validated or defaulted.
VISIBLE_USER_DATA1.VISIBLE_USER_DATA20	N	VARCHAR2(200)	These columns hold the user-defined fields attached to the user screen. Values should be entered only if User Data is defined. These columns will not be validated or defaulted.
USER_DATA_SET_CONTEXT_ID	N	NUMBER	Parameter set context identifier for the user data fields.
AUTHENTICATION_MODE	N	VARCHAR2(30)	Authentication Mode of the user. If the user is being imported from a LDAP server, then this is automatically set to LDAP, otherwise it is set to KINTANA.

Table 2-1. KNTA_USERS_INT

Column	Required for Import?	DataType	Description
SCREEN_ID	N	NUMBER	This column is optional and is given a default value. It determines which screen is shown first after logon.
SHORTCUT_BAR_FLAG	N	VARCHAR2(1)	This column is optional and is given a default value. It determines whether or not the shortcut bar is shown in the screen manager.
SHORTCUT_BAR_LOC_CODE	N	VARCHAR2(4)	This column is optional and is given a default value. It determines the position where the shortcut bar is displayed.
SAVE_WINDOW_BOUNDS_FLAG	N	VARCHAR2(1)	This column is optional and is given a default value. It determines whether the size and location of the screen manager window are saved after logoff. If they are saved, the settings are the default at the next logon.
WINDOW_HEIGHT	N	NUMBER	This column is optional and is given a default value. It determines the default height of the screen manager window.
WINDOW_WIDTH	N	NUMBER	This column is optional and is given a default value. It determines the default width of the screen manager window.
WINDOW_X_LOCATION	N	NUMBER	This column is optional and is given a default value. It determines the horizontal position of the screen manager window.
WINDOW_Y_LOCATION	N	NUMBER	This column is optional and is given a default value. It determines the vertical position of the screen manager window.
REUSE_INTERNAL_FRAME_FLAG	N	VARCHAR2(1)	This column is optional and is given a default value. It determines whether multiple internal frames can be opened within each screen.
SHOW_ALL_WORKFLOW_STEPS_FLAG	N	VARCHAR2(1)	This column is optional and is given a default value. It determines whether all Workflow steps are shown within Workflow status panels.

Table 2-1. KNTA_USERS_INT

Column	Required for Import?	DataType	Description
SHOW_TRAVERSED_STEPS_FLAG	N	VARCHAR2(1)	This column is optional and is given a default value. It determines whether steps that have been traversed and are no longer active are shown within Workflow status panels.
NUM_BRANCH_STEPS_TO_SHOW	N	NUMBER	This column is optional and is given a default value. It determines how many steps of each branch are shown within Workflow status panels, if a currently active Workflow step leads to several branches.
NUM_KNOWN_REACH_STEPS_TO_SHOW	N	NUMBER	This column is optional and is given a default value. It determines how many steps of a non-branching path are shown within Workflow status panels.
HIDE_IMMEDIATE_STEPS_FLAG	N	VARCHAR2(1)	This column is optional and is given a default value. It determines whether or not Workflow steps based upon immediate executions and conditions are shown within Workflow status panels.
SHOW_CHANGE_WARNINGS_FLAG	N	VARCHAR2(1)	This column is optional and is given a default value. It determines whether warning messages are displayed when a business entity that is used by another entity is updated (for example, when a Workflow is updated that is used by a Package Line).
HIDE_CANCELLED_CRL_FLAG	N	VARCHAR2(1)	This column is optional and is given a default value. It determines whether cancelled Package Lines are displayed in the Packages screen.
DEFAULT_BROWSER	N	VARCHAR2(300)	Default browser associated with the user.
DEST_USER_PROFILE_ID	N	NUMBER	Should be left blank. Will be derived from KNTA_USER_PROFILE_S.
PHONE_NUMBER	N	VARCHAR2(300)	This column specifies the users phone number on the Resource page.
COST_RATE	N	NUMBER	This column specifies the user’s cost rate on the Resource page.

Table 2-1. KNTA_USERS_INT

Column	Required for Import?	DataType	Description
WORKLOAD_CAPACITY	N	NUMBER	This column specifies the user's workload capacity (in percentage) on the Resource page.
MAX_ROWS_PORTLETS	N	NUMBER	Maximum number of results to be displayed on the maximized portlet.
DEPARTMENT_CODE	N	VARCHAR2(300)	Code of the Department to which the Resource is associated.
DEPARTMENT_MEANING	N	VARCHAR2(80)	Text that is displayed to the user. This is the Department to which the Resource is associated. When populating the interface tables for an import, you only need to specify the MEANING -- the CODE is automatically derived.
LOCATION_CODE	N	VARCHAR2(30)	Code of the Location associated with the user on the Resource page.
LOCATION_MEANING	N	VARCHAR2(80)	Text that is displayed to the user. This is the Location associated with the user on the Resource page. When populating the interface tables for an import, you only need to specify the MEANING -- the CODE is automatically derived.
MANAGER_USER_ID	N	NUMBER	This column specifies the user id of the manager specified on the Resource page.
MANAGER_USERNAME	N	VARCHAR2(80)	This column specifies the username of the manager specified on the Resource page.
MANAGER_LOGON_IDENTIFIER	N	VARCHAR2(300)	The logon ID of the user's manager. Used when Kintana is started in LOGON_ID mode.
RESOURCE_CATEGORY_CODE	N	VARCHAR2(30)	Code for the Category associated with a user on his Resource page.

Table 2-1. KNTA_USERS_INT

Column	Required for Import?	DataType	Description
RESOURCE_CATEGORY_MEANING	N	VARCHAR2(80)	Text that is displayed to the user. This is the Category associated with a user on his Resource page. When populating the interface tables for an import, you only need to specify the MEANING -- the CODE is automatically derived.
RESOURCE_TITLE_CODE	N	VARCHAR2(30)	Code for the the resource's title that appears on the Resource page.
RESOURCE_TITLE_MEANING	N	VARCHAR2(80)	Text that is displayed to the user. This is the Title associated with a user on his Resource page. When populating the interface tables for an import, you only need to specify the MEANING -- the CODE is automatically derived.
DASHBOARD_POWER_ENABLED	N	VARCHAR2(1)	Used to indicate if the user should have a Kintana Dashboard Power account.
DASHBOARD_STANDARD_ENABLED	N	VARCHAR2(1)	Used to indicate if the user should have a Kintana Dashboard Standard account.
DELIVER_POWER_ENABLED	N	VARCHAR2(1)	Used to indicate if the user should have a Kintana Deliver Power account.
DELIVER_STANDARD_ENABLED	N	VARCHAR2(1)	Used to indicate if the user should have a Kintana Deliver Standard account.
CREATE_POWER_ENABLED	N	VARCHAR2(1)	Used to indicate if the user should have a Kintana Create Power account.
CREATE_STANDARD_ENABLED	N	VARCHAR2(1)	Used to indicate if the user should have a Kintana Create Standard account.
DRIVE_POWER_ENABLED	N	VARCHAR2(1)	Used to indicate if the user should have a Kintana Drive Power account.
DRIVE_STANDARD_ENABLED	N	VARCHAR2(1)	Used to indicate if the user should have a Kintana Drive Standard account.
SOLUTIONS	N	VARCHAR2(2000)	A ";" delimited list of Kintana Solutions for which the user is licensed.

Table 2-1. KNTA_USERS_INT

Column	Required for Import?	DataType	Description
SUITE_POWER_ENABLED	N	VARCHAR2(1)	Used to indicate if the user should have a Kintana Suite Power account.
SUITE_STANDARD_ENABLED	N	VARCHAR2(1)	Used to indicate if the user should have a Kintana Suite Standard account.

Table 2-2. KNTA_USER_SECURITY_INT

Column	Required for Import?	DataType	Description
TRANSACTION_ID	N	NUMBER	System-generated identifier.
PARENT_TRANSACTION_ID	N	NUMBER	The transaction ID of the parent table being imported.
PARENT_TABLE_NAME	N	VARCHAR2(30)	Which table was this entity imported with. (The parent_table should be KNTA_USERS_INT.)
GROUP_ID	Y	NUMBER	A value from KNTA_INTERFACE_GROUPS_S. Used to group together all records to be processed together. You should use one group ID for each batch of imported users when running the Kintana User Open Interface program.
EXISTS_FLAG	N	VARCHAR2(1)	Used to indicate if the security group exists for the users.
PROCESS_PHASE	N	NUMBER	Indicates the current stage of the record as it is being processed.
PROCESS_STATUS	N	NUMBER	Indicates the current disposition of the record. The value should initially be set to 1.
CREATED_BY	N	NUMBER	Identifier for the user that created the record in the source.

Table 2-2. KNTA_USER_SECURITY_INT

Column	Required for Import?	DataType	Description
CREATED_BY_USERNAME	N	VARCHAR2(30)	The USERNAME from the KNTA_USERS table for the user that is performing the transaction. This will be used only if the CREATED_BY is null.
CREATION_DATE	N	DATE	Date record was created.
DEST_CREATED_BY	N	NUMBER	Identifier for the user that created the record in the destination.
DEST_CREATION_DATE	N	DATE	The date the record is created in the destination.
DEST_LAST_UPDATED_BY	N	NUMBER	The USER_ID from the KNTA_USERS table for the user that is performing the transaction. If null, the column is derived from LAST_UPDATED_USERNAME.
DEST_LAST_UPDATE_DATE	N	DATE	The date that the transaction is performed.
DEST_ENTITY_UPD_DATE	N	DATE	The date that the transaction is performed.
USER_SECURITY_ID	N	NUMBER	Internal identifier for a user security. This should normally be left blank and will be defaulted from KNTA_USER_SECURITY_S. If a value is entered, it should be derived from KNTA_USER_SECURITY_S sequence.
DEST_USER_SECURITY_ID	N	NUMBER	Internal identifier for a user security. This should normally be left blank and will be defaulted from KNTA_USER_SECURITY_S. If a value is entered, it should be derived from KNTA_USER_SECURITY_S sequence.
USER_ID	N	NUMBER	This is used to tie a record to a parent record in KNTA_USERS_INT. For existing users, this should refer to the USER_ID column in KNTA_USERS.

Table 2-2. KNTA_USER_SECURITY_INT

Column	Required for Import?	DataType	Description
DEST_USER_ID	N	NUMBER	This is used to tie a record to a parent record in KNTA_USERS_INT. For existing users, this should refer to the USER_ID column in KNTA_USERS.
SECURITY_GROUP_ID	N	NUMBER	Identifier of the security group the user is linked to.
SOURCE_TYPE_CODE	N	VARCHAR2(30)	For records that have been updated by an interface or migrator, indicates the type of external update (specific interface or migrator name, etc.)
SOURCE	N	VARCHAR2(100)	For records that have been updated by an interface or migrator, provides additional information about the source of the external update.
USERNAME	Y	VARCHAR2(30)	USERNAME in KNTA_USERS table.
SECURITY_GROUP_NAME	Y	VARCHAR2(40)	SECURITY_GROUP_NAME in KNTA_SECURITY_GROUPS table.
USER_SECURITY_ACTION	Y	VARCHAR2(30)	Action for user security. Possible values: ADD, DROP.
LOGON_IDENTIFIER	Y	VARCHAR2(30)	LOGON_IDENTIFIER in KNTA_USERS table.

Running the User Open Interface for a Simple Import

Importing users from an external database consists of the following steps.

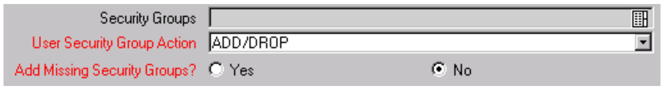
- *Determining User Security*. Decide which users should have which Security Groups linked to them. Kintana provides a method for adding, removing, and overwriting the Security Groups associated with a batch of users.

- *Loading Data into the Interface Tables*. You must populate Kintana's open interface tables with data before running the import program. This population can be done through any means supported by the Oracle database (for example: using SQL Loader). This process and the requirements for this population depends on what you want to import: specifically regarding Security Groups.

- *The "Run Kintana User Interface" Program*. This program is defined as a standard Kintana Report Type and is launched through either the Kintana Create, Deliver, or Drive Reports screen.

Determining User Security

When importing users into Kintana, you can specify how the user is assigned to specific Security Groups. This is done using a combination of the following fields: Security Groups, User Security Group Action, and Add Missing Security Groups.



Security Groups

User Security Group Action: ADD/DROP

Add Missing Security Groups? ○ Yes ● No

From the Kintana Workbench, you can specify the following:

- Add selected Security Groups to the group of users.
- Drop selected Security Groups from the user definitions.
- Add some Security Groups to the user definitions while dropping others. When using this ADD/DROP option, you must also populate the KNTA_USER_SECURITY_INT table. See *"Loading Data into the Interface Tables"* on page 24 for details.
- Overwrite the Security Group specification to include only the specified Security Groups. This will delete all references to the user's Security Groups and replace them with the selected ones.

You can also select to add missing Security Groups to Kintana. This will create a new Kintana Security Group, but will not link the user to that Security Group. See *"The "Run Kintana User Interface" Program"* on page 29 for details on the Security Group import options.

Loading Data into the Interface Tables

The initial step in importing Users into Kintana is populating the open interface table. This can be done through any means supported by the Oracle database. Standard mechanisms include the use of SQL*Loader to load in the contents of an ASCII file or direct Oracle database to database communication through database links.

The following sections discuss any requirements associated with specific import scenarios:

- *Required Data for Simple User Import*
- *Using the ADD/DROP Security Group Feature: Populating the KNTA_USER_SECURITY_INT Table*

Note

If users are imported from an LDAP server this step can be skipped. See *"The "Run Kintana User Interface" Program for LDAP Import"* on page 41 for instructions on importing users from an LDAP server.

Required Data for Simple User Import

Certain columns in the KNTA_USERS_INT table must be populated for a simple user import. *Table 2-3* defines the columns in the KNTA_USERS_INT table that you need to populate for the import. For a complete table description, refer to *Table 2-1 on page 14*.

Table 2-3. KNTA_USERS_INT Columns Required for User Import

Column	Required for Import?	DataType	Description
GROUP_ID	Y	NUMBER	A value from KNTA_INTERFACE_GROUPS_S. This is used to group together all records that have to be processed together. You should use one group ID for each batch of imported users when running the Kintana User Open Interface program.
USERNAME	Y	VARCHAR2(30)	The username used to Logon.

Table 2-3. KNTA_USERS_INT Columns Required for User Import

Column	Required for Import?	DataType	Description
LOGON_ID	N (see Description)	NUMBER	You need to populate either this column or the USERNAME, depending on the LOGON_METHOD setting in the Kintana server.conf file. If LOGON_METHOD = USER_NAME, the USERNAME column must be populated for the user import. If LOGON_METHOD = LOGON_ID, the LOGON_ID column must be populated.
DEST_USERNAME	Y	VARCHAR2(30)	The username that will be used to Logon.
PASSWORD_EXPIRATION_DAYS	N (see Description)	NUMBER	Number of days in which the current password expires. This column is not required, but can be populated for a group of users for convenience.
PASSWORD_EXPIRATION_DATE	N (see Description)	DATE	The effective date when the password for user id expires. This column is not required, but can be populated for a group of users for convenience.
EMAIL_ADDRESS	N (BUT YOU CAN)	VARCHAR2(80)	The email address of the user. This column is not required, but can be populated for a group of users for convenience.
FIRST_NAME	Y (see Description)	VARCHAR2(30)	The user’s first name. This field is required if you are creating a new user in Kintana. It is not required when re-importing an existing user.

Table 2-3. KNTA_USERS_INT Columns Required for User Import

Column	Required for Import?	DataType	Description
LAST_NAME	Y (IF NOT IN SYSTEM -- SEE DESCRIPTION)	VARCHAR2(30)	The user's last name. This field is required if you are creating a new user in Kintana. It is not required when re-importing an existing user.
START_DATE	N (BUT YOU CAN)	DATE	The start date for the user. This column is not required, but can be populated for a group of users for convenience.
END_DATE	N (BUT YOU CAN)	DATE	The end date for the user. This column is not required, but can be populated for a group of users for convenience.

Note

Note: additional columns in the KNTA_USER_SECURITY_INT table must be populated if you are using the ADD/DROP security group action. See *"Using the ADD/DROP Security Group Feature: Populating the KNTA_USER_SECURITY_INT Table"* on page 27 for more information.

Using the ADD/DROP Security Group Feature: Populating the KNTA_USER_SECURITY_INT Table

If you select to use the ADD/DROP Security Group feature in the Run Kintana User Interface program, you need to first populate the KNTA_USER_SECURITY_INT table. This table needs to include a record for each desired Security Group action for each user.

Example

User A and User B exist as Kintana users and are linked to the following Security Groups:

- User A => Security Group X
- User B => Security Group Y

Using a single Kintana User Open Interface transaction, you would like to change the users' Security Groups to the following:

- User A => Security Group Y
- User B => Security Group X

To do this, you must first populate the KNTA_USER_SECURITY_INT table with the following records:

```
GROUP_ID  USER_ID  SECURITY_GROUP_NAME  USER_SECURITY_ACTION
100       USER A   GROUP X              DROP
100       USER A   GROUP Y              ADD
100       USER B   GROUP X              ADD
100       USER B   GROUP Y              DROP
```

You can then proceed with the import using the Run Kintana Open Interface report. Select the ADD/DROP from the User Security Group Action drop down list and run the report. The user definitions in the destination instance will be updated with the above Security Group information.

Table 2-4 defines the columns in the KNTA_USER_SECURITY_INT table that you need to populate for the import. For a complete table description, refer to *Table 2-2 on page 21*.

Table 2-4. KNTA_USER_SECURITY_INT Columns Required for User Import

Column	Required for Import?	DataType	Description
GROUP_ID	Y	NUMBER	A value from KNTA_INTERFACE_GROUPS_S. Used to group together all records to be processed together. You should use one group ID for each batch of imported users when running the Kintana User Open Interface program. This should be the same GROUP_ID that you have specified in the KNTA_USERS_INT table.
USERNAME	Y	VARCHAR2(30)	USERNAME in KNTA_USERS table.
LOGON_IDENTIFIER	Y	VARCHAR2(30)	LOGON_IDENTIFIER in KNTA_USERS table. You need to populate either this column or the USERNAME, depending on the LOGON_METHOD setting in the Kintana server.conf file. If LOGON_METHOD = USER_NAME, the USERNAME column must be populated for the user import. If LOGON_METHOD = LOGON_ID, the LOGON_ID column must be populated.
SECURITY_GROUP_NAME	Y	VARCHAR2(40)	SECURITY_GROUP_NAME in KNTA_SECURITY_GROUPS table.
USER_SECURITY_ACTION	Y	VARCHAR2(30)	Action for user security. Possible values: ADD, DROP.

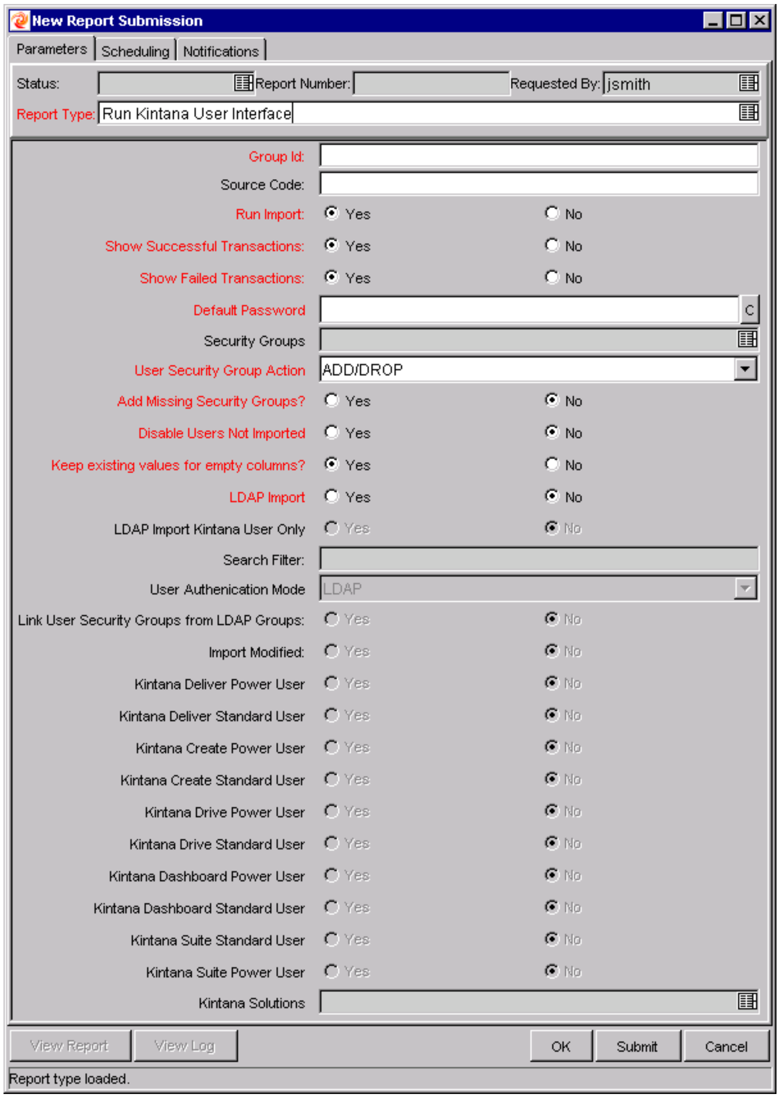
The “Run Kintana User Interface” Program

To import data from the interface tables, the “Run Kintana User Interface” program must be used. This program is defined as a standard Kintana Report Type and is launched through either the Kintana Create, Deliver, or Drive Reports screen.

Note

The “Run Kintana User Interface” program automatically imports relevant user information stored in the LDAP server into the open interface table. See *“Running the User Open Interface for an LDAP Import”* on page 35 for details.

For more information on using Report Types and launching Reports, refer to the *"Kintana Reports"* document and respective product manuals.



Status:
Report Number:
Requested By: jsmith
Report Type: Run Kintana User Interface

Group Id:
Source Code:
Run Import: ● Yes ○ No
Show Successful Transactions: ● Yes ○ No
Show Failed Transactions: ● Yes ○ No
Default Password
Security Groups
User Security Group Action: ADD/DROP
Add Missing Security Groups? ○ Yes ● No
Disable Users Not Imported ○ Yes ● No
Keep existing values for empty columns? ● Yes ○ No
LDAP Import ○ Yes ● No
LDAP Import Kintana User Only ○ Yes ● No
Search Filter:
User Authenication Mode: LDAP
Link User Security Groups from LDAP Groups: ○ Yes ● No
Import Modified: ○ Yes ● No
Kintana Deliver Power User ○ Yes ● No
Kintana Deliver Standard User ○ Yes ● No
Kintana Create Power User ○ Yes ● No
Kintana Create Standard User ○ Yes ● No
Kintana Drive Power User ○ Yes ● No
Kintana Drive Standard User ○ Yes ● No
Kintana Dashboard Power User ○ Yes ● No
Kintana Dashboard Standard User ○ Yes ● No
Kintana Suite Standard User ○ Yes ● No
Kintana Suite Power User ○ Yes ● No
Kintana Solutions

Report type loaded.

Figure 2-1 Report-Run Kintana User Interface

When executed, the “Run Kintana User Interface” program:

- Queries the KNTA_USERS_INT interface table for active records matching the given selection criteria.
- Queries the KNTA_USER_SECURITY_INT table.
- Validates the user information.
- Imports validated Users into the Kintana tables. Partial imports are not allowed. Users with one or more failed fields will not be imported.
- Reports on the results of the execution, listing the specified Users that failed validation and the specific validation errors they encountered.

Parameters

The "Run Kintana User Interface" program has several parameters for controlling the behavior of the program execution. These parameters are defined in *Table 2-5*.

Table 2-5. Run Kintana User Interface Parameters

Name	Type	Required	Description
Group ID	Text Field	Yes	Runs the interface for a specific Group ID. The interface program will only look for records with this value in the GROUP_ID column. This is useful when importing a batch of Users.
Source Code	Text Field	No	Used to indicate the source from which the users are being imported. In the case of a LDAP import, it is set to LDAP_IMPORT.
Table Name	Text Field	N	This parameter is used for custom LDAP imports. When you want to load LDAP data into some other interface table (for example, KCRT_CONTACTS_INT), you should specify the table name by enabling this field in the Report Type.
Run Import	Radio Button	Yes	If set to **Yes**, the program processes the records in the interface table and tries to import them. If set to **No**, the program simply reports on the records in the interface table. This option is useful when auditing prior executions of the open interface.
Show Successful Transactions	Radio Button	Yes	Shows successfully imported users.
Show Failed Transactions	Radio Button	Yes	Shows users that were not successfully imported.
Default Password	Password Field	Yes	Sets a default password for all users being imported, if they are not LDAP users.

Name	Type	Required	Description
Security Groups	Auto-complete list	No	Links available Security Groups to the imported users.
User Security Group Action	Drop Down List	Yes	Used to specify how the Security Groups are managed during the import. You can select one of the following options: • ADD/DROP -- Use this option to add certain security groups while removing others from user definitions. This option needs to be used in conjunction with the population of the KNTA_USER_SECURITY_INT table. See *“Using the ADD/DROP Security Group Feature: Populating the KNTA_USER_SECURITY_INT Table”* on page 27 for details. • ADD -- Adds the Security Groups listed in the Security Groups field to the users. Also adds any records in the KNTA_USER_SECURITY_INT table with an “ADD” user_security_action. • DROP -- Removes the Security Groups listed in the Security Groups field from the users. Also drops any records in the KNTA_USER_SECURITY_INT table with an “DROP” user_security_action. • OVERWRITE -- Removes any relationships between an existing Kintana user and their security groups and replaces them with the Security Groups listed in the Security Groups field.
Add Missing Security Groups	Radio Button	Yes	Selects whether to create Security Groups in Kintana. To use this feature, the SECURITY_GROUP_NAME and the corresponding USER_SECURITY_ACTION must be populated in the KNTA_USER_SECURITY_INT table.
Disable Users Not Imported	Radio Button	Yes	Disables all existing users currently in the Kintana system. This happens prior to the import.
Keep existing values for empty columns?	Radio Button	Yes	Keep existing values on updated users when interface table columns are empty.

Name	Type	Required	Description
LDAP Import	Radio Button	Yes	This indicates whether users are being imported from a LDAP server. Selecting **Yes** enables multiple required fields. Set the AUTHENTICATION_MODE parameter in the server.conf to LDAP or a comma-delimited list (LDAP, Kintana, etc.). The appropriate LDAP parameters should be specified. Set this to **Yes** if the authentication mode in the server.conf contains LDAP or NTLM.
LDAP Import Kintana User Only	Radio Button	No	If set to **Yes**, Kintana only imports those LDAP users with the “KNTAUser” attribute. See *“Adding the “KNTAUser” Attribute to Users on an LDAP Server”* on page 36 for detailed instruction.
Search Filter	Text Field	No	Used to import users from the LDAP server which satisfy a particular LDAP search filter. If no search filter is specified, Kintana will import all appropriate LDAP users. Refer to your LDAP documentation for instructions on searching for users based on specific filters. A few Examples are provided following this table.
User Authentication Mode	Drop Down List	No	Specifies how the user is authenticated upon their logon. For example, if you select LDAP, the user authentication occurs on the LDAP server.
Link Security Groups from LDAP Groups	Radio Button	No	Select to link the imported users to Security Groups corresponding to the LDAP Groups on the LDAP server. If a corresponding Security Group does not exist in Kintana, you must also select Add Missing Security Groups = **Yes**. This option is only available if you are importing groups from an LDAP server. ***************************** EXAMPLE: LDAP Server: Group F1 = User A and User B --Sub-group F2 = User C and User D <-- Imported into Kintana --> Kintana User A -> Security Group F1 Kintana User B -> Security Group F1 Kintana User C -> Security Group F1 and F2 Kintana User D -> Security Group F1 and F2 ******************************
Import Modified	Radio Button	No	Select **Yes** to import only users who have been modified in the LDAP server since the last import.

Name	Type	Required	Description
Kintana Deliver Power User	Radio Button	Only for LDAP	Establishes a Kintana Deliver Power License account for the imported users.
Kintana Deliver Standard User	Radio Button	Only for LDAP	Establishes a Kintana Deliver Standard License account for the imported users.
Kintana Create Power User	Radio Button	Only for LDAP	Establishes a Kintana Create Power License account for the imported users.
Kintana Create Standard User	Radio Button	Only for LDAP	Establishes a Kintana Create Standard License account for the imported users.
Kintana Dashboard Power User	Radio Button	Only for LDAP	Establishes a Kintana Dashboard Power License account for the imported users.
Kintana Dashboard Standard User	Radio Button	Only for LDAP	Establishes a Kintana Dashboard Standard License account for the imported users.
Kintana Drive Power User	Radio Button	Only for LDAP	Establishes a Kintana Drive Power License account for the imported users.
Kintana Drive Standard User	Radio Button	Only for LDAP	Establishes a Kintana Drive Standard License account for the imported users.
Kintana Solutions	Auto-complete list	Only for LDAP	Establishes Kintana Solution licenses for the imported user.
Kintana Suite Standard User	Radio Button	Only for LDAP	Establishes a Kintana Suite Standard License account for the imported users.
Kintana Suite Power User	Radio Button	Only for LDAP	Establishes a Kintana Suite Power License account for the imported users.

Example

Examples of Search Filter values and their functional results:

- (cn=Babs Jensen) : Fetch the object who has cn = Babs Jensen
- (!(cn=Tim Howes)): Fetch the objects who don’t have cn = Tim Howes
- (&(objectClass=Person)(|(sn=Jensen)(cn=Babs J*))): Fetch all objects belonging to objectclass Person and who are either sn = Jensen or cn is like Babs J (which means cn could be Babs J or cn could be Babs Jen)
- (o=univ*of*mich*): Fetch objects with o like univ%of%mich% (using sql concepts)
- (&(ou=Development)(|(uid=test1)(uid=test2)(uid=test3))): Fetch all objects with ou= Development and who have uid=test1 or uid=test2 or uid=test3

Note

All users imported using the “Run Kintana User Interface” report will have the same user privileges. To set different attributes (Security Groups or product permissions) for imported Users, it is necessary to run the report multiple times.

Running the User Open Interface for an LDAP Import

To import data from an LDAP server, the “Run Kintana User Interface” program must be used. This program is defined as a standard Kintana Report Type and is launched through either the Kintana Create, Deliver, or Drive Reports screen.

The “Run Kintana User Interface” program automatically imports relevant user information stored in the LDAP server into the open interface table. You can exercise more control over this process by mapping LDAP attributes to Kintana users in the LdapAttribute.conf file. See *“Mapping LDAP Attributes to Kintana Users”* on page 37 for details.

If user information is imported from an LDAP server, ensure that LDAP Import = **Yes** is selected in the New Report Submission window shown below. Selecting **Yes** enables other required fields, ensuring a smooth import into Kintana. A special command line utility can also be run to add the attribute “KNTA User” to various users on the LDAP server. See *“Adding the “KNTAUser” Attribute to Users on an LDAP Server”* on page 36 for more information.

Prepare for an LDAP User Import

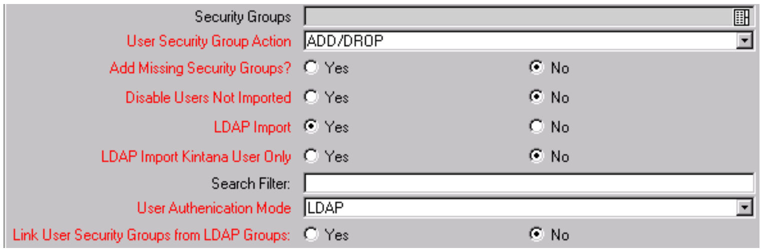
The process for importing users from an LDAP server differs slightly from the simple user import process. The following sections detail some additional preparation required for an LDAP user import.

- *User Security for an LDAP Import*
- *Adding the “KNTAUser” Attribute to Users on an LDAP Server*
- *Mapping LDAP Attributes to Kintana Users*
- *Kintana Server Configuration*

User Security for an LDAP Import

Similar to a simple user import, you must determine which Security Groups you want the imported users to be linked to. You can select to use the following strategies for setting security for users:

- Use the Security Group Action field in combination with the Security Groups field to specify which Security Groups to add to the user definitions.
- Use the Link Security Groups from LDAP Groups option. Select **Yes** to link the imported users to Security Groups corresponding to the LDAP Groups on the LDAP server. If a corresponding Security Group does not exist in Kintana, you must also select Add Missing Security Groups = **Yes**.



Security Groups		
User Security Group Action	ADD/DROP	
Add Missing Security Groups?	○ Yes	● No
Disable Users Not Imported	○ Yes	● No
LDAP Import	● Yes	○ No
LDAP Import Kintana User Only	○ Yes	● No
Search Filter:		
User Authenication Mode	LDAP	
Link User Security Groups from LDAP Groups:	○ Yes	● No

Note

You can not use the DROP, ADD/DROP, or OVERWRITE Security Group Action features for the LDAP user security definitions. To remove a Security Group from a user definition, you must either perform the update manually in the Kintana Workbench or re-run a simple User Open Interface. See *"Running the User Open Interface for a Simple Import"* on page 23 for details.

Adding the "KNTAUser" Attribute to Users on an LDAP Server

If you have selected LDAP Import Kintana User Only = **Yes** on the Run Kintana User Interface, Kintana will only import the LDAP users with the "KNTAUser" attribute.

To apply the KNTAUser attribute to users on an LDAP server, it is necessary to execute a command locally on the server machine. The command is located in the KINTANA_HOME/bin directory and should be run using a bash shell.

This command needs to be run by an LDAP user who has privileges to modify the LDAP schema. To execute the command:

1. Type kLdap.sh

   A prompt for a number of LDAP server parameters appears.

2. Type kLdap.sh -s

   The LDAP parameters will be read from the server.conf file and no additional information will be requested.

Note

LDAP users can only logon in Kintana only mode if they have a Kintana password defined. Also, if the server is in the Kintana only mode, Kintana passwords can be set for LDAP users. These Kintana passwords are not required.

Mapping LDAP Attributes to Kintana Users

You can map the attributes on the LDAP Server to attributes used by the Kintana server. Some of this mapping occurs by default, but you can exercise greater control by mapping the attributes in the following file:

```
<KINTANA_HOME>/integration/ldap/LdapAttribute.conf
```

The following table lists the attributes and provides some contextual background for each parameter. Kintana also provides sample files (in the same directory) for mapping to a Netscape Directory Server and an Active Directory Server. The default mapping is for a Netscape Directory Server.

Table 2-6. LdapAttribute.conf parameters

LDAP Attribute	Description

LDAP_USER_ID	Enter the attribute which can be used to obtain the User ID on the LDAP server
	# e.g. Ldap_user_id=uid
	LDAP_USER_ID=uid
	This is used to resolve the users in the Ldap server. It is mapped to unique attribute that determines a user.

Table 2-6. LdapAttribute.conf parameters

LDAP Attribute	Description
LDAP_LOGON_ID	Enter the attribute which can be used to obtain the logon id from the LDAP Server LDAP_LOGON_ID=uid Note: This needs to be different from the LDAP_USER_ID if the LOGON_METHOD = LOGON_ID in the Kintana server.conf file.
LDAP_GROUP_NAME	Enter the attribute which can be used to obtain the group names from the LDAP Server LDAP_GROUP_NAME=cn
LDAP_ORG_UNIT_NAME	Enter the attribute which can be used to obtain the org units from the LDAP Server LDAP_ORG_UNIT_NAME=ou
LDAP_STATIC_GROUP_ MEMBERS	Enter the attribute which identifies the Static group members on your ldap Server LDAP_STATIC_GROUP_MEMBERS=uniquemember This parameter and the LDAP_DYNAMIC_GROUP_MEMBERS parameter are used to determine the attribute that indicates the members in the Group. In Netscape there can be STATIC and DYNAMIC Groups, hence we have these two different parameters. In Active Directory these would map to the same attribute (member)
LDAP_DYNAMIC_GROUP_ MEMBERS	Enter the attribute which identifies the Dynamic group members on your ldap Server LDAP_DYNAMIC_GROUP_MEMBERS=memberurl This parameter and the LDAP_STATIC_GROUP_MEMBERS parameter are used to determine the attribute that indicates the members in the Group. In Netscape there can be STATIC and DYNAMIC Groups, hence we have these two different parameters. In Active Directory these would map to the same attribute (member)
LDAP_OBJECTCLASS	Enter the attribute which identifies the objectclass attribute on your ldap Server LDAP_OBJECTCLASS=objectclass This parameter determines what the objectclass is called on the LDAP Server. This will usually map to “objectclass”.

LDAP_USER_OBJECTCLASS	#Enter the attribute which identifies the objectclass attribute for a user on your ldap Server
	LDAP_USER_OBJECTCLASS=person
	
	This parameter determines the objectclass that determines if a resource is a user. It is defaulted to “person”.

Table 2-6. LdapAttribute.conf parameters

LDAP Attribute	Description
LDAP_GROUP_OBJECTCLASS	Enter the attribute which identifies the objectclass attribute for a group on your ldap Server LDAP_GROUP_OBJECTCLASS=groupofuniquenames This parameter determines the objectclass that determines if a resource is a group.
LDAP_MODIFY_TIMESTAMP	Enter the attribute which keeps track of the last modified time for an object on your ldap Server LDAP_MODIFY_TIMESTAMP=modifyTimeStamp This parameter is mapped to attribute on the LDAP Server that keeps track of the modified time for that entity.
LDAP_TIME_FORMAT	Enter the attribute which keeps track of the Time format followed by the ldap server. Format for Netscape LDAP Servers: yyyyMMddHHmmss'Z' Format for Active Directory Servers: yyyyMMddHHmmss'.0Z' LDAP_TIME_FORMAT=yyyyMMddHHmmss'Z' This parameter gives Kintana the information of the Time Format the LDAP server follows.

KNTA_USERS_INT	Denotes the table name to which the import would take place to. Then the format is
	
	ColumnName= LDAP Attribute.
	
	Thus Any column could be mapped to any LDAP Attribute.
	
	Map Both VISIBLE_USER_DATA and USER_DATA Columns always. To disable a default mapping below, either comment out or delete the mapping line.
	
	USERNAME=sAMAccountName
	FIRST_NAME=givenname
	LAST_NAME=sn
	EMAIL_ADDRESS=mail
	PHONE_NUMBER=telephonenumber
	DEPARTMENT_MEANING=departmentNumber
	LOCATION_MEANING=locality
	MANAGER_USERNAME=managerUSER_DATA1=mail**
	VISIBLE_USER_DATA1=mail**
	** These are added in for an example.

VISIBLE_USER_DATA and USER_DATA	Map Both VISIBLE_USER_DATA and USER_DATA Columns always.

Note

The ORG_UNIT_NAME and PARENT_ORG_UNIT_NAME columns should not be mapped in the LdapAttribute.conf file. Those attributes are specified in the KRSC_ORG_UNITS_INT table. See *"Organization Unit Open Interface"* on page 47 for details.

Kintana Server Configuration

The following Kintana server parameters need to be considered when performing a user import from an LDAP server. These parameters are set in the server.conf file located in the following directory:

```
<KINTANA_HOME>/server.conf
```

Table 2-7 lists the attributes and provides some contextual background for each parameter. After changing these parameters, you need to stop and restart the Kintana server.

Table 2-7. server.conf Parameters

Parameter	Description
Authentication_Mode	This is required for the Kintana Server to determine what method to use for authenticating users. It currently defaults to the KINTANA value. MIXED is no longer a valid value; mixed values can be separated with a comma (LDAP, KINTANA etc.). Valid values are: KINTANA, LDAP, SITEMINDER, NTLM com.kintana.core.server.AUTHENTICATION_MODE=KINTANA, LDAP, SITEMINDER
LDAP_Server_URL	This can be a comma delimited list of LDAP URLs and the Kintana Server will query them in the order in which they are specified. If no port number is specified then the default port 389 will be used. e.g. ldap://ldap.mydomain.com:389, ldap://ldap2.mydomain.com com.kintana.core.server.LDAP_URL=
LDAP_BASE_DN	This specifies the base in the LDAP server from where to start the search. If this is not specified, then the LDAP server will be queried to determine the base. e.g. o=mydomain.com com.kintana.core.server.LDAP_BASE_DN=

Table 2-7. server.conf Parameters

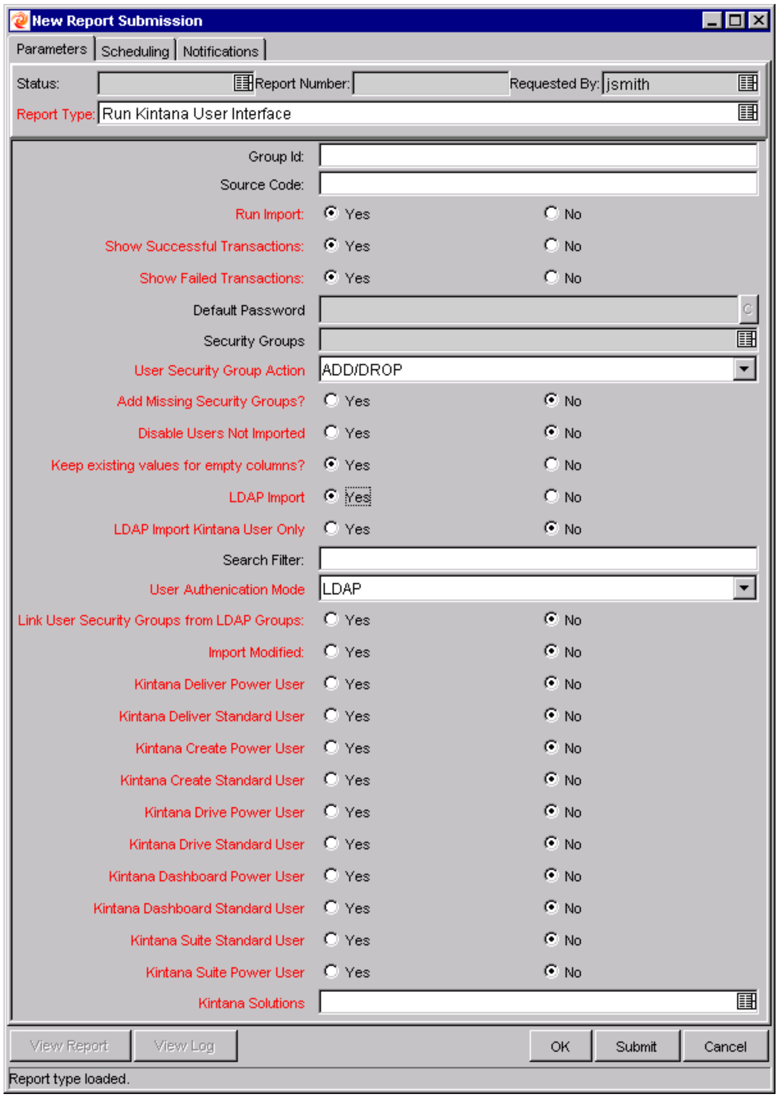
Parameter	Description
KINTANA_LDAP_ID	Kintana account on the LDAP server. This is a required field if the LDAP server is being used at all. This will be used by the Kintana Server to bind to the LDAP server. This is the complete distinguished name of the user. (Example: uid=admin, ou=Dev, o=mydomain.com) com.kintana.core.server.KINTANA_LDAP_ID=

KINTANA_LDAP_PASSWORD	Kintana password on the LDAP server. This is automatically encrypted by the server configuration utility. Leave this blank for an anonymous authentication.
	Note: If you are manually editing the server.conf file, the encrypted password should be surrounded with #!# delimiters.
	com.kintana.core.server.KINTANA_LDAP_PASSWORD=#!#0123456789abcdefghij9876543210AB#!#
	com.kintana.core.server.KINTANA_LDAP_PASSWORD=#!##!#

LDAP_SSL_PORT	SSL Port number on the LDAP server. If the LDAP server is SSL enabled then this should be set to the SSL port of the LDAP server (which is usually 636). This port will be used to carry out all secure transactions. If this field is not set, then all transactions will be carried out over the port specified in the param # LDAP_URL com.kintana.core.server.LDAP_SSL_PORT=

The "Run Kintana User Interface" Program for LDAP Import

After determining your strategy for assigning Security Groups to your users and preparing for the import, you will run the import using the "Run Kintana User Interface" program. This program is launched through either the Kintana Create, Deliver, or Drive Reports screen.



Status: | Report Number: | Requested By: jsmith

Report Type: Run Kintana User Interface

Group Id:		
Source Code:		
Run Import:	● Yes	○ No
Show Successful Transactions:	● Yes	○ No
Show Failed Transactions:	● Yes	○ No
Default Password		
Security Groups		
User Security Group Action	ADD/DROP	
Add Missing Security Groups?	○ Yes	● No
Disable Users Not Imported	○ Yes	● No
Keep existing values for empty columns?	● Yes	○ No
LDAP Import	● Yes	○ No
LDAP Import Kintana User Only	○ Yes	● No
Search Filter:		
User Authenication Mode	LDAP	
Link User Security Groups from LDAP Groups:	○ Yes	● No
Import Modified:	○ Yes	● No
Kintana Deliver Power User	○ Yes	● No
Kintana Deliver Standard User	○ Yes	● No
Kintana Create Power User	○ Yes	● No
Kintana Create Standard User	○ Yes	● No
Kintana Drive Power User	○ Yes	● No
Kintana Drive Standard User	○ Yes	● No
Kintana Dashboard Power User	○ Yes	● No
Kintana Dashboard Standard User	○ Yes	● No
Kintana Suite Standard User	○ Yes	● No
Kintana Suite Power User	○ Yes	● No
Kintana Solutions		

Report type loaded.

Figure 2-2 Report-Run Kintana User Interface for LDAP

When executed, the “Run Kintana User Interface” program:

- Populates the interface tables with records from the LDAP server.
- Validates the user information.
- Imports validated Users into the Kintana tables. Partial imports are not allowed. Users with one or more failed fields will not be imported.

Reports on the results of the execution, listing the specified Users that failed validation and the specific validation errors they encountered.

To run the import from the Kintana Workbench:

1. Open the Report window in either Kintana Create, Deliver or Drive.
2. Select **Run Kintana User Interface** from the Report Type auto-complete list. The parameters for this program appear in the Report window.
3. Enter the parameters and select the import options. Each parameter on this Report is defined in *Table 2-5 on page 31*. For an LDAP import, you should pay special attention to the following fields:
    - LDAP Import: Set this field to **Yes**. This will enable the other LDAP-import related parameters.
    - Search Filter
    - User Authentication Mode
    - Link User Security Groups from LDAP Groups
    - Import Modified
    - Kintana Standard and Power User license information
4. Click **Submit**.

You can then view the report and the log to analyze the import results.

LDAP Authentication

Kintana uses simple authentication to authenticate against any LDAP v3. compliant LDAP server.

The authentication steps are:

1. The Kintana server binds to the LDAP server using the credentials supplied in the server.conf parameters KINTANA_LDAP_ID and KINTANA_LDAP_PASSWORD. This step is optional though. Kintana will do an anonymous authentication if no password is supplied in server.conf.
2. Kintana tries to obtain the distinguished name of the user by supplying a Search Filter to the LDAP server which is of the form (uid=username).

Here the attribute uid could vary from one LDAP server to another depending on the information supplied in the LdapAttribute.conf file.

3. If Kintana obtains a unique distinguished name, then it tries to rebind to the LDAP server using the distinguished name and the password supplied by the user.

If more than one LDAP server has been specified in the server.conf parameter LDAP_URL, Kintana will try to authenticate against all of them until it succeeds. If the referral option has been enabled, then Kintana will also chase the referral server to authenticate against that if the user is not present in primary server.

For users who are running the Kintana server on jdk1.3 platform, Kintana also supports LDAP authentication over SSL using passwords. To enable the SSL option, the server.conf param LDAP_SSL_PORT should be set to the SSL port of the LDAP server.

Post-Import Activities

Following the user import, you can view the results of the import. From the Report screen, click **View Report** to open the report. This report will identify any errors with the import. After reviewing the import results, you can proceed with the following activities:

- *Correcting Failures*
- *Purging the Interface Tables*

Correcting Failures

When a user is successfully imported, information stored in the interface tables is not deleted, and no additional action is required. It is possible to view and process the user with the Kintana user interface.

For users that fail to import, corrective actions are required. The first step involves examining the audit report from the open interface program to identify the failed records and the specific reasons for each failure.

Depending on the reasons, it may be necessary to correct the problem through a variety of means. Some failures may occur due to a mapping problem between the source data and existing Kintana data.

Other failures may be due to missing information that cannot be defaulted. For example, users require a Username. If the Username columns were left blank for records in the User interface table, the records will fail validation. To correct this, the custom program or procedure that inserts records into the interface table needs to be modified to include this required data.

Note

During the initial implementation of the Open Interface, the mapping between the non-Kintana source and Kintana should be thoroughly reviewed and the load program(s) thoroughly tested in a testing instance. Additionally, it is good practice to monitor executions of the Open Interface and periodically monitor the import of desired data into Kintana.

Purging the Interface Tables

All the interface tables are automatically purged by the Purge service. Purging process depends on two parameters in the server.conf file:

```
com.kintana.is.server.ENABLE_INTERFACE_CLEANUP

com.kintana.is.server.DAYS_TO_KEEP_INTERFACE_ROWS
```

The first one enables or disables the Purge process, while the second parameter is used to give the number of days that the records are retained in the Interface tables.

Chapter 3

Organization Unit Open Interface

Kintana includes an interface for importing organization information into Kintana. This open interface can import organizational models from 3rd party systems including LDAP databases, home grown organization modeling systems, and HR systems. Using this interface, a Kintana administrator can periodically synchronize the organizational model in Kintana with the authoritative data source within their company.

In general, the synchronization process will involve importing attributes of the various resources. The following sections detail the data model and process used to import users from an existing database:

- *Data Model*
- *Running the Organization Open Interface for a Simple Import*
- *Running the Organization Unit Open Interface for an LDAP Import*
- *Post-Import Activities*

Note

When associating users with an organization model, the users/resources must exist in the system. Kintana recommends using one of two approaches to ensure a successful Organization Unit import:

- First import the users using Kintana's User Open Interface to ensure that all users are in the system. Then import the Organization information using Kintana's Org Unit Open Interface.

  OR

- Populate the KNTA_USERS_INT table (as if preparing for a User import), populate the tables for the Org Unit open interface, and then run Kintana's Org Unit Open Interface program. This will add the users to the system on the fly and link them to the appropriate Org Units.

See *"Managing Resources in Kintana"* for more information on mapping your organization model in Kintana.

Data Model

The following interface tables are used by the Kintana organization open interface:

- KRSC_ORG_UNITS_INT:
  Used to define the Organization Unit. See *Table 3-1* for details.
- KRSC_ORG_UNIT_MEMBERS_INT:
  Used to specify user membership in the Organization Units. See *Table 3-2* for details.
- KNTA_USERS_INT:
  Used when adding additional users into the system; this is the same table used in Kintana's User Open Interface. See *Table 2-1 on page 14* for details.

Note

Each table includes a "Required for Import" column. This column, and other related requirements are discussed in *"Loading Data into the Interface Tables"* on page 54.

Table 3-1. KRSC_ORG_UNITS_INT

Column	Required for Import?	DataType	Description
TRANSACTION_ID	N	NUMBER	System-generated identifier.
GROUP_ID	Y	NUMBER	A value from KNTA_INTERFACE_GROUPS_S. This is used to group together all records that have to be processed together.
EXISTS_FLAG	N	VARCHAR2 (1)	Used to indicate if the Org unit already exists in the system.
PROCESS_PHASE	N	NUMBER	Indicates the current stage of the record as it is being processed.

Table 3-1. KRSC_ORG_UNITS_INT

Column	Required for Import?	DataType	Description
PROCESS_STATUS	N	NUMBER	Indicates the current disposition of the record. The value should initially be set to 1.
CREATED_BY	N	NUMBER	The USER_ID from the KNTA_USERS table for the user that is performing the transaction. If null, the column is derived from CREATED_BY_USERNAME or set to the user currently running the report.
CREATED_BY_USERNAME	N	VARCHAR2(30)	The USERNAME from the KNTA_USERS table for the user that is performing the transaction. This will only be used if the CREATED_BY is null.
CREATION_DATE	N	DATE	The date that the transaction is performed.
DEST_CREATED_BY	N	NUMBER	The USER_ID from the KNTA_USERS table for the user that is performing the transaction. If null, the column is derived from CREATED_BY_USERNAME or set to the user currently running the report.
DEST_CREATION_DATE	N	DATE	The date that the transaction is performed.
DEST_LAST UPDATED_BY	N	NUMBER	The USER_ID from the KNTA_USERS table for the user that last performed the transaction.
DEST_LAST_UPDATE_DATE	N	DATE	The date that the transaction was last updated.
DEST_ENTITY_UPD_DATE	N	DATE	The date that the transaction is performed.
SOURCE	N	VARCHAR2(100)	This is an optional, non-validated field that can be used to indicate the exact source of the Organization Information (the name of the Third Party Application, the text string “Conversion”, etc.)

Table 3-1. KRSC_ORG_UNITS_INT

Column	Required for Import?	DataType	Description
SOURCE_TYPE_CODE	N	VARCHAR2(30)	For records that have been updated by an interface or migrator, indicates the type of external update (specific interface or migrator name, etc.)
ORG_UNIT_ID	N	NUMBER	Internal identifier of the Org Unit. This should normally be left blank.
ORG_UNIT_NAME	Y	VARCHAR2(30)	The name of the Org Unit.
PARENT_ORG_UNIT_ID	N	NUMBER	Internal identifier of the Org Unit's parent Org Unit. This should normally be left blank.
PARENT_ORG_UNIT_NAME	N	VARCHAR2(30)	The name of the Org Unit's parent Org Unit. If none exists, then the Org Unit will appear as a top-level unit in the organization model.
MANAGER_ID	N	NUMBER	Internal identifier of the manager associated with the Org Unit. This should normally be left blank.
MANAGER_USERNAME	N	VARCHAR2(30)	The name of the manager associated with the Org Unit.
MANAGER_LOGON_IDENTIFIER	N	VARCHAR2(30)	The logon ID of the manager associated with the Org Unit. Used when Kintana is started in LOGON_ID mode.
DEPARTMENT_CODE	N	VARCHAR2(30)	Code of the Department to which the Org Unit is associated.
DEPARTMENT_MEANING	N	VARCHAR2(80)	Text that is displayed to the user. This is the Department to which the Org Unit is associated. When populating the interface tables for an import, you only need to specify the MEANING -- the CODE is automatically derived.
LOCATION_CODE	N	VARCHAR2(30)	Code of the Location associated with the Org Unit.
LOCATION_MEANING	N	VARCHAR2(80)	Text that is displayed to the user. This is the Location associated with the Org Unit. When populating the interface tables for an import, you only need to specify the MEANING -- the CODE is automatically derived.

Table 3-1. KRSC_ORG_UNITS_INT

Column	Required for Import?	DataType	Description
CATEGORY_CODE	N	VARCHAR2(30)	Code for the Category associated with an Org Unit.
CATEGORY_MEANING	N	VARCHAR2(80)	Text that is displayed to the user. This is the Category associated with an Org Unit. When populating the interface tables for an import, you only need to specify the MEANING -- the CODE is automatically derived.
ENABLED_FLAG	N	VARCHAR2(1)	Specifies whether the Org Unit is enabled upon import.
USER_DATA_SET_CONTEXT_ID	N	NUMBER	Parameter set context identifier for the user data fields.
USER_DATA1 - 20	N	VARCHAR2(200)	These columns hold the user-defined fields attached to the user screen. Values should be entered only if User Data is defined. These columns will not be validated or defaulted.
VISIBLE_USER_DATA1 - 20	N	VARCHAR2(200)	These columns hold the user-defined fields attached to the user screen. Values should be entered only if User Data is defined. These columns will not be validated or defaulted.

Table 3-2. KRSC_ORG_UNIT_MEMBERS_INT

Column	Required for Import?	DataType	Description
TRANSACTION_ID	N	NUMBER	System-generated identifier.
GROUP_ID	Y	NUMBER	A value from KNTA_INTERFACE_GROUPS_S. This is used to group together all records that have to be processed together.
EXISTS_FLAG	N	VARCHAR2 (1)	Used to indicate if the Org unit already exists in the system.

Table 3-2. KRSC_ORG_UNIT_MEMBERS_INT

Column	Required for Import?	DataType	Description
PROCESS_PHASE	N	NUMBER	Indicates the current stage of the record as it is being processed.
PROCESS_STATUS	N	NUMBER	Indicates the current disposition of the record. The value should initially be set to 1.
CREATED_BY	N	NUMBER	The USER_ID from the KNTA_USERS table for the user that is performing the transaction. If null, the column is derived from CREATED_BY_USERNAME or set to the user currently running the report.
CREATED_BY_USERNAME	N	VARCHAR2(30)	The USERNAME from the KNTA_USERS table for the user that is performing the transaction. This will only be used if the CREATED_BY is null.
CREATION_DATE	N	DATE	The date that the transaction is performed.
DEST_CREATED_BY	N	NUMBER	The USER_ID from the KNTA_USERS table for the user that is performing the transaction. If null, the column is derived from CREATED_BY_USERNAME or set to the user currently running the report.
DEST_CREATION_DATE	N	DATE	The date that the transaction is performed.
DEST_LAST UPDATED_BY	N	NUMBER	The USER_ID from the KNTA_USERS table for the user that last performed the transaction.
DEST_LAST_UPDATE_DATE	N	DATE	The date that the transaction was last updated.
DEST_ENTITY_UPD_DATE	N	DATE	The date that the transaction is performed.
SOURCE	N	VARCHAR2(100)	This is an optional, non-validated field that can be used to indicate the exact source of the Organization Information (the name of the Third Party Application, the text string “Conversion”, etc.)

Table 3-2. KRSC_ORG_UNIT_MEMBERS_INT

Column	Required for Import?	DataType	Description
SOURCE_TYPE_CODE	N	VARCHAR2(30)	For records that have been updated by an interface or migrator, indicates the type of external update (specific interface or migrator name, etc.)
ORG_UNIT_MEMBER_ID	N	NUMBER	Internal identifier of the Org Unit member. This should normally be left blank.
ORG_UNIT_ID	N	NUMBER	Internal identifier of the Org Unit. This should normally be left blank.
ORG_UNIT_NAME	Y	VARCHAR2(30)	The name of the Org Unit.
USER_ID	N	NUMBER	Internal identifier of the user to be associated with the Org Unit.
USERNAME	Y	VARCHAR2(30)	The name of the user to be associated with the Org Unit. Either this column or the LOGON_IDENTIFIER are required for import.
LOGON_IDENTIFIER	Y (See Notes)	VARCHAR2(30)	The logon ID of the user. Used when Kintana is started in LOGON_ID mode. Either this column or the USERNAME are required for import.

Running the Organization Open Interface for a Simple Import

Importing an Organization Model from an external database consists of the following steps.

1. Loading the users/resources into Kintana. This can be done by running the Kintana User Open Interface. See *"Running the User Open Interface for a*

Simple Import" on page 23 for details. You can also populate the KNTA_USERS_INT table and run the Org Unit Open Interface program. See *Loading Data into the Interface Tables* for more details.

2. *Loading Data into the Interface Tables*. You must populate Kintana's open interface tables with data before running the import program. This population can be done through any means supported by the Oracle database (for example: using SQL Loader). This process and the requirements for this population depends on what you want to import.

3. *The "Run Kintana Organization Unit Interface" Program*. Kintana provides a Running the Kintana Open Interface program. This program is defined as a standard Kintana Report Type and is launched through either the Kintana Create, Deliver, or Drive Reports screen.

Loading Data into the Interface Tables

The initial step in importing Organization Units into Kintana is populating the open interface table. This can be done through any means supported by the Oracle database. Standard mechanisms include the use of SQL*Loader to load in the contents of an ASCII file or direct Oracle database to database communication through database links.

Certain columns in the KRSC_ORG_UNITS_INT and KRSC_ORG_UNIT_MEMBERS_INT tables must be populated for a simple user import. Additionally, if you are adding users to the system, you also need to populate the required fields in the KNTA_USERS_INT table.

Note

If you are importing an Organization Unit from an LDAP server this step can be skipped. See *""Run Kintana Organization Unit Interface" Program for LDAP Import"* on page 67 for instructions on importing users from an LDAP server.

Table 3-3. KRSC_ORG_UNITS_INT Columns required for Organization import

Column	Required for Import?	DataType	Description
GROUP_ID	Y	NUMBER	A value from KNTA_INTERFACE_GROUPS_S. This is used to group together all records that have to be processed together.

Table 3-3. KRSC_ORG_UNITS_INT Columns required for Organization import

Column	Required for Import?	DataType	Description
ORG_UNIT_NAME	Y	VARCHAR2(30)	The name of the Org Unit.

Table 3-4. KRSC_ORG_UNIT_MEMBERS_INT Columns required for Organization import.

Column	Required for Import?	DataType	Description
GROUP_ID	Y	NUMBER	A value from KNTA_INTERFACE_GROUPS_S. This is used to group together all records that have to be processed together. The GROUP_ID should match the one used in the KRSC_ORG_UNITS_INT table.
ORG_UNIT_NAME	Y	VARCHAR2(30)	The name of the Org Unit.
USERNAME	Y (See Notes)	VARCHAR2(30)	The name of the user to be associated with the Org Unit. Either this column or the LOGON_IDENTIFIER are required for import.
LOGON_IDENTIFIER	Y (See Notes)	VARCHAR2(30)	The logon ID of the user. Used when Kintana is started in LOGON_ID mode. Either this column or the USERNAME are required for import.

*Table 3-5. KNTA_USERS_INT Columns Required for Org Unit Import ** (see note below table)*

Column	Required for Import?	DataType	Description
GROUP_ID	Y	NUMBER	A value from KNTA_INTERFACE_GROUPS_S. This is used to group together all records that have to be processed together. You should use one group ID for each batch of imported users when running the Kintana User Open Interface program.
USERNAME	Y	VARCHAR2(30)	The username used to Logon.
LOGON_ID	N (see Description)	NUMBER	You need to populate either this column or the USERNAME, depending on the LOGON_METHOD setting in the Kintana server.conf file. If LOGON_METHOD = USER_NAME, the USERNAME column must be populated for the user import. If LOGON_METHOD = LOGON_ID, the LOGON_ID column must be populated.
DEST_USERNAME	Y	VARCHAR2(30)	The username that will be used to Logon.
FIRST_NAME	Y (see Description)	VARCHAR2(30)	The user’s first name. This field is required if you are creating a new user in Kintana. It is not required when re-importing an existing user.
LAST_NAME	Y (see Description)	VARCHAR2(30)	The user’s last name. This field is required if you are creating a new user in Kintana. It is not required when re-importing an existing user.

Note

You only need to populate the KNTA_USERS_INT table if you are adding new users to Kintana.

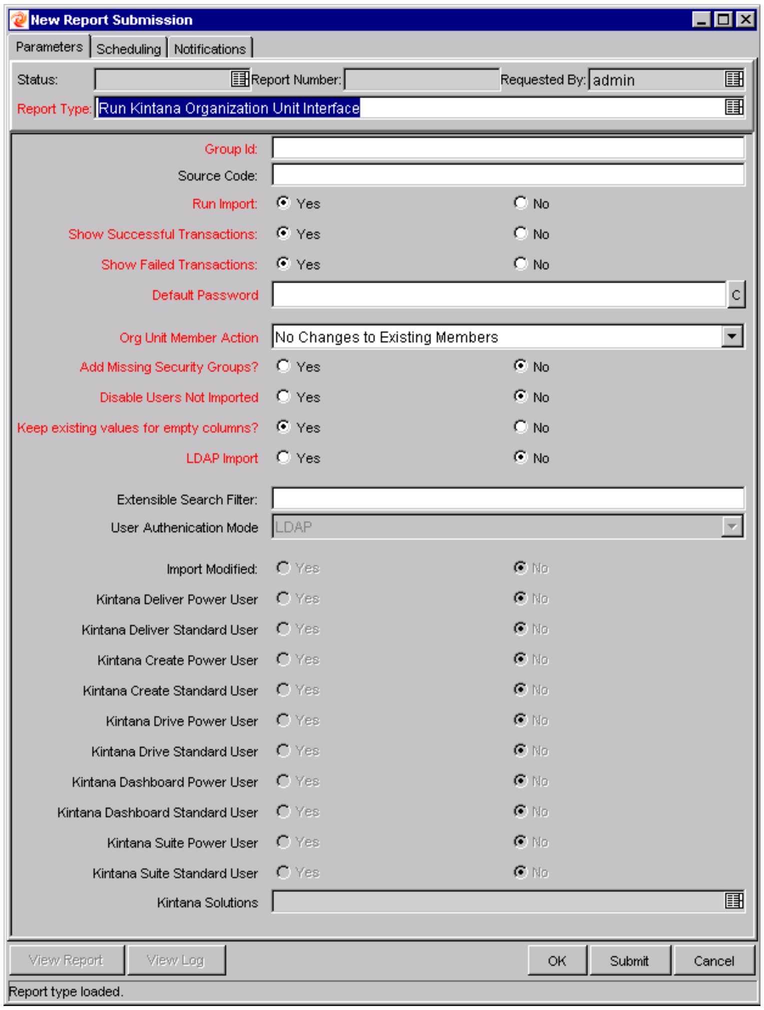
The "Run Kintana Organization Unit Interface" Program

To import data from the interface tables, the "Run Kintana Organization Unit Interface" program must be used. This program is defined as a standard Kintana Report Type and is launched through either the Kintana Create, Deliver, or Drive Reports screen.

Note

The "Run Kintana Organization Unit Interface" program automatically imports relevant Organization information stored in the LDAP server into the open interface table. See *"Running the Organization Unit Open Interface for an LDAP Import"* on page 61 for details.

For more information on using Report Types and launching Reports, refer to the *"Kintana Reports"* document and respective product manuals.



Status: Report Number: Requested By: admin

Report Type: Run Kintana Organization Unit Interface

Group Id:		
Source Code:		
Run Import:	● Yes	○ No
Show Successful Transactions:	● Yes	○ No
Show Failed Transactions:	● Yes	○ No
Default Password		
Org Unit Member Action	No Changes to Existing Members	
Add Missing Security Groups?	○ Yes	● No
Disable Users Not Imported	○ Yes	● No
Keep existing values for empty columns?	● Yes	○ No
LDAP Import	○ Yes	● No
Extensible Search Filter:		
User Authenication Mode	LDAP	
Import Modified:	○ Yes	● No
Kintana Deliver Power User	○ Yes	● No
Kintana Deliver Standard User	○ Yes	● No
Kintana Create Power User	○ Yes	● No
Kintana Create Standard User	○ Yes	● No
Kintana Drive Power User	○ Yes	● No
Kintana Drive Standard User	○ Yes	● No
Kintana Dashboard Power User	○ Yes	● No
Kintana Dashboard Standard User	○ Yes	● No
Kintana Suite Power User	○ Yes	● No
Kintana Suite Standard User	○ Yes	● No
Kintana Solutions		

Report type loaded.

Figure 3-1 Report-Run Kintana Organization Unit Interface

When executed, the “Run Kintana Organization Unit Interface” program:

- Queries the KRSC_ORG_UNITS_INT interface table for active records matching the given selection criteria.
- Queries the KRSC_ORG_UNIT_MEMBERS_INT table.
- Queries the KNTA_USERS_INT table.
- Validates the Organization information.
- Imports validated Organization Units, Organization Unit members, and any new users into the Kintana tables.
- Updates the KNTA_SECURITY_GROUPS table with information derived from the import.
- Reports on the results of the execution, listing the specified Organization Units and Organization Members that failed validation and the specific validation errors they encountered.

Parameters

The “Run Kintana Organization Unit Interface” program has several parameters for controlling the behavior of the program execution. These parameters are defined in *Table 3-6*.

Table 3-6. Run Kintana User Interface Parameters

Name	Type	Required	Description
Group ID	Text Field	Yes	Runs the interface for a specific Group ID. The interface program will only look for records with this value in the GROUP_ID column. This is useful when importing a batch of Users.
Source Code	Text Field	No	Used to indicate the source from which the organization units are being imported. In the case of a LDAP import, it is set to LDAP_IMPORT.
Run Import	Radio Button	Yes	If set to **Yes**, the program processes the records in the interface table and tries to import them. If set to **No**, the program simply reports on the records in the interface table. This option is useful when auditing prior executions of the open interface.
Show Successful Transactions	Radio Button	Yes	Shows successfully imported org units.
Show Failed Transactions	Radio Button	Yes	Shows org units that were not successfully imported.

Name	Type	Required	Description
Default Password	Password Field	Yes	Sets a default password for all users being associated with an organization, if they are not LDAP users.
Org Unit Member Action	Drop Down List	Yes	Used to specify how the Org Unit membership is managed during the import for existing Org Units. You can select one of the following options: • No Changes to Existing Members -- The import does not add or remove any members in an existing Org Unit. • Replace All Existing Members -- Removes all members of the Org Unit and replaces them with the members specified in the KRSC_ORG_UNIT_MEMBERS_INT table. • Replace LDAP Imported Members -- Removes all members of the Org Unit who are associated using LDAP and replaces them with members associated with the Org Unit on the LDAP server. Other members, who have been added manually using the Kintana interface or by a separate open interface import, will not be altered.
Add Missing Security Groups	Radio Button	Yes	Selects whether to create Security Groups in Kintana. Selecting **YES** will: • Create Security Groups with the same names as the Organization Units. • Add the Org Unit members to the Security Groups (if **REPLACE ALL EXISTING MEMBERS** is selected from the ORG UNIT MEMBER ACTION field).
Disable Users Not Imported	Radio Button	Yes	Disables all existing users currently in the Kintana system (in the specified Org Unit). This happens prior to the import.
Keep existing values for empty columns	Radio Button	Yes	Keep existing values on updated org units and users when interface table columns are empty.
LDAP Import	Radio Button	Yes	This indicates whether the Org Units are being imported from a LDAP server. Selecting **Yes** enables multiple required fields. This field is enabled in the server.conf file. It must be set to LDAP or a comma-delimited list (LDAP, Kintana, etc.). The appropriate LDAP parameters should be specified. Set this to **Yes** if the authentication mode in the server.conf contains LDAP or NTLM.

Name	Type	Required	Description
Extensible Search Filter	Text Field	No	Used to import Org Units from the LDAP server which satisfy a particular LDAP search filter. If no search filter is specified, Kintana will import all appropriate LDAP org units. Refer to your LDAP documentation for instructions on searching for users based on specific filters. A few Examples are provided following this table.
User Authentication Mode	Drop Down List	No	Specifies how users are authenticated upon their logon. For example, if you select LDAP, the user authentication occurs on the LDAP server.
Import Modified	Radio Button	No	Select **Yes** to import only users who have been modified in the LDAP server since the last import.
Kintana Deliver Power User	Radio Button	No	Establishes a Kintana Deliver Power License account for the imported users.
Kintana Deliver Standard User	Radio Button	No	Establishes a Kintana Deliver Standard License account for the imported users.
Kintana Create Power User	Radio Button	No	Establishes a Kintana Create Power License account for the imported users.
Kintana Create Standard User	Radio Button	No	Establishes a Kintana Create Standard License account for the imported users.
Kintana Drive Power User	Radio Button	No	Establishes a Kintana Drive Power License account for the imported users.
Kintana Drive Standard User	Radio Button	No	Establishes a Kintana Drive Standard License account for the imported users.
Kintana Dashboard Power User	Radio Button	No	Establishes a Kintana Dashboard Power License account for the imported users.
Kintana Dashboard Standard User	Radio Button	No	Establishes a Kintana Dashboard Standard License account for the imported users.
Kintana Suite Standard User	Radio Button	No	Establishes a Kintana Suite Standard License account for the imported users.
Kintana Suite Power User	Radio Button	No	Establishes a Kintana Suite Power License account for the imported users.
Kintana Solutions	Auto-complete	N	Establishes a user license for the selected Kintana Solution(s) for the members of the Organization Unit.

Example

Examples of Extensible Search Filter values and their functional results:

- The following filter returns any entries in which the o (organization) attribute exactly matches Kintana and any entries in which o=Kintana is one of the components of the DN:

  (o:dn:=Kintana)
- The following filter returns any entries in which a DN component with a syntax appropriate to the given matching rule matches Kintana :

  (:dn:1.2.3.4.5.8:=Kintana)

  The matching rule given by the OID 1.2.3.4.5.8 should be used.
- The following filter returns any entries in which the ou (organization unit) attribute exactly matches "My Org Unit" and any entries in which ou="My Org Unit" is one of the components of the DN

  (ou:dn:=My Org Unit)

Note

All users imported and associated with the Organization Unit using the “Run Kintana Organization Unit Interface” report will have the same user licenses.

Running the Organization Unit Open Interface for an LDAP Import

To import data from an LDAP server, the “Run Kintana Organization Unit Interface” program must be used. This program is defined as a standard Kintana Report Type and is launched through either the Kintana Create, Deliver, or Drive Reports screen.

The “Run Kintana Organization Unit Interface” program automatically imports relevant user information stored in the LDAP server into the open interface table. You can exercise more control over this process by mapping LDAP attributes to Kintana users in the LdapAttribute.conf file. See *“Mapping LDAP Attributes to Kintana Users and Organization Units”* on page 62 for details.

If user and organization information is imported from an LDAP server, ensure that LDAP Import = **Yes** is selected in the New Report Submission window shown below. Selecting **Yes** enables other required fields, ensuring a smooth import into Kintana.

Prepare for an LDAP User Import

The process for importing users from an LDAP server differs slightly from the simple user import process. The following sections detail some additional preparation required for an LDAP user import.

- *Org Unit Member Action for an LDAP Import*
- *Mapping LDAP Attributes to Kintana Users and Organization Units*
- *Kintana Server Configuration*

Org Unit Member Action for an LDAP Import

Similar to a simple org unit import, you must determine which users you want linked to the org unit. You can select one of the following options from the Org Unit Member Action field:

- No Changes to Existing Members -- The import does not add or remove any members in an existing Org Unit.
- Replace All Existing Members -- Removes all members of the Org Unit and replaces them with the members specified in the KRSC_ORG_UNIT_MEMBERS_INT table.
- Replace LDAP Imported Members -- Removes all members of the Org Unit who are associated using LDAP and replaces them with members in the Org Unit on the LDAP server. Other members, who have been added manually using the Kintana interface or by a separate open interface import, will not be altered.

Mapping LDAP Attributes to Kintana Users and Organization Units

You can map the attributes on the LDAP Server to attributes used by the Kintana server. Some of this mapping occurs by default, but you can exercise greater control by mapping the attributes in the following file:

```
<KINTANA_HOME>/integration/ldap/LdapAttribute.conf
```

The following table lists the attributes and provides some contextual background for each parameter. Kintana also provides sample files (in the same directory) for mapping to a Netscape Directory Server and an Active Directory Server. The default mapping is for a Netscape Directory Server.

Table 3-7. LdapAttribute.conf parameters

LDAP Attribute	Description

LDAP_USER_ID	Enter the attribute which can be used to obtain the User ID on the LDAP server
	# e.g. Ldap_user_id=uid
	LDAP_USER_ID=uid
	
	This is used to resolve the users in the Ldap server. It is mapped to unique attribute that determines a user.

LDAP_LOGON_ID	Enter the attribute which can be used to obtain the logon id from the LDAP Server LDAP_LOGON_ID=uid Note: This needs to be different from the LDAP_USER_ID if the LOGON_METHOD = LOGON_ID in the Kintana server.conf file.
LDAP_GROUP_NAME	Enter the attribute which can be used to obtain the group names from the LDAP Server LDAP_GROUP_NAME=cn
LDAP_ORG_UNIT_NAME	Enter the attribute which can be used to obtain the org units from the LDAP Server LDAP_ORG_UNIT_NAME=ou
LDAP_STATIC_GROUP_ MEMBERS	Enter the attribute which identifies the Static group members on your ldap Server LDAP_STATIC_GROUP_MEMBERS=uniquemember This parameter and the LDAP_DYNAMIC_GROUP_MEMBERS parameter are used to determine the attribute that indicates the members in the Group. In Netscape there can be STATIC and DYNAMIC Groups, hence we have these two different parameters. In Active Directory these would map to the same attribute (member)

Table 3-7. LdapAttribute.conf parameters

LDAP Attribute	Description
LDAP_DYNAMIC_GROUP_ MEMBERS	Enter the attribute which identifies the Dynamic group members on your ldap Server LDAP_DYNAMIC_GROUP_MEMBERS=memberurl This parameter and the LDAP_STATIC_GROUP_MEMBERS parameter are used to determine the attribute that indicates the members in the Group. In Netscape there can be STATIC and DYNAMIC Groups, hence we have these two different parameters. In Active Directory these would map to the same attribute (member)
LDAP_OBJECTCLASS	Enter the attribute which identifies the objectclass attribute on your ldap Server LDAP_OBJECTCLASS=objectclass This parameter determines what the objectclass is called on the LDAP Server. This will always map to “objectclass”.

LDAP_USER_OBJECTCLASS	#Enter the attribute which identifies the objectclass attribute for a user on your ldap Server
	LDAP_USER_OBJECTCLASS=person
	This parameter determines the objectclass that determines if a resource is a user. It is defaulted to “person”.

LDAP_GROUP_OBJECTCLASS	Enter the attribute which identifies the objectclass attribute for a group on your ldap Server LDAP_GROUP_OBJECTCLASS=groupofuniquenames This parameter determines the objectclass that determines if a resource is a group.
LDAP_MODIFY_TIMESTAMP	Enter the attribute which keeps track of the last modified time for an object on your ldap Server LDAP_MODIFY_TIMESTAMP=modifyTimeStamp This parameter is mapped to attribute on the LDAP Server that keeps track of the modified time for that entity.
LDAP_TIME_FORMAT	Enter the attribute which keeps track of the Time format followed by the ldap server. Format for Netscape LDAP Servers: yyyyMMddHHmmss'Z' Format for Active Directory Servers: yyyyMMddHHmmss'.0Z' LDAP_TIME_FORMAT=yyyyMMddHHmmss'Z' This parameter gives Kintana the information of the Time Format the LDAP server follows.

Table 3-7. LdapAttribute.conf parameters

LDAP Attribute	Description

KNTA_USERS_INT	Denotes the table name to which the import would take place to. Then the format is
	ColumnName= LDAP Attribute.
	Thus Any column could be mapped to any LDAP Attribute.
	Map Both VISIBLE_USER_DATA and USER_DATA Columns always. To disable a default mapping below, either comment out or delete the mapping line.
	USERNAME=sAMAccountName
	FIRST_NAME=givenname
	LAST_NAME=sn
	EMAIL_ADDRESS=mail
	PHONE_NUMBER=telephonenumber
	DEPARTMENT_MEANING=departmentNumber
	LOCATION_MEANING=locality
	MANAGER_USERNAME=managerUSER_DATA1=mail**
	VISIBLE_USER_DATA1=mail**
	** These are added in for an example.

VISIBLE_USER_DATA and USER_DATA	Map Both VISIBLE_USER_DATA and USER_DATA Columns always.

Note

The ORG_UNIT_NAME and PARENT_ORG_UNIT_NAME columns should not be mapped in the LdapAttribute.conf file. Those attributes are specified in the KRSC_ORG_UNITS_INT table.

Kintana Server Configuration

The following Kintana server parameters need to be considered when performing a user import from an LDAP server. These parameters are set in the server.conf file located in the following directory:

```
<KINTANA_HOME>/server.conf
```

Table 3-8 lists the attributes and provides some contextual background for each parameter. After changing these parameters, you need to stop and restart the Kintana server.

Table 3-8. server.conf Parameters

Parameter	Description
Authentication_Mode	This is required for the Kintana Server to determine what method to use for authenticating users. It currently defaults to the KINTANA value. MIXED is no longer a valid value; mixed values can be separated with a comma (LDAP, KINTANA etc.). Valid values are: KINTANA, LDAP, SITEMINDER, NTLM com.kintana.core.server.AUTHENTICATION_MODE=KINTANA, LDAP, SITEMINDER
LDAP_Server_URL	This can be a comma delimited list of LDAP URLs and the Kintana Server will query them in the order in which they are specified. If no port number is specified then the default port 389 will be used. e.g. ldap://ldap.mydomain.com:389, ldap://ldap2.mydomain.com com.kintana.core.server.LDAP_URL=
LDAP_BASE_DN	This specifies the base in the LDAP server from where to start the search. If this is not specified, then the LDAP server will be queried to determine the base. e.g. o=mydomain.com com.kintana.core.server.LDAP_BASE_DN=
KINTANA_LDAP_ID	Kintana account on the LDAP server. This is a required field if the LDAP server is being used at all. This will be used by the Kintana Server to bind to the LDAP server. com.kintana.core.server.KINTANA_LDAP_ID=

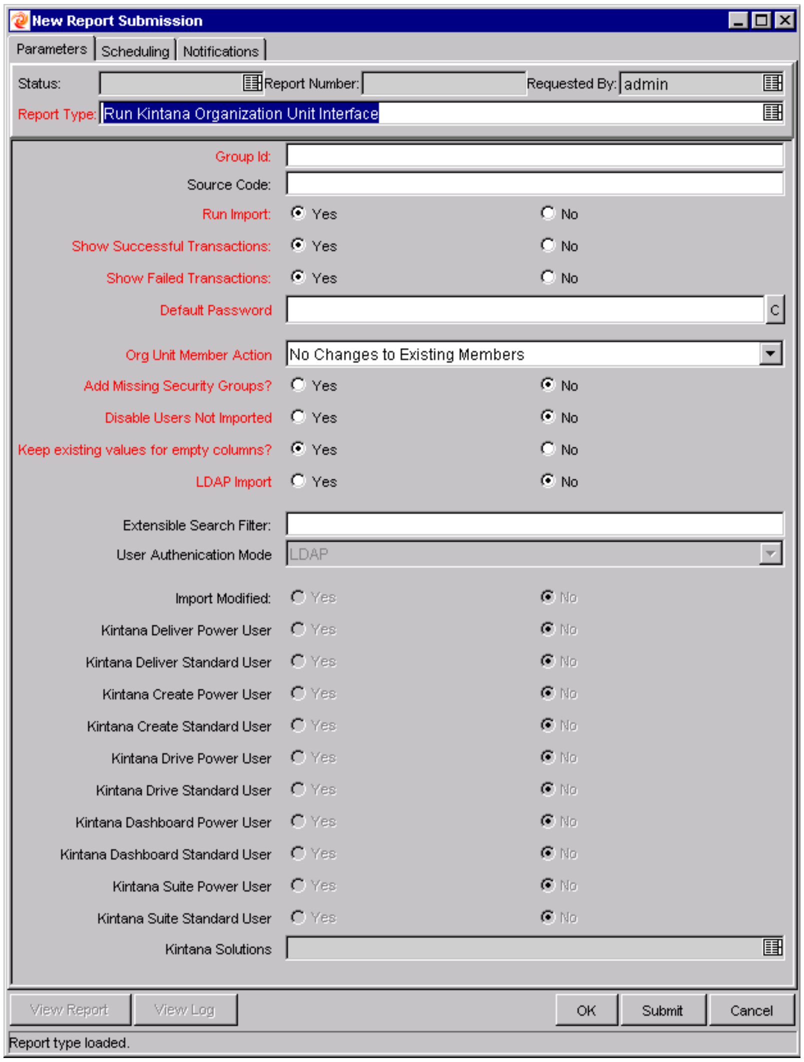
KINTANA_LDAP_PASSWORD	Kintana password on the LDAP server. This is automatically encrypted by the server configuration utility. Leave this blank for an anonymous authentication.
	Note: If you are manually editing the server.conf file, the encrypted password should be surrounded with #!# delimiters.
	com.kintana.core.server.KINTANA_LDAP_PASSWORD=#!#0123456789abcdefghij9876543210AB#!#
	com.kintana.core.server.KINTANA_LDAP_PASSWORD=#!##!#

Table 3-8. server.conf Parameters

Parameter	Description
LDAP_SSL_PORT	SSL Port number on the LDAP server. If the LDAP server is SSL enabled then this should be set to the SSL port of the LDAP server (which is usually 636). This port will be used to carry out all secure transactions. If this field is not set, then all transactions will be carried out over the port specified in the param # LDAP_URL com.kintana.core.server.LDAP_SSL_PORT=

“Run Kintana Organization Unit Interface” Program for LDAP Import

After determining your strategy for assigning Security Groups to your users and preparing for the import, you will run the import using the “Run Kintana Organization Unit Interface” program. This program is launched through either the Kintana Create, Deliver, or Drive Reports screen.



Status:
Report Number:
Requested By: admin
Report Type: Run Kintana Organization Unit Interface

Group Id:		
Source Code:		
Run Import:	● Yes	○ No
Show Successful Transactions:	● Yes	○ No
Show Failed Transactions:	● Yes	○ No
Default Password		
Org Unit Member Action	No Changes to Existing Members	
Add Missing Security Groups?	○ Yes	● No
Disable Users Not Imported	○ Yes	● No
Keep existing values for empty columns?	● Yes	○ No
LDAP Import	○ Yes	● No
Extensible Search Filter:		
User Authenication Mode	LDAP	
Import Modified:	○ Yes	● No
Kintana Deliver Power User	○ Yes	● No
Kintana Deliver Standard User	○ Yes	● No
Kintana Create Power User	○ Yes	● No
Kintana Create Standard User	○ Yes	● No
Kintana Drive Power User	○ Yes	● No
Kintana Drive Standard User	○ Yes	● No
Kintana Dashboard Power User	○ Yes	● No
Kintana Dashboard Standard User	○ Yes	● No
Kintana Suite Power User	○ Yes	● No
Kintana Suite Standard User	○ Yes	● No
Kintana Solutions		

Report type loaded.

Figure 3-2 Report-Run Kintana Organization Unit Interface for LDAP

When executed, the "Run Kintana Organization Unit Interface" program:

- Populates the interface tables with records from the LDAP server.
- Validates the user information.
- Imports validated Organization Units and Organization Unit members into the Kintana tables.
- Reports on the results of the execution, listing the specified Users that failed validation and the specific validation errors they encountered.

To run the import from the Kintana Workbench:

1. Open the Report window in either Kintana Create, Deliver or Drive.
2. Select **Run Kintana Organization Unit Interface** from the Report Type auto-complete list. The parameters for this program appear in the Report window.
3. Enter the parameters and select the import options. Each parameter on this Report is defined in *Table 3-6 on page 58*. For an LDAP import, you should pay special attention to the following fields:
    - LDAP Import: Set this field to **Yes**. This will enable the other LDAP-import related parameters.
    - Search Filter
    - User Authentication Mode
    - Import Modified
    - Kintana Standard and Power User license information
4. Click **Submit**.

You can then view the report and the log to analyze the import results.

LDAP Authentication

Kintana uses simple authentication to authenticate against any LDAP v3. compliant LDAP server.

The authentication steps are:

1. The Kintana server binds to the LDAP server using the credentials supplied in the server.conf parameters KINTANA_LDAP_ID and KINTANA_LDAP_PASSWORD. This step is optional though. Kintana will do an anonymous authentication if no password is supplied in server.conf.
2. Kintana tries to obtain the distinguished name of the user by supplying a Search Filter to the LDAP server which is of the form (uid=username). Here the attribute uid could vary from one LDAP server to another depending on the information supplied in the LdapAttribute.conf file.

3. If Kintana obtains a unique distinguished name, then it tries to rebind to the LDAP server using the distinguished name and the password supplied by the user.

If more than one LDAP server has been specified in the server.conf parameter LDAP_URL, Kintana will try to authenticate against all of them until it succeeds. If the referral option has been enabled, then Kintana will also chase the referral server to authenticate against that if the user is not present in primary server.

For users who are running the Kintana server on jdk1.3 platform, Kintana also supports LDAP authentication over SSL using passwords. To enable the SSL option, the server.conf param LDAP_SSL_PORT should be set to the SSL port of the LDAP server.

Post-Import Activities

Following the user import, you can view the results of the import. From the Report screen, click **View Report** to open the report. This report will identify any errors with the import. After reviewing the import results, you can proceed with the following activities:

- *Correcting Failures*
- *Purging the Interface Tables*

Correcting Failures

When a user is successfully imported, information stored in the interface tables is not deleted, and no additional action is required. It is possible to view and process the user with the Kintana user interface.

For users that fail to import, corrective actions are required. The first step involves examining the audit report from the open interface program to identify the failed records and the specific reasons for each failure.

Depending on the reasons, it may be necessary to correct the problem through a variety of means. Some failures may occur due to a mapping problem between the source data and existing Kintana data.

Other failures may be due to missing information that cannot be defaulted. For example, users require a Username. If the Username columns were left blank for records in the User interface table, the records will fail validation. To correct this, the custom program or procedure that inserts records into the interface table needs to be modified to include this required data.

Note

During the initial implementation of the Open Interface, the mapping between the non-Kintana source and Kintana should be thoroughly reviewed and the load program(s) thoroughly tested in a testing instance. Additionally, it is good practice to monitor executions of the Open Interface and periodically monitor the import of desired data into Kintana.

Purging the Interface Tables

All the interface tables are automatically purged by the Purge service. Purging process depends on two parameters in the server.conf file:

```
com.kintana.is.server.ENABLE_INTERFACE_CLEANUP

com.kintana.is.server.DAYS_TO_KEEP_INTERFACE_ROWS
```

The first one enables or disables the Purge process, while the second parameter is used to give the number of days that the records are retained in the Interface tables.

Chapter

4

Kintana Request Open Interface

In addition to a Web based user interface for the entry of new Requests, the Kintana Create application includes an open interface for Request creation. This API uses interface tables within the Kintana Create database instance. Data added to these interface tables is validated and eventually imported into standard Kintana Create tables. This generates Requests that can be processed using Kintana Create.

The primary purpose of the Request Open Interface is to allow integration with non-Kintana products. Relevant information from these products can be used to generate the appropriate Request using the Open Interface. The Open Interface can also be used as a conversion mechanism to convert data from a legacy system into Kintana Create during initial implementation.

This chapter includes the following information related to the Kintana Request Open Interface:

- *Data Model*
- *Running the Request Open Interface*

Data Model

The interface tables used by the Kintana Create Request Open Interface closely relate to the standard tables used to store Request information.

- **KCRT_REQUESTS_INT** - This interface stores Request header and detail information for each new Request generated. This includes information such as Request Number, Priority, Project Name, Description, and attached Notes. This table also holds columns to import user-defined detail fields determined by the Request Type for each specific Request.

- **KCRT_REQUEST_DETAILS_INT** - This is an internal interface table used by the Request Open Interface program as it processes new Requests. It is used to store validation information related to the user defined custom fields for each Request.
- **KCRT_REQ_HEADER_DETAILS_INT** - This internal table stores data for custom fields that are defined in the Request Header. Standard Request Header Type fields (such as Request Number and Priority) are stored in KCRT_REQUESTS_INT. This table can be optionally populated by the user.
- **KCRT_FG_<NAME>_INT** - Each Field Group defined in Kintana has an associated interface table. These tables store information related to fields defined for that Field Group. These tables can be optionally populated by the user. Field Groups are installed when you install a Kintana Solution. Consequently, not all Field Group interface tables may be present in your database. The following Field Group interface tables currently exist in Kintana:
    - KCRT_FG_DEMAND_SCHEDULE_INT
    - KCRT_FG_MASTER_PROJ_REF_INT
    - KCRT_FG_PROG_ISSUE_INT
    - KCRT_FG_PROG_REFERENCE_INT
    - KCRT_FG_PROG_RESOURCE_REQ_INT
    - KCRT_FG_PROG_RISK_INT
    - KCRT_FG_PROG_SCOPE_CHANGE_INT
    - KCRT_FG_SLA_INT
    - KCRT_FG_WORK_ITEMS_INT

Figure 4-1 displays the relationships between the Request Open Interface tables.

Note

Each table includes a “Required for Import” column. This column, and other related requirements, are discussed in *“Loading Data into the Request Interface Tables”* on page 91.

The KNTA_INTERFACE_ERRORS table is included in the Kintana data model for reference only and should NOT be altered by the user.

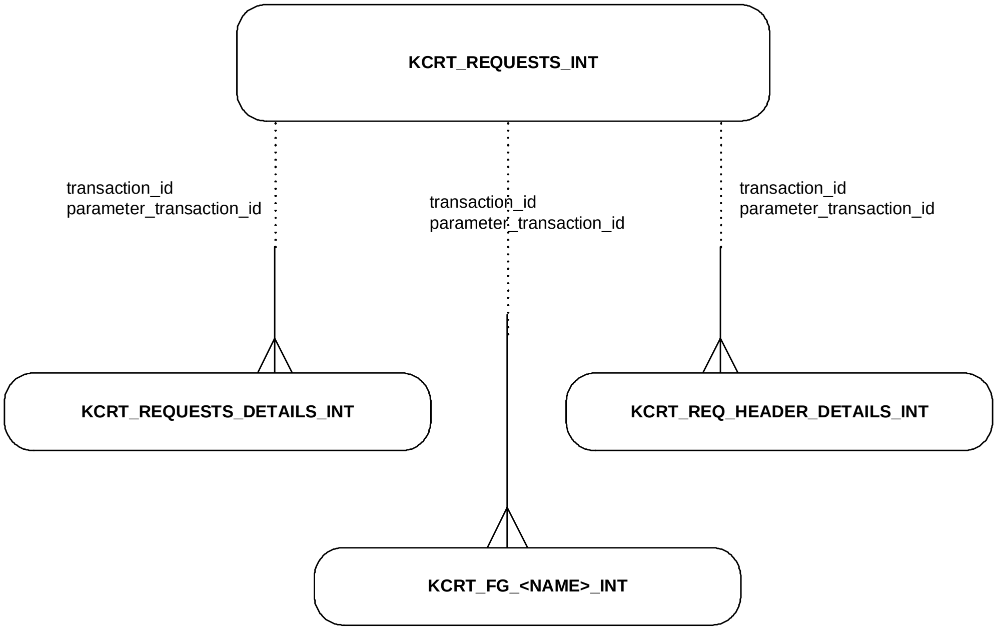


Figure 4-1 Request Interface Tables

Table 4-1. KCRT_REQUESTS_INT

Column	Required for Import?	Data Type	Description
GROUP_ID	Y	Number	Derived from the KNTA_INTERFACE_GROUPS_S sequence, this column is used to group together all the Requests to be processed (all records processed as a group should have the same value).
TRANSACTION_ID	Y (See Note)	Number	A unique identifier for the record. Enter a value from the sequence KNTA_INTERFACE_TXNS_S. If left blank, the column will be derived from this sequence. *Note: If there is a detail record, a unique value for the record must be supplied and it must match the parent_transaction_id of the detail record*.
PROCESS_PHASE	N	Number	Indicates the current stage of the record as it is being processed. Should be initially set to 1.

Table 4-1. KCRT_REQUESTS_INT

Column	Required for Import?	Data Type	Description
PROCESS_STATUS	N	Number	Indicates the current disposition of the record (whether the record has been imported or has failed validation). Should be initially set to 1.
REQUEST_ID	N	Number	The internal identifier for a Request. This should normally be left blank and will default from the KCRT_REQUESTS_S sequence. If a value is entered, it should be derived from the KCRT_REQUESTS_S sequence.
CREATION_DATE	N	Date	The creation date of the new Request. If left blank, it will default to the current date.
CREATED_USERNAME	Y	Varchar2(30)	Required column. The USERNAME from KNTA_USERS of the user generating the Request.
CREATED_BY	N	Number	The USER_ID from KNTA_USERS table for the user generating the Request. This is an internal column that should be left blank. It will be derived from CREATED_USERNAME.
LAST_UPDATE_DATE	N	Date	The last update date of the new Request. If left blank, it will default to the current date.
LAST_UPDATED_USERNAME	Y	Varchar2(30)	Required column. The USERNAME from KNTA_USERS of the user generating the Request.
LAST_UPDATED_BY	N	Number	The USER_ID from KNTA_USERS table for the user generating the Request. This is an internal column that should be left blank. It will be derived from LAST_UPDATED_USERNAME.
ENTITY_LAST_UPDATE_DATE	N	Date	Should be left blank. It will default to the current date.
REQUEST_NUMBER	N	Varchar2(30)	The user key for the Request. Normally, this column is left blank and is set to the REQUEST_ID which is also derived. If a value is entered, it should be unique and should match the value in the REQUEST_ID field.

Table 4-1. KCRT_REQUESTS_INT

Column	Required for Import?	Data Type	Description
REQUEST_TYPE_NAME	Y	Varchar2(80)	Required column. The REQUEST_TYPE_NAME from the KCRT_REQUEST_TYPES table that indicates the Request Type for the Request.
REQUEST_TYPE_ID	N	Number	The REQUEST_TYPE_ID from KCRT_REQUEST_TYPES that indicates the Request Type for the Request. This is an internal column that should be left blank. It will be derived from the REQUEST_TYPE_NAME.
REQUEST_SUBTYPE_NAM E	N	Varchar2(80)	The REQUEST_SUB_TYPE_NAME from the KCRT_REQUEST_SUB_TYPES table that indicates the Request Sub Type for the Request. If entered, it must be a valid Sub Type for the specified Request Type.
REQUEST_SUBTYPE_ID	N	Number	The REQUEST_SUB_TYPE_ID from KCRT_REQUEST_SUB_TYPES that indicates the Request Sub Type for the Request. This is an internal column that should be left blank. It will be derived from the REQUEST_SUBTYPE_NAME.
DESCRIPTION	N	Varchar2(24 0)	A user visible description of the Request. For information purposes only.
RELEASE_DATE	N	Date	This column signifies when the Request first became active. For new Requests, leave the column blank. When converting existing Requests from a Third Party system, enter the initial creation date of the Request in the remote system.
STATUS_NAME	N	Varchar2(80)	The STATUS_NAME from KCRT_STATUSES indicates the current status of the Request. It must be a valid Status attached to the given Request Type and should be a Request Status for at least one Workflow Step of the Workflow. If left blank, the new Request will get the Initial Status indicated on the Request Type definition.

Table 4-1. KCRT_REQUESTS_INT

Column	Required for Import?	Data Type	Description
STATUS_ID	N	Number	The STATUS_ID from KCRT_STATUSES. Indicates the current status of the Request. This is an internal column that should be left blank. It will be derived from the STATUS_NAME.
WORKFLOW_NAME	N	Varchar2(80)	The WORKFLOW_NAME from the KWFL_WORKFLOWS table that specifies the Kintana Create Workflow that the Request should follow. Should normally be left blank and will default based on the values for Request Type, Department, and Application for the Request.
WORKFLOW_ID	N	Number	The WORKFLOW_ID from the KWFL_WORKFLOWS table that specifies which Kintana Create Workflow the Request should follow. This is an internal column that should be left blank. It will be derived from the WORKFLOW_NAME.
DEPARTMENT_CODE	N	Varchar2(30)	A non-required column indicating the user-defined department the Request is tied to. This is an internal column that should be left blank. It will be derived from the DEPARTMENT_NAME.
DEPARTMENT_NAME	N	Varchar2(80)	A non-required column indicating the user-defined department name the Request is tied to. If entered, it must be a valid MEANING from the KNTA_LOOKUPS table where LOOKUP_TYPE = ‘DEPT’.
PRIORITY_CODE	N	Varchar2(30)	A non-required column indicating the user-defined priority of the Request. This is an internal column that should be left blank. It will be derived from the PRIORITY_NAME.
PRIORITY_NAME	N	Varchar2(80)	A non-required column indicating the user-defined priority name of the Request. If entered, it must be a valid MEANING from the KNTA_LOOKUPS table where LOOKUP_TYPE = ‘REQUEST_PRIORITY’.

Table 4-1. KCRT_REQUESTS_INT

Column	Required for Import?	Data Type	Description
APPLICATION	N	Varchar2(30)	A non-required column indicating the user-defined application the Request is tied to. If entered, it must be a valid LOOKUP_CODE from the KNTA_LOOKUPS table where LOOKUP_TYPE = ‘APPLICATION’.
ASSIGNED_TO_USERNAME	N	Varchar2(30)	The USERNAME from the KNTA_USERS table that should initially be assigned the Request.
ASSIGNED_TO_USER_ID	N	Number	The USER_ID from the KNTA_USERS table for the user who should be assigned the Request. This is an internal column that should be left blank.
ASSIGNED_TO_GROUP_NAME	N	Varchar2(30)	The SECURITY_GROUP_ID from the KNTA_SECURITY_GROUPS table for the group that should initially be assigned the Request. This column is not required.
ASSIGNED_TO_GROUP_ID	N	Number	The SECURITY_GROUP_ID from KNTA_SECURITY_GROUPS for the group the Request should initially be assigned to. This is an internal column that should be left blank. It is derived from the ASSIGNED_TO_GROUP_NAME.
PROJECT_CODE	N	Varchar2(30)	A non-required column indicating the user-defined project the Request is tied to. If entered, it must be a valid LOOKUP_CODE from the KNTA_LOOKUPS table where LOOKUP_TYPE = ‘PROJECT’.
CONTACT_FIRST_NAME	N	Varchar2(30)	This non-required column can be used to give Contact information for the Request. Should be derived from FIRST_NAME from the KCRT_CONTACTS table. If a value is entered, CONTACT_LAST_NAME should also be populated.
CONTACT_LAST_NAME	N	Varchar2(30)	This non-required column can be used to give Contact information for the Request. Should be derived from LAST_NAME from KCRT_CONTACTS table. If a value is entered, CONTACT_FIRST_NAME should also be populated.

Table 4-1. KCRT_REQUESTS_INT

Column	Required for Import?	Data Type	Description
CONTACT_ID	N	Number	This non-required column can be used to give Contact information for the Request. This is an internal column that should be left blank.
RELEASED_FLAG	N	Varchar2(1)	Required; if set to “Y”, the Request will be Released after import. Otherwise, it will remain Unreleased.
USER_DATA_SET_CONTEXT_ID	N	Number	An internal column used when User-Defined Fields (User Data) has been specified. Should be left blank.
USER_DATA1..20 VISIBLE_USER_DATA1..20	N	Varchar2(200)	These columns hold the User-Defined Fields attached to Request headers. Values should be entered only if Request User Data has been defined. These columns will not be validated or defaulted, so when entering values, enter both the user visible values and the internal value or id.
PARAMETER_SET_CONTEXT_ID	N	Number	An internal column used to determine the detail fields for the Request. It is based on the Request Type attached to the Request and should be left blank.
NOTES	N	Long	This non-required column holds the free-form notes text to be attached to the Request. It will be visible in the **Notes** tab of the Request window. In the Notes field, the Carriage Returns may be represented as '{\n}' and are replaced with actual carriage returns when notes are moved into the notes table. This can be helpful when the interface table is populated through SQL*Loader.
SOURCE_TYPE_CODE	N	Varchar2(30)	Indicates how the Request was generated in Kintana Create. Should be left blank.
SOURCE	N	Varchar2 (100)	This is a free form column and can be used to indicate the exact source of the Request (the name of the Third Party Application, the text string ‘Conversion’, etc.).
WORKFLOW_STEP_ID	N	Number	An internal column that should be left blank.
COMPANY	N	Varchar2(30)	The name of the company associated with this Request; associated with any lookup.

Table 4-2. KCRT_REQUEST_DETAILS_INT

Column	Required for Import	Data Type	Description
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together. Most of database processing is done based on this value. The value should be the same as the parent's GROUP_ID in KCRT_REQUEST_INT table.
TRANSACTION_ID	N	Number	Unique identifier for a record in the group.
PARENT_TRANSACTION_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table.
REQUEST_DETAIL_ID	N	Number	Refers to the REQUEST_DETAIL_ID in the KCRT_REQUEST_DETAILS table.
REQUEST_ID	N	Number	Refers to the REQUEST_ID in the KCRT_REQUESTS table.
REQUEST_TYPE_ID	N	Number	Refers to the REQUEST_TYPE_ID in the KCRT_REQUEST_TYPES table.
PARAMETER_SET_CONTEXT_ID	N	Number	Parameter set context identifier for the custom data fields.
BATCH_NUMBER	Y	Number	Batch number for the custom fields. This is specified in the Storage tab in the Field definition window on the Request Type. See the Request Type chapter in the System Administrator's Guide for more details.
PARAMETER1..40 VISIBLE_PARAMETER1..40	Y (if custom fields exist and are required)	Varchar2(200)	Refers to Parameter1 through Parameter 40 and Visible Parameter1 through Visible Parameter 40 in the KCRT_REQUEST_DETAILS table.
PARAMETER41..50 VISIBLE_PARAMETER41..50	Y (if custom fields exist and are required)	Varchar2(1800)	Refers to Parameter1 through Parameter 40 and Visible Parameter1 through Visible Parameter 40 in the KCRT_REQUEST_DETAILS table.
LOOKUP_TYPE1..50	N	Varchar2(80)	Lookup Type for Parameter1.
VALIDATION_TYPE_CODE1..50	N	Varchar2(30)	Validation Type Code for Parameter1.

Table 4-3. KCRT_REQ_HEADER_DETAILS_INT

Column	Required for Import	Data Type	Description
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together. Most of database processing is done based on this value. The value should be the same as the parent's GROUP_ID in KCRT_REQUEST_INT table.
TRANSACTION_ID	N	Number	Unique identifier for a record in the group.
PARENT_TRANSACTION_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table.
REQ_HEADER_DETAIL_ID	N	Number	Refers to the REQ_HEADER_DETAIL_ID in the KCRT_REQ_HEADER_DETAILS table.
REQUEST_ID	N	Number	Refers to the REQUEST_ID in the KCRT_REQUESTS table.
REQUEST_TYPE_ID	N	Number	Refers to the REQUEST_TYPE_ID in the KCRT_REQUEST_TYPES table.
BATCH_NUMBER	Y	Number	Batch number for the custom fields. This is specified in the Storage tab in the Field definition window on the Request Type.
PARAMETER1..40 VISIBLE_PARAMETER1..40	Y (if custom fields exist and are required)	Varchar2(200)	Refers to Parameter1 through Parameter 40 and Visible Parameter1 through Visible Parameter 40 in the KCRT_REQ_HEADER_DETAILS table.
PARAMETER41..50 VISIBLE_PARAMETER41..50	Y (if custom fields exist and are required)	Varchar2(1800)	Refers to Parameter1 through Parameter 40 and Visible Parameter1 through Visible Parameter 40 in the KCRT_REQ_HEADER_DETAILS table.
LOOKUP_TYPE1..50	N	Varchar2(80)	Lookup Type for Parameter1.
VALIDATION_TYPE_CODE1..50	N	Varchar2(30)	Validation Type Code for Parameter1.

Table 4-4. KCRT_FG_DEMAND_SCHEDULE_INT

Column	Required for Import	Data Type	Description
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together. Most of database processing is done based on this value. The value should be the same as the parent's GROUP_ID in KCRT_REQUEST_INT table.
TRANSACTION_ID	N	Number	Unique identifier for a record in the group.
PARENT_TRANSACTION_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table.
REQUEST_ID	N	Number	Refers to the REQUEST_ID in the KCRT_REQUESTS table.
REQUEST_TYPE_ID	N	Number	Refers to the REQUEST_TYPE_ID in the KCRT_REQUEST_TYPES table.
SCHEDULE_DATE	N	Date	Date that the Demand was scheduled.
REJECT_DATE	N	Date	Date that the Demand was rejected.
EFFORT	N	Number	Effort associated with satisfied the demand in hours.
DEMAND_SATISFIED_DATE	N	Date	Date that the demand was satisfied.

Table 4-5. KCRT_FG_MASTER_PROJ_REF_INT

Column	Required for Import	Data Type	Description
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together. Most of database processing is done based on this value. The value should be the same as the parent's GROUP_ID in KCRT_REQUEST_INT table.
TRANSACTION_ID	N	Number	Unique identifier for a record in the group.
PARENT_TRANSACTION_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table.

Table 4-5. KCRT_FG_MASTER_PROJ_REF_INT

Column	Required for Import	Data Type	Description
REQUEST_ID	N	Number	Refers to the REQUEST_ID in the KCRT_REQUESTS table.
REQUEST_TYPE_ID	N	Number	Refers to the REQUEST_TYPE_ID in the KCRT_REQUEST_TYPES table.
REF_MASTER_PROJECT_ID	N	Varchar2(200)	If a value is supplied, automatically creates a reference to the specified master project.
REF_MASTER_PROJECT_NAME	N	Varchar2(200)	If a value is supplied, automatically creates a reference to the specified master project.

Table 4-6. KCRT_FG_PROG_ISSUE_INT

Column	Required for Import	Data Type	Description
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together. Most of database processing is done based on this value. The value should be the same as the parent’s GROUP_ID in KCRT_REQUEST_INT table.
TRANSACTION_ID	N	Number	Unique identifier for a record in the group.
PARENT_TRANSACTION_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table.
REQUEST_ID	N	Number	Refers to the REQUEST_ID in the KCRT_REQUESTS table.
REQUEST_TYPE_ID	N	Number	Refers to the REQUEST_TYPE_ID in the KCRT_REQUEST_TYPES table.
ESCALATION_LEVEL_CODE	N	Varchar2(200)	The escalation level code.
ESCALATION_LEVEL_MEANING	N	Varchar2(200)	The escalation level meaning.

Table 4-7. KCRT_FG_PROG_REFERENCE_INT

Column	Required for Import	Data Type	Description
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together. Most of database processing is done based on this value. The value should be the same as the parent's GROUP_ID in KCRT_REQUEST_INT table.
TRANSACTION_ID	N	Number	Unique identifier for a record in the group.
PARENT_TRANSACTION_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table.
REQUEST_ID	N	Number	Refers to the REQUEST_ID in the KCRT_REQUESTS table.
REQUEST_TYPE_ID	N	Number	Refers to the REQUEST_TYPE_ID in the KCRT_REQUEST_TYPES table.
REF_PROGRAM_ID	N	Varchar2(200)	The ID of the referenced program. If a value is supplied, automatically creates a reference to the specified Program.
REF_PROGRAM_NAME	N	Varchar2(200)	The name of the referenced program. If a value is supplied, automatically creates a reference to the specified Program.

Table 4-8. KCRT_FG_PROG_RESOURCE_REQ_INT

Column	Required for Import	Data Type	Description
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together. Most of database processing is done based on this value. The value should be the same as the parent's GROUP_ID in KCRT_REQUEST_INT table.
TRANSACTION_ID	N	Number	Unique identifier for a record in the group.
PARENT_TRANSACTION_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table.

Table 4-8. KCRT_FG_PROG_RESOURCE_REQ_INT

Column	Required for Import	Data Type	Description
REQUEST_ID	N	Number	Refers to the REQUEST_ID in the KCRT_REQUESTS table.
REQUEST_TYPE_ID	N	Number	Refers to the REQUEST_TYPE_ID in the KCRT_REQUEST_TYPES table.
ROLE_DESCRIPTION_CODE	N	Varchar2(1800)	Description of the resource's role.

Table 4-9. KCRT_FG_PROG_RISK_INT

Column	Required for Import	Data Type	Description
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together. Most of database processing is done based on this value. The value should be the same as the parent's GROUP_ID in KCRT_REQUEST_INT table.
TRANSACTION_ID	N	Number	Unique identifier for a record in the group.
PARENT_TRANSACTION_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table.
REQUEST_ID	N	Number	Refers to the REQUEST_ID in the KCRT_REQUESTS table.
REQUEST_TYPE_ID	N	Number	Refers to the REQUEST_TYPE_ID in the KCRT_REQUEST_TYPES table.
PROBABILITY_CODE	N	Varchar2(200)	Probability of the program risk.
PROBABILITY_MEANING	N	Varchar2(200)	Probability of the program risk.
RISK_IMPACT_LEVEL_CODE	N	Varchar2(200)	Impact level of the program's risk.
RISK_IMPACT_LEVEL_MEANING	N	Varchar2(200)	Impact level of the program's risk.

Table 4-10. KCRT_FG_PROG_SCOPE_CHANGE_INT

Column	Required for Import	Data Type	Description
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together. Most of database processing is done based on this value. The value should be the same as the parent's GROUP_ID in KCRT_REQUEST_INT table.
TRANSACTION_ID	N	Number	Unique identifier for a record in the group.
PARENT_TRANSACTION_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table.
REQUEST_ID	N	Number	Refers to the REQUEST_ID in the KCRT_REQUESTS table.
REQUEST_TYPE_ID	N	Number	Refers to the REQUEST_TYPE_ID in the KCRT_REQUEST_TYPES table.
IMPACT_SEVERITY_CODE	N	Varchar2(200)	Severity of the impact of the scope change.
IMPACT_SEVERITY_MEANING	N	Varchar2(200)	Severity of the impact of the scope change.
CR_LEVEL_CODE	N	Varchar2(200)	Change request level importance of the scope change.
CR_LEVEL_MEANING	N	Varchar2(200)	Change request level importance of the scope change.

Table 4-11. KCRT_FG_SLA_INT

Column	Required for Import	Data Type	Description
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together. Most of database processing is done based on this value. The value should be the same as the parent's GROUP_ID in KCRT_REQUEST_INT table.
TRANSACTION_ID	N	Number	Unique identifier for a record in the group.

Table 4-11. KCRT_FG_SLA_INT

Column	Required for Import	Data Type	Description
PARENT_TRANSACTION_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table.
REQUEST_ID	N	Number	Refers to the REQUEST_ID in the KCRT_REQUESTS table.
REQUEST_TYPE_ID	N	Number	Refers to the REQUEST_TYPE_ID in the KCRT_REQUEST_TYPES table.
SERVICE_REQUESTED_DATE	N	Date	Date that the service was requested.
SLA_LEVEL_CODE	N	Varchar2(30)	Service level agreement level.
SLA_LEVEL	N	Varchar2(100)	Service level agreement level.
VIOLATION_DATE	N	Date	Date that the SLA rule was violated.
SERVICE_SATISFIED_DATE	N	Date	Date that the service was satisfied.

Table 4-12. KCRT_FG_WORK_ITEMS_INT

Column	Required for Import	Data Type	Description
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together. Most of database processing is done based on this value. The value should be the same as the parent’s GROUP_ID in KCRT_REQUEST_INT table.
TRANSACTION_ID	N	Number	Unique identifier for a record in the group.
PARENT_TRANSACTION_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table.
REQUEST_ID	N	Number	Refers to the REQUEST_ID in the KCRT_REQUESTS table.
REQUEST_TYPE_ID	N	Number	Refers to the REQUEST_TYPE_ID in the KCRT_REQUEST_TYPES table.

Table 4-12. KCRT_FG_WORK_ITEMS_INT

Column	Required for Import	Data Type	Description
PROCESS_PHASE	N	Number	Indicates the current stage of the record as it is being processed. Should be initially set to 1.
PROCESS_STATUS	N	Number	Indicates the current disposition of the record (whether the record has been imported or has failed validation). Should be initially set to 1.
WORKLOAD_FLAG	N	Varchar2 (1)	Indicates whether this Request should count as workload against Resource capacity. “Y” or “N.”
WORKLOAD_FLAG_MEANING	N	Varchar2 (200)	Text associated with WORKLOAD_FLAG. Either “Yes” or “No.”
WORKLOAD_CATEGORY_CODE	N	Varchar2 (30)	If the workload represented by this Request falls under a category, this is the code for that category (lookup type = RSC - Workload Category Code).
WORKLOAD_CATEGORY_MEANING	N	Varchar2 (200)	Meaning or visible text for corresponding WORKLOAD_CATEGORY_CODE (lookup type = “RSC - Workload Category Code).
ALLOW_EXTERNAL_UPDATE_FLAG	N	Varchar2 (1)	Indicates whether the actuals can be updated by an external system (such as Time Management Time Sheets). “Y” or “N.”
USR_SCHEDULED_START_DATE	N	Date	Internal timestamp when work item is scheduled to start -- same day as SCHEDULED_START_DATE, but the time may not be 8AM.
USR_SCHEDULED_FINISH_DATE	N	Date	Internal timestamp when work item is scheduled to finish -- same day as SCHEDULED_FINISH_DATE, but the time may not be the end of the working day.
SCHEDULED_START_DATE	N	Date	Date that the work item is scheduled to start, at 8:00 AM on that day.
SCHEDULED_FINISH_DATE	N	Date	Date that the work item is scheduled to finish, at the end of the working day.
SCHEDULED_EFFORT	N	Number	Effort in hours. Usually equal to (Duration) x (Hours/Day)
SCHEDULED_DURATION	N	Number	(Days) Number of working days between USR_SCHEDULED_START_DATE and USR_SCHEDULED_FINISH_DATE.

Table 4-12. KCRT_FG_WORK_ITEMS_INT

Column	Required for Import	Data Type	Description
SCHED_EFF_OVER_DUR	N	Number	(No units) Helper column used when calculation actuals.
USR_ACTUAL_START_DATE	N	Date	Internal timestamp when work item is scheduled to start -- same day as ACTUAL_START_DATE, but the time may not be 8AM.
USR_ACTUAL_FINISH_DATE	N	Date	Internal timestamp when work item is scheduled to finish -- same day as ACTUAL_FINISH_DATE, but the time may not be the end of the working day.
ACTUAL_START_DATE	N	Date	Date that the work item actually starts, at 8:00 AM on that day.
ACTUAL_FINISH_DATE	N	Date	Date that the work item finishes, at the end of the working day.
ACTUAL_EFFORT	N	Number	Effort in hours. Usually equal to (Duration) x (Hours/Day)
ACTUAL_DURATION	N	Number	(Days) Number of working days between USR_ACTUAL_START_DATE and USR_ACTUAL_FINISH_DATE.
ACTUAL_EFF_OVER_DUR	N	Number	(No units) Helper column used when calculation actuals.
BOOKED_SKILL_ID	N	Number	ID of booked skill. Should match a SKILL_ID in KRSC_SKILLS table.
BOOKED_SKILL_NAME	N	Varchar2 (200)	Skill name booked on this Request. Should match a SKILL_NAME in KRSC_SKILLS table.

Running the Request Open Interface

The following sections discuss the Request Open Interface in more detail:

- *Loading Data into the Request Interface Tables*

- *Using the Run Kintana Request Interface Program*

Loading Data into the Request Interface Tables

The initial step in importing Requests into Kintana Create is populating the Open Interface table. This can be done through any means supported by the Oracle database. Standard mechanisms include the use of SQL*Loader to load in the contents of an ASCII file, or direct Oracle database to database communication through database links.

The load process can also involve the manipulation of the table records once they have been brought into the interface table. This can include the setting of id columns, such as GROUP_ID and TRANSACTION_ID, and the defaulting of specific data not available in the source of the Request (the third-party application, the ASCII file, etc.).

The following section discusses the data that is required for a successful import.

Required Data for Request Import

Certain columns in the Request Open Interface tables must be populated for a Request import. *Table 4-13* defines the columns in the tables that you need to populate for the import. For a complete table description, refer to *"Data Model"* on page 73.

Table 4-13. KCRT_REQUESTS_INT and KCRT_REQUEST_DETAILS_INT Columns Required for Import

Column	Required for Import?	DataType	Description
KCRT_REQUESTS_INT Table			
GROUP_ID	Y	Number	Derived from the KNTA_INTERFACE_GROUPS_S sequence, this column is used to group together all the Requests to be processed (all records processed as a group should have the same value).

Table 4-13. KCRT_REQUESTS_INT and KCRT_REQUEST_DETAILS_INT Columns Required for Import

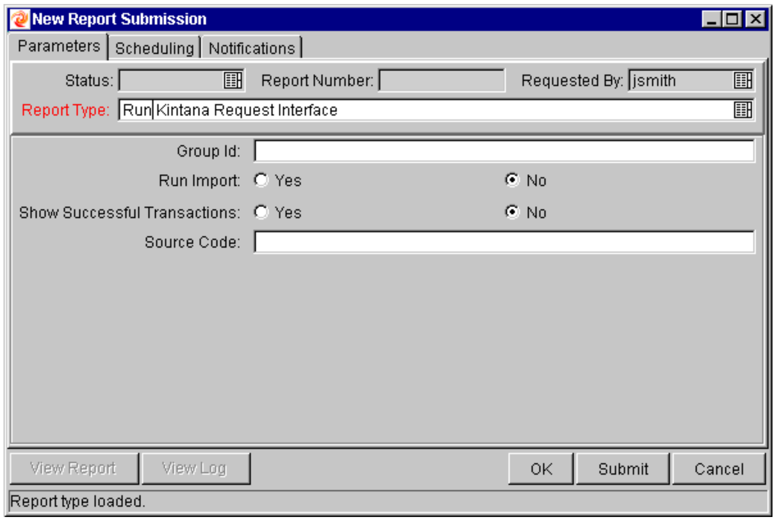
Column	Required for Import?	DataType	Description
TRANSACTION_ID	Y (See Note)	Number	A unique identifier for the record. Enter a value from the sequence KNTA_INTERFACE_TXNS_S. If left blank, the column will be derived from this sequence. *Note: If there is a detail record, a unique value for the record must be supplied and it must match the parent_transaction_id of the detail record*.
CREATED_USERNAME	Y	Varchar2(30)	Required column. The USERNAME from KNTA_USERS of the user generating the Request.
LAST_UPDATED_USER NAME	Y	Varchar2(30)	Required column. The USERNAME from KNTA_USERS of the user generating the Request.
REQUEST_TYPE_NAME	Y	Varchar2(80)	Required column. The REQUEST_TYPE_NAME from the KCRT_REQUEST_TYPES table that indicates the Request Type for the Request.
KCRT_REQUEST_DETAILS_INT Table			
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together as a group. Most of database processing is done based on this value. The value should be the same as the parent's GROUP_ID in KCRT_REQUEST_INT table.
PARENT_TRANSACTIO N_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table. Links detailed record to a unique parent record.
BATCH_NUMBER	Y	Number	Batch number for the custom fields.
PARAMETER1..40 VISIBLE_PARAMETER1..40	Y (if custom fields exist)	Varchar2(200)	Refers to Parameter1 through Parameter 40 and Visible Parameter1 through Visible Parameter 40 in the KCRT_REQUEST_DETAILS table.

Table 4-13. KCRT_REQUESTS_INT and KCRT_REQUEST_DETAILS_INT Columns Required for Import

Column	Required for Import?	DataType	Description
PARAMETER41..50 VISIBLE_PARAMETER41..50	Y (if custom fields exist)	Varchar2(1800)	Refers to Parameter1 through Parameter 40 and Visible Parameter1 through Visible Parameter 40 in the KCRT_REQUEST_DETAILS table.
KCRT_REQ_HEADER_DETAILS_INT Table -- Required ONLY if you have defined custom fields on the Request Header Types associated with the Requests being imported.			
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together as a group. Most of database processing is done based on this value. The value should be the same as the parent's GROUP_ID in KCRT_REQUEST_INT table.
PARENT_TRANSACTION_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table. Links detailed record to a unique parent record.
BATCH_NUMBER	Y	Number	Batch number for the custom fields.
PARAMETER1..40 VISIBLE_PARAMETER1..40	Y (if custom fields exist)	Varchar2(200)	Refers to Parameter1 through Parameter 40 and Visible Parameter1 through Visible Parameter 40 in the KCRT_REQ_HEADER_DETAILS table.
PARAMETER41..50 VISIBLE_PARAMETER41..50	Y (if custom fields exist)	Varchar2(1800)	Refers to Parameter1 through Parameter 40 and Visible Parameter1 through Visible Parameter 40 in the KCRT_REQ_HEADER_DETAILS table.
KCRT_FG_<NAME>_INT Table -- Required ONLY if you are importing field information stored in a field group associated with the Request.			
GROUP_ID	Y	Number	This value is used to tie records in the interface tables together as a group. Most of database processing is done based on this value. The value should be the same as the parent's GROUP_ID in KCRT_REQUEST_INT table.
PARENT_TRANSACTION_ID	Y	Number	Identifier to link with the records in the TRANSACTION_ID in the KCRT_REQUESTS_INT table. Links detailed record to a unique parent record.

Using the Run Kintana Request Interface Program

To process the data in the interface tables, use the ‘Run Kintana Request Interface’ program. This program is defined as a standard Kintana Create Report Type and is launched through the Kintana Create Reports window. For more information on using Report Types and launching Reports, see the *"Kintana Reports"* document.



Status:
Report Number:
Requested By: jsmith
Report Type: Run Kintana Request Interface
Group Id:
Run Import: ○ Yes ● No
Show Successful Transactions: ○ Yes ● No
Source Code:
Report type loaded.

Figure 4-2 The Run Kintana Create Request Interface Report

When executed, the ‘Run Kintana Request Interface’ program:

- Queries the KCRT_REQUESTS_INT interface table for active records matching the given selection criteria.
- Defaults any information that has defaulting rules in Kintana Create but has not been specified in the interface table records. For example, if the REQUEST_ID column is left blank, it will be defaulted from a sequence.
- Validates Request header and detail data for both referential and data integrity. This validation is based on the logic used when entering or updating data through the graphical user interface. Information in User Data fields is not validated.
- Imports validated Requests into the Kintana Create Request tables. Partial imports are not allowed. Requests with one or more failed fields will not be imported.

- Moves the Request to the appropriate Request Status and moves the Request to the first Workflow Step corresponding to the specific Request Status, if indicated.
- Reports on the results of the execution, listing the specified Requests that failed validation and the specific validation errors they encountered.

Run Kintana Request Open Interface Program Parameters

The ‘Run Kintana Request Interface’ program has several parameters for controlling the behavior of the program execution.

Table 4-14. Run Kintana Request Interface Parameters

Parameter	Field Type	Description
Group ID	Text Field	Runs the interface for a specific Group ID. The interface program will only look for records with this value in the GROUP_ID column. This is useful when importing a batch of Requests. If this parameter is left blank, the program will only pick up records with a NULL GROUP_ID value.
Run Import	Radio Button	If set to **Yes**, the program will process the records in the interface table and try to import them. If set to **No**, the program will simply report on the records in the interface table. This option is useful when auditing prior executions of the Open Interface.
Show Successful Transactions	Radio Button	Shows Requests that were successfully imported.
Source Code	Text Field	Used to set the “source_code” column of the final Requests created with a free form text code. It is used as an indicator of how the Request was created for auditing or testing purposes.

Post-Import Activities

Following the Request import, you can view the results of the import. From the Report screen, click View Report to open the report. This report will identify any errors within the import. After reviewing the import results, you can proceed with the following activities:

- *Correcting Failures*

- *Purging the Interface Tables*

Correcting Failures

When a Request is successfully imported, information stored in the interface tables is not deleted, and no additional action is required. Users can view and process the Request using the Kintana Create user interface.

For Requests that fail to import, corrective actions are required. The first step is examining the audit report from the Open Interface program to identify the failed records and the specific reasons for each failure.

Depending on the reasons, it may be necessary to correct the problem through a variety of means. Some failures might occur due to a mapping problem between the source data and existing Kintana Create data.

Example

The source data might use a Project name that does not exist in Kintana Create. Corrective measures for this specific problem would include adding the specific Project in Kintana Create, or mapping the source Project to a Project name that already exists in Kintana Create.

Other failures might be due to missing required information that cannot be defaulted.

Example

Requests require a Request Type. If the Request Type columns are left blank for records in the Requests interface table, the records will fail validation. To correct this, the custom program or procedure that inserts records into the interface table needs to be modified to include this required data.

Failures could occur due to other configuration and mapping problems in either the source or in Kintana Create, or could be the result of errors in the custom loading program.

Note

During initial implementation of the Open Interface, the mapping between the non-Kintana source and Kintana Create should be thoroughly reviewed and the load program(s) thoroughly tested in a testing instance. Additionally, it is good practice to monitor executions of the Open Interface and periodically monitor that the desired data is being imported into Kintana Create.

Purging the Interface Tables

All the interface tables are automatically purged by the purge service. The purging process depends on these two parameters in the server.conf file:

```
com.kintana.core.server.ENABLE_INTERFACE_CLEANUP

com.kintana.core.server.DAYS_TO_KEEP_INTERFACE_ROWS
```

The first parameter enables or disables the Purge process while the second parameter is used to give the number of days for which the records are retained in the Interface tables.

Chapter 5 Kintana Package Open Interface

In addition to a Web based user interface for the entry of new Packages and Package Lines, the Kintana Deliver application includes an open interface for Package creation and the creation of new Package Lines. This API uses interface tables within the Kintana Deliver database instance. Data added to these interface tables is validated and eventually imported into standard Kintana Deliver tables. This generates Packages and Package Lines that can be processed using Kintana Deliver.

The primary purpose of the Package Open Interface is to allow integration with non-Kintana products. Relevant information from these products can be used to generate the appropriate Packages using the Open Interface. The Package Interface can also be used to support site-specific customizations such as the automatic addition of Package Lines based on the processing of a Package, or the spawning of child Packages from other Packages. The Open Interface can also be used as a conversion mechanism to convert data from a legacy system into Kintana Deliver during initial implementation.

This chapter includes the following information related to the Kintana Package Open Interface:

- *Data Model*
- *Running the Package Open Interface*

Note

Integration between the products in Kintana is automatic and does not require user development or user customization involving the Open Interface. For example, no customization work needs to be done to support the creation of Kintana Deliver Packages from Kintana Create Requests.

Data Model

The interface tables used by the Kintana Deliver Package Open Interface closely relate to the standard tables used to store Package information.

- **KDLV_PACKAGES_INT** - This interface stores Package header information for new Packages to be generated. This includes information such as Package Number, Priority, Project Name, and Description. This table also holds columns to import User Data information (custom fields attached to the Packages).
- **KDLV_PACKAGE_LINES_INT** - This interface table holds information for each Package Line on the new Package, or for each new Package Line to be added to an existing Package. This includes information of the specific Object Type and App Code for the Package Line, as well as parameter information for the specified Object Type and User Data for the Package Line.
- **KDLV_PACKAGE_NOTES_INT** - This interface table is used to import notes attached to the new Package. It can only be used when importing a new Package and cannot be used to update the notes of an existing Package.

Figure 5-1 displays the relationships between the **KDLV_PACKAGES_INT**, **KDLV_PACKAGE_LINES_INT**, and the **KDLV_PACKAGE_NOTES_INT** tables.

Note

Each table includes a “Required for Import” column. This column, and other related requirements, are discussed in *“Loading Data into the Package Interface Tables”* on page 110.

The KNTA_INTERFACE_ERRORS table is displayed for reference only and should *not* be altered by the user.

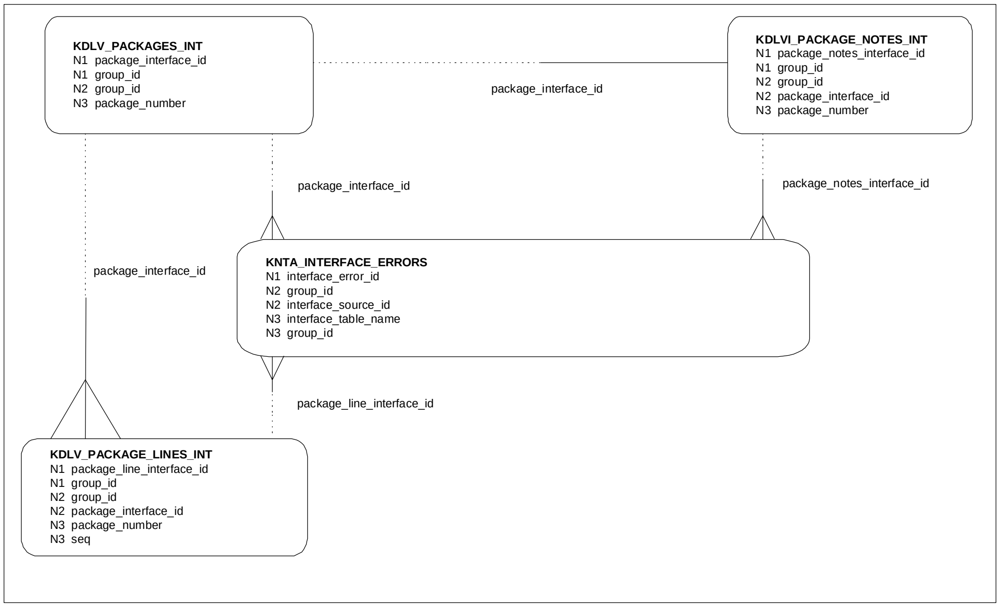


Figure 5-1 Interface and Supporting Tables

Table 5-1. KDLV_PACKAGES_INT

Column	Required for Import?	DataType	Description
PACKAGE_INTERFACE_ID	Y (See Note)	Number	A unique identifier for the record. Enter a value from the sequence KDLV_INTERFACES_S. If left blank, the column will be derived from this sequence. *Note: This column is required if package_lines exist.*
GROUP_ID	Y	Number	Derived from KDLV_INTERFACES_S, this column is used to group together all Package Headers, Lines, and note information to be processed (all records should have the same value).
PROCESS_PHASE	N	Number	Indicates the current stage of the record as it is being processed. Should initially be set to 1.
PROCESS_STATUS	N	Number	Indicates the current disposition of the record (whether the record has been imported or has failed validation). Should initially be set to 1.

Table 5-1. KDLV_PACKAGES_INT

Column	Required for Import?	DataType	Description
CREATED_BY	N	Number	The USER_ID from KNTA_USERS table for the user generating the Package. If left blank, it will be derived from CREATED_BY_USERNAME or will be set to the user currently running the interface.
CREATED_BY_USERNAME	Y	Varchar2(30)	The USERNAME from KNTA_USERS of the user generating the Package. Will only be used if CREATED_BY is left blank.
CREATION_DATE	N	Date	The creation date of the new Package. If left blank, it will default to the current date.
SOURCE_CODE	N	Varchar2(30)	A non-validated column used to identify the source of the record. Used for information purposes only.
PACKAGE_ID	N	Number	The internal identifier for a Package. Unlike the Kintana Create Open interface, this *must not be left blank*. It should be populated from KDLV_PACKAGES_S to make an association between the Package and the Package Lines.
REQUESTED_BY	Y (See Note)	Number	The USER_ID from the KNTA_USERS table for the user requesting the Package. If left blank, it will be derived from REQUESTED_BY_USERNAME or will be set to the user currently running the interface. *Note: You must populate either this column or the REQUESTED_BY_USERNAME column.*
REQUESTED_BY_USERNAME	Y (See Note)	Varchar2(30)	The USERNAME from the KNTA_USERS table of the user requesting the Package. Will only be used if REQUESTED_BY is left blank. *Note: You must populate either this column or the REQUESTED_BY column.*

Table 5-1. KDLV_PACKAGES_INT

Column	Required for Import?	DataType	Description
PACKAGE_NUMBER	N	Varchar2(40)	The user key for the Package. Unlike the Kintana Create Open interface, this *must not be left blank*. It should be populated with the same value as PACKAGE_ID or a unique string value.
ASSIGNED_TO_USER_ID	N	Number	The USER_ID from the KNTA_USERS table for the user who should be assigned the Package. If left blank, it will be derived from ASSIGNED_TO_USERNAME. If both columns are left blank, the Package will not have an initial Assigned To user.
ASSIGNED_TO_USERNAM E	Y	Varchar2(30)	The USERNAME from the KNTA_USERS table that should initially be assigned the Package. It will only be used if ASSIGNED_TO_USER_ID is left blank.
ASSIGNED_TO_GROUP_ID	N	Number	The SECURITY_GROUP_ID from KNTA_SECURITY_GROUPS for the group the Package should initially be assigned to. If it is left blank, it will be derived from ASSIGNED_TO_GROUP_NAME. If both columns are left blank, the Package will not have an initial Assigned To group.
ASSIGNED_TO_GROUP_N AME	Y	Varchar2(30)	The SECURITY_GROUP_ID from the KNTA_SECURITY_GROUPS table for the group that should initially be assigned the Package. This is only used if ASSIGNED_TO_GROUP_ID is left blank.
DESCRIPTION	N	Varchar2(24 0)	A user visible description of the Package. For information purposes only.
PACKAGE_TYPE_CODE	N	Varchar2(30)	A non-required user-defined categorization of the Package. If entered, it must be a valid LOOKUP_CODE from the KNTA_LOOKUPS table where LOOKUP_TYPE = ‘PACKAGE_TYPE’.
PRIORITY_CODE	N	Varchar2(30)	A non-required user-defined prioritization of the Package. If entered, it must be a valid LOOKUP_CODE from the KNTA_LOOKUPS table where LOOKUP_TYPE = ‘PACKAGE_PRIORITY’.

Table 5-1. KDLV_PACKAGES_INT

Column	Required for Import?	DataType	Description
STATUS_CODE	N	Varchar2(30)	An internal indicator for the Package status. Should be left blank and will be defaulted to 'NEW'.
PROJECT_CODE	N	Varchar2(30)	A non-required field indicating the user-defined project the Package is tied to. If entered, it must be a valid LOOKUP_CODE from the KNTA_LOOKUPS table where LOOKUP_TYPE = 'PROJECT'.
WORKFLOW_ID	Y (See Note)	Number	The WORKFLOW_ID from the KWFL_WORKFLOWS table that specifies which Kintana Deliver Workflow the Package should follow. If left blank, this will be derived from WORFKLOW_NAME. Either WORKFLOW_ID or WORKFLOW_NAME must be entered. *Note: You must populate either this column or the WORKFLOW_NAME column.*
WORKFLOW_NAME	Y (See Note)	Varchar2(80)	The WORKFLOW_NAME from the KWFL_WORKFLOWS table that specifies the Kintana Deliver Workflow that the Package should follow. Will only be used if WORKFLOW_ID is left blank. Either WORKFLOW_ID or WORKFLOW_NAME must be entered. *Note: You must populate either this column or the WORKFLOW_ID column.*
PRIORITY_SEQ	N	Number	A sequence number used to determine the relative priority of Packages that are scheduled to process at the same time. If left blank, it will default to 10.
RELEASE_FLAG	N (See Description for impact)	Varchar2(1)	If set to 'Y', the Interface program will Release the Package once it imports in into the standard Kintana Deliver tables. If set to 'N' or left blank, the Package will not be released.
USER_DATA_SET_CONTEXT_ID	N	Number	An internal column used when User-Defined Fields (User Data) have been specified. Can be left blank or set to 1202.

Table 5-1. KDLV_PACKAGES_INT

Column	Required for Import?	DataType	Description
USER_DATA1..20 VISIBLE_USER_DATA1..20	N	Varchar2(200)	These columns hold the User-Defined Fields attached to Package headers. Values should be entered only if Package User Data has been defined. These columns will not be validated or defaulted, so if entering values, enter both the user visible values and the internal value or id.
SOURCE_PACKAGE_ID	N	Number	Used with Kintana's Release Management functionality. Identifier of the original Package for this Distribution Package.
DISTPKG_STATUS_MEANING	N	Varchar2(80)	Used with Kintana's Release Management functionality. Displayed status of this Distribution Package.
RUN_GROUP	N	Number	Used with Kintana's Release Management functionality. Run Group number of a specific Distribution Package.
DISTRIBUTION_ID	N	Number	Used with Kintana's Release Management functionality. Identifier of the Distribution that the Package belongs to.
ENABLED_FLAG	N	Varchar2(1)	Used with Kintana's Release Management functionality. Denote whether this Distribution Package is enabled or disabled.
DIST_STEP_TRANSACTION_ID	N	Number	Used with Kintana's Release Management functionality. Path of the Distribution Workflow step that was executed in the transaction with DIST_STEP_TRANSACTION_ID.

Table 5-2. KDLV_PACKAGE_LINES_INT

Column	Required for Import?	DataType	Description
PACKAGE_LINE_INTERFACE_ID	N	Number	A unique identifier for the record. Enter a value from the sequence KDLV_INTERFACES_S. If left blank, the column will be derived from this sequence.

Table 5-2. KDLV_PACKAGE_LINES_INT

Column	Required for Import?	DataType	Description
GROUP_ID	Y	Number	Also derived from KDLV_INTERFACES_S, this column is used to group together all Package Header, Line, and note information to be processed (all records should have the same value).
PACKAGE_INTERFACE_ID	Y	Number	For Lines tied to a new Package, this column can be used to tie the Line record to the parent record in KDLV_PACKAGES_INT. The PACKAGE_NUMBER and PACKAGE_ID columns can be used for this tie as well. For new Lines to be imported into existing Packages, this column should be left blank.
PACKAGE_ID	N	Number	For Lines tied to a new Package, this column can be used to tie the Line record to the parent record in KDLV_PACKAGES_INT. The PACKAGE_INTERFACE_ID and PACKAGE_NUMBER columns can be used for this tie as well. For new Lines to be imported into existing Packages, this column should refer to the PACKAGE_ID of the existing Package.
PACKAGE_NUMBER	N	Varchar2(40)	For Lines tied to a new Package, this column can be used to tie the Line record to the parent record in KDLV_PACKAGES_INT. The PACKAGE_INTERFACE_ID and PACKAGE_ID columns can be used for this tie as well. For new Lines to be imported into existing Packages, this column should refer to the PACKAGE_NUMBER of the existing Package.
PROCESS_PHASE	N	Number	Indicates the current stage of the record as it is being processed. Should be initially set to 1.
PROCESS_STATUS	N	Number	Indicates the current disposition of the record (whether the record has been imported or has failed validation). Should be initially set to 1.

Table 5-2. KDLV_PACKAGE_LINES_INT

Column	Required for Import?	DataType	Description
CREATED_BY	Y	Number	The USER_ID from the KNTA_USERS table for the user generating the Package. If left blank, it will be derived from CREATED_BY_USERNAME or will be set to the user currently running the interface.
CREATED_BY_USERNAME	Y	Varchar2(30)	The USERNAME from the KNTA_USERS table of the user generating the Package. Will only be used if CREATED_BY is left blank.
CREATION_DATE	N	Date	The creation date of the new Package. If left blank, it will default to the current date.
SOURCE_CODE	N	Varchar2(30)	A non-validated column used to identify the source of the record. Used for information purposes only.
SEQ	Y	Number	A user visible sequence number for the Package Line. Must be a positive integer and not conflict with other Package Lines in the interface table or existing Lines if importing Lines to an existing Packages.
PACKAGE_LINE_ID	N	Number	The internal identifier for a Package Line. Normally, this should be left blank and will be defaulted from the KDLV_PACKAGE_LINES_S sequence. If a value is entered, it should be derived from the KDLV_PACKAGE_LINES_S sequence.
OBJECT_TYPE_ID	N	Number	The OBJECT_TYPE_ID from the KDLV_OBJECT_TYPES table for the Object Type attached to the Package Line. If left blank, it will be derived from OBJECT_TYPE_NAME. Either OBJECT_TYPE_ID or OBJECT_TYPE_NAME must be entered.
OBJECT_TYPE_NAME	Y	Varchar2(80)	The OBJECT_TYPE_NAME from the KDLV_OBJECT_TYPES table for the Object Type attached to the Package Line. It will only be used if OBJECT_TYPE_ID is left blank. Either OBJECT_TYPE_ID or OBJECT_TYPE_NAME must be entered.
OBJECT_NAME	Y	Varchar2(300)	A non-validated, required value indicating the name of the object to be processed.

Table 5-2. KDLV_PACKAGE_LINES_INT

Column	Required for Import?	DataType	Description
APP_CODE	N	Varchar2(30)	The APP_CODE from the KDLV_ENVIRONMENT_APPS table indicating the application category for the Package Line. The APP_CODE must exist for all environments in the Workflow attached to the Package. APP_CODE can be used as information and can sometimes determine migration behavior. This field can also be left blank.
PARAMETER_SET_CONTEXT_ID	N	Number	An internal column derived from the OBJECT_TYPE_ID. This should be left blank.
PARAMETER1..30 VISIBLE_PARAMETER1..30	N	Varchar2 (200)	These columns hold the Parameters attached to the Package Line. The specific parameters are based on the Object Type attached to the Line. These columns will not be validated or defaulted, so if entering values, enter both the user visible values and the internal value or id.
RELEASE_FLAG	N	Varchar2(1)	An internal column used by the Interface program. It should be left blank.
USER_DATA_SET_CONTEXT_ID	N	Number	An internal column used when user-defined fields (User Data) has been specified. It can be left blank or set to 1203.
USER_DATA1..20 VISIBLE_USER_DATA1..20	N	Varchar2(200)	These columns hold the user-defined fields attached to Package headers. Values should be entered only if Package User Data has been defined. These columns will not be validated or defaulted, so if entering values, enter both the user visible values and the internal value or id.
OBJECT_REVISION	N	Varchar2(300)	The denormalized object_revision of the object entered on this Line.
SOURCE_PACKAGE_LINE_ID	N	Number	Used with Kintana's Release Management functionality. Identifier of the original Package Line for this Distribution Package Line.
ENABLED_FLAG	N	Varchar2(1)	Used with Kintana's Release Management functionality. Denotes whether this Distribution Package Line is enabled or disabled.

Table 5-3. KDLV_PACKAGE_NOTES_INT

Column	Required for Import?	DataType	Description
PACKAGE_NOTE_INTERFACE_ID	N	Number	A unique identifier for the record. Enter a value from the sequence KDLV_INTERFACES_S. If it is left blank, the column will be derived from this sequence.
GROUP_ID	Y	Number	Also derived from KDLV_INTERFACES_S, this column is used to group together all Package Header, Line, and note information to be processed. All records should have the same value.
PACKAGE_INTERFACE_ID	Y	Number	This column can be used to tie the Note record to the parent record in KDLV_PACKAGES_INT. The PACKAGE_NUMBER and PACKAGE_ID columns can be used for this tie as well.
PACKAGE_ID	N	Number	This column can be used to tie the Note record to the parent record in KDLV_PACKAGES_INT. The PACKAGE_INTERFACE_ID and PACKAGE_NUMBER columns can be used for this tie as well.
PACKAGE_NUMBER	N	Varchar2(40)	This column can be used to tie the Note record to the parent record in KDLV_PACKAGES_INT. The PACKAGE_INTERFACE_ID and PACKAGE_ID columns can be used for this tie as well.
PROCESS_PHASE	N	Number	Indicates the current stage of the record as it is being processed. Should be initially set to 1.
PROCESS_STATUS	N	Number	Indicates the current disposition of the record (whether the record has been imported or has failed validation). Should be initially set to 1.
CREATED_BY	Y	Number	The USER_ID from the KNTA_USERS table for the user generating the Package. If left blank, it will be derived from CREATED_BY_USERNAME or will be set to the user currently running the interface.

Table 5-3. KDLV_PACKAGE_NOTES_INT

Column	Required for Import?	DataType	Description
CREATED_BY_USERNAME	N	Varchar2(30)	The USERNAME from the KNTA_USERS table of the user generating the Package. It will only be used if CREATED_BY is left blank.
CREATION_DATE	N	Date	The creation date of the new Package. If it is left blank, it will default to the current date.
SOURCE_CODE	N	Varchar2(30)	A non-validated column used to identify the source of the record. Used for information purposes only.
NOTE	Y	Long	The full text of the Note.
REPLACE_NOTE_FLAG	N	Varchar2(1)	This column is not used by the current Interface program.

Running the Package Open Interface

The following sections discuss the Package Open Interface in more detail:

- *Loading Data into the Package Interface Tables*
- *Using the Run Kintana Package Interface Program*

Loading Data into the Package Interface Tables

The initial step in importing Packages and Package Lines into Kintana Deliver is populating the Open Interface tables. This can be done through any means supported by the Oracle database. Standard mechanisms include the use of SQL*Loader to load in the contents of an ASCII file or direct Oracle database to database communication through database links.

This load process can also involve the manipulation of the table records once they have been brought into the interface tables. This can include the setting of id columns such as GROUP_ID and TRANSACTION_ID and the defaulting of specific data not available in the source of the Package (the third-party application, the ASCII file, etc.).

Required Data for Package Import

Certain columns in the KDLV_PACKAGES_INT, KDLV_PACKAGE_LINES_INT, and KDLV_PACKAGE_NOTES_INT tables must be populated for a Package import. *Table 5-4* defines the columns in the tables that you need to populate for the import. For a complete table description, refer to *Table 5-1 on page 101*, *Table 5-2 on page 105*, and *Table 5-3 on page 109*.

Table 5-4. Columns Required for Package Import

Column	Required for Import?	DataType	Description
KDLV_PACKAGES_INT Table			
PACKAGE_INTERFACE_ID	Y (See Note)	Number	A unique identifier for the record. Enter a value from the sequence KDLV_INTERFACES_S. If left blank, the column will be derived from this sequence. *Note: This column is required if package_lines exist.*
GROUP_ID	Y	Number	Derived from KDLV_INTERFACES_S, this column is used to group together all Package Headers, Lines, and note information to be processed (all records should have the same value).
CREATED_BY_USERNAME	Y	Varchar2(30)	The USERNAME from KNTA_USERS of the user generating the Package. Will only be used if CREATED_BY is left blank.
REQUESTED_BY	Y (OR NEXT)	Number	The USER_ID from the KNTA_USERS table for the user requesting the Package. If left blank, it will be derived from REQUESTED_BY_USERNAME or will be set to the user currently running the interface.
REQUESTED_BY_USERNAME	Y (OR PREVIOUS)	Varchar2(30)	The USERNAME from the KNTA_USERS table of the user requesting the Package. Will only be used if REQUESTED_BY is left blank.

Table 5-4. Columns Required for Package Import

Column	Required for Import?	DataType	Description
ASSIGNED_TO_USER NAME	Y	Varchar2(30)	The USERNAME from the KNTA_USERS table that should initially be assigned the Package. It will only be used if ASSIGNED_TO_USER_ID is left blank.
ASSIGNED_TO_GROUP_NAME	Y	Varchar2(30)	The SECURITY_GROUP_ID from the KNTA_SECURITY_GROUPS table for the group that should initially be assigned the Package. This is only used if ASSIGNED_TO_GROUP_ID is left blank.
WORKFLOW_ID	Y (WORKFLOW_NAME)	Number	The WORKFLOW_ID from the KWFL_WORKFLOWS table that specifies which Kintana Deliver Workflow the Package should follow. If left blank, this will be derived from WORFKLOW_NAME. Either WORKFLOW_ID or WORKFLOW_NAME must be entered.
WORKFLOW_NAME	Y (OR WORKFLOW_ID)	Varchar2(80)	The WORKFLOW_NAME from the KWFL_WORKFLOWS table that specifies the Kintana Deliver Workflow that the Package should follow. Will only be used if WORKFLOW_ID is left blank. Either WORKFLOW_ID or WORKFLOW_NAME must be entered.
RELEASE_FLAG	N, BUT HAS IMPACTS	Varchar2(1)	If set to 'Y', the Interface program will Release the Package once it imports in into the standard Kintana Deliver tables. If set to 'N' or left blank, the Package will not be released.
KDLV_PACKAGE_LINES_INT Table			

Table 5-4. Columns Required for Package Import

Column	Required for Import?	DataType	Description
GROUP_ID	Y	Number	Also derived from KDLV_INTERFACES_S, this column is used to group together all Package Header, Line, and note information to be processed (all records should have the same value).
PACKAGE_INTERFACE_ID	Y	Number	For Lines tied to a new Package, this column can be used to tie the Line record to the parent record in KDLV_PACKAGES_INT. The PACKAGE_NUMBER and PACKAGE_ID columns can be used for this tie as well. For new Lines to be imported into existing Packages, this column should be left blank.
CREATED_BY	Y	Number	The USER_ID from the KNTA_USERS table for the user generating the Package. If left blank, it will be derived from CREATED_BY_USERNAME or will be set to the user currently running the interface.
CREATED_BY_USERNAME	Y	Varchar2(30)	The USERNAME from the KNTA_USERS table of the user generating the Package. Will only be used if CREATED_BY is left blank.
SEQ	Y	Number	A user visible sequence number for the Package Line. Must be a positive integer and not conflict with other Package Lines in the interface table or existing Lines if importing Lines to an existing Packages.
OBJECT_TYPE_NAME	Y	Varchar2(80)	The OBJECT_TYPE_NAME from the KDLV_OBJECT_TYPES table for the Object Type attached to the Package Line. It will only be used if OBJECT_TYPE_ID is left blank. Either OBJECT_TYPE_ID or OBJECT_TYPE_NAME must be entered.

Table 5-4. Columns Required for Package Import

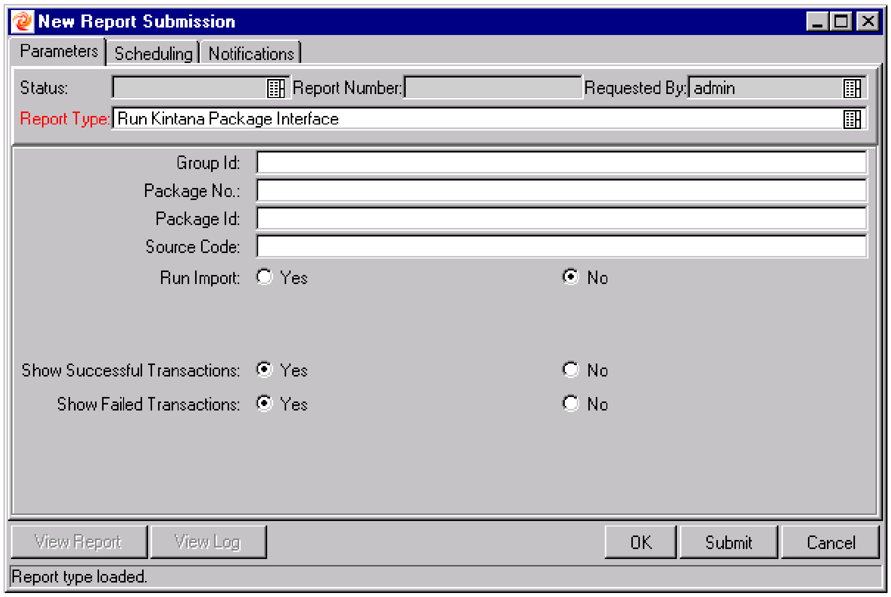
Column	Required for Import?	DataType	Description
OBJECT_NAME	Y	Varchar2(300)	A non-validated, required value indicating the name of the object to be processed.
PARAMETER1..30 VISIBLE_PARAMETER 1..30	N, BUT IF YOU HAVE DATA USE IT	Varchar2 (200)	These columns hold the Parameters attached to the Package Line. The specific parameters are based on the Object Type attached to the Line. These columns will not be validated or defaulted, so if entering values, enter both the user visible values and the internal value or id.
KDLV_PACKAGE_NOTES_INT Table			
GROUP_ID	Y	Number	Also derived from KDLV_INTERFACES_S, this column is used to group together all Package Header, Line, and note information to be processed. All records should have the same value.
PACKAGE_INTERFACE _ID	Y	Number	This column can be used to tie the Note record to the parent record in KDLV_PACKAGES_INT. The PACKAGE_NUMBER and PACKAGE_ID columns can be used for this tie as well.
CREATED_BY	Y	Number	The USER_ID from the KNTA_USERS table for the user generating the Package. If left blank, it will be derived from CREATED_BY_USERNAME or will be set to the user currently running the interface.
NOTE	Y	Long	The full text of the Note.

Using the Run Kintana Package Interface Program

To process the data in the interface tables, use the ‘Run Kintana Package Interface’ program. This program is defined as a standard Kintana Deliver Report Type and is launched through the Kintana Deliver Reports window. For more information on using Report Types and launching Reports, see the *"Kintana Reports"* document.

To generate an executable version of the program using the Report Types workbench:

1. Click the **Configuration** shortcut group and click the **Report Types** icon. The Report Types workbench opens.
2. Search for the ‘Run Kintana Package Interface’ program.
3. Click **Copy** to copy the reference Report Type.
4. Rename the copy ‘Run Kintana Package Interface’.
5. Click **Yes** to the ‘Would you like to edit’ prompt to open the Report Type window. Select **Yes** next to Enabled to make this Report Type available in Kintana Deliver.



New Report Submission

Status:
Report Number:
Requested By: admin
Report Type: Run Kintana Package Interface

Group Id:
Package No.:
Package Id:
Source Code:
Run Import: ○ Yes ● No

Show Successful Transactions: ● Yes ○ No
Show Failed Transactions: ● Yes ○ No

Report type loaded.

Figure 5-2 The Run Kintana Package Interface Report

When executed, the ‘Run Kintana Package Interface’ program:

- Queries the interface tables for active records matching the given selection criteria.
- Defaults any information that has defaulting rules in Kintana Deliver but has not been specified in the interface table records.
- Validates Package header data and Package Line Object Type information for referential and data integrity. This validation is based on the logic used when entering or updating data through the graphical user interface. Information in user data fields and in line parameters is not validated.
- Imports Packages and Package Lines passing validation into the standard Package tables. Partial imports are not allowed. Packages with one or more failed Lines will not be imported.
- Can be used to submit new Packages.
- Reports on the results of the execution, listing both the Packages and Package Lines that passed validation and were imported, as well as those that failed validation and the specific validation errors they encountered.

Run Kintana Package Interface Program Parameters

The ‘Run Kintana Package Interface’ program has several parameters for controlling the behavior of the program execution.

Table 5-5. Run Kintana Package Interface Parameters

Parameter	Field Type	Description
Group Id	Text Field	Runs the interface for a specific Group ID. The interface program will only look for records with this value in the GROUP_ID column. This is useful when importing a batch of Packages. If this parameter is left blank, the program will only pick up records with a NULL GROUP_ID value.
Package No.	Text Field	Runs the interface for a specific Package Number. The interface program will only look for records with this value in the PACKAGE_NUMBER column. This is useful when importing a specific Package.
Package Id	Text Field	Runs the interface for a specific Package ID. The interface program will only look for records with this value in the PACKAGE_ID column.This is useful when importing a specific Package.

Table 5-5. Run Kintana Package Interface Parameters

Parameter	Field Type	Description
Source Code	Text Field	Runs the interface for records from a specific source. The interface program will only look for records with this value in the SOURCE_CODE column.This is useful for running the open interface at different frequencies depending on the driver of the Package creation (for example, to have Packages initiated from the Project Management system imported once a day, while having Packages generated to solve problems detected by the performance monitor imported within an hour).
Run Import	Radio Button	If set to “Yes”, the program will process the records in the interface table and try to import them. If set to “No”, the program will simply report on the records in the interface table. This option is useful when auditing prior executions of the Open Interface.
Show Successful Transactions	Radio Button	Shows Packages and Package Lines that were successfully imported.
Show Failed Transactions	Radio Button	Shows Packages and Package Lines that were not successfully imported.

Post-Import Activities

Following the Request import, you can view the results of the import. From the Report screen, click **View Report** to open the report. This report will identify any errors within the import. After reviewing the import results, you can proceed with the following activities:

Correcting Failures

When a Package is successfully imported, information stored in the interface tables is not deleted, and no additional action is required. The Package can be viewed and processed using the Kintana Deliver user interface.

For Packages and Package Lines that fail to import, corrective actions are required. The first step is examining the audit report from the Open Interface program to identify the failed records and the specific reasons for each failure.

Depending on the reasons, it may be necessary to correct the problem through a variety of means. Some failure might occur due to a mapping problem between the source data and existing Kintana Deliver data.

Example

The source data might use a Project name that does not exist in Kintana Deliver. Corrective measures for this specific problem would include adding the specific Project in Kintana Deliver, or mapping the source Project to a Project name that already exists in Kintana Deliver.

Other failures might be due to missing required information that cannot be defaulted.

Example

Package Lines require an Object Type. If the Object Type columns were left blank for records in the Package Lines interface table, the records will fail validation. To correct this, the custom program or procedure that inserts records into the interface table needs to be modified to include this required data.

Failures could occur due to other configuration and mapping problems in either the source or in Kintana Deliver, or could be the result of errors in the custom loading program.

Note

During initial implementation of the Open Interface, the mapping between the non-Kintana source and Kintana Deliver should be thoroughly reviewed and the load program(s) thoroughly tested. Additionally, it is good practice to monitor executions of the Open Interface and periodically monitor that the desired data is being imported into Kintana Deliver.

Chapter 6 Workflow Transaction Open Interface

In addition to a Web-based user interface for performing executions and approving Workflow steps, the Kintana Product Suite includes an open interface for performing these same Workflow transactions. Workflow transactions are all of the actions that can be performed at a Workflow Step for a Package Line or Request, such as a file migration or a design approval. The open interface supports the following Workflow transactions:

- Submit: A user can submit a Package (and all of its Lines) or a Request.
- Decision: A user can make a choice at a Decision Workflow Step. For example, a user could decide to approve a Workflow Step (that has choices Approved and Not Approved).
- Delegation: A user can delegate the choice at a Decision step to another user.
- Execution: A user can perform an execution at a Workflow Step. This execution could be Object Type or Request Type command execution, a SQL statement, a PL/SQL function, a token evaluation, or a Workflow Step command.
- Schedule Execution: A user can schedule an execution to be performed at a later date or time.
- Bypass Execution: A user can bypass an execution and manually provide the result instead. For example, if a file did not need to be migrated to an environment, a user could bypass the migration and supply the result ‘Succeeded’ instead.
- Override Result: A user can override the result at any non-Eligible step that is still active. For example, if a migration failed, and there is no transition defined from the step on the ‘Failure’ result, a user could override the ‘Failure’ with another result.

- Cancel: A user can cancel a Package Line or a Request.
- Force Transition: A user can force a transition from one Workflow Step to another, even if there is no standard transition between the two steps defined in the Workflow. Note that this feature is not supported through the Kintana user interface.

The Workflow Transactions Open Interface is a set of tables within the Kintana database instance. Data added to these tables is validated, and Workflow Steps within Package Lines and Requests are acted upon based upon the information.

The primary purpose of the Workflow Open Interface is to allow integration with non-Kintana products. Relevant information from these products can be used to perform Workflow transactions for Package Lines and Requests. The Open Interface can also be used as a mechanism to convert data from a legacy system into the Kintana product suite during initial implementation.

This chapter includes the following information related to the Kintana Package Open Interface:

- *Data Model*
- *Running the Workflow Open Interface*

Note

Currently, the Workflow interface does not support the creation of Packages from Requests (create_package and create_package_and_wait). Also, it does not support the Ready for Release command or the creation of Requests from Requests.

Note

The Workflow interface does support the use of Subworkflows. When dealing with Subworkflows, it is important to remember that:

- The Workflow Step sequence should be the same as the one visible on the screen. e.g. 2.4.5.
- ‘Force transition’ can only be performed to the same level.
- When needed, it is necessary to pass in the Workflow step sequence and not the Workflow step id or the Workflow step name. The same applies to TO_WORKFLOW_STEP_SEQUENCE.

Data Model

The interface table used by the Workflow Transactions Open Interface closely relates to the standard table used to store Workflow Transactions:

- **KWFL_TRANSACTIONS_INT** - This interface stores the specific transaction that is to be performed at a Workflow Step for a Package Line or a Request. This information includes the Transaction Type, Package Number, Request Number and the Workflow Step.

Figure 6-1 displays the relationship between the KWFL_TRANSACTIONS_INT and KNTA_INTERFACE_ERRORS table.

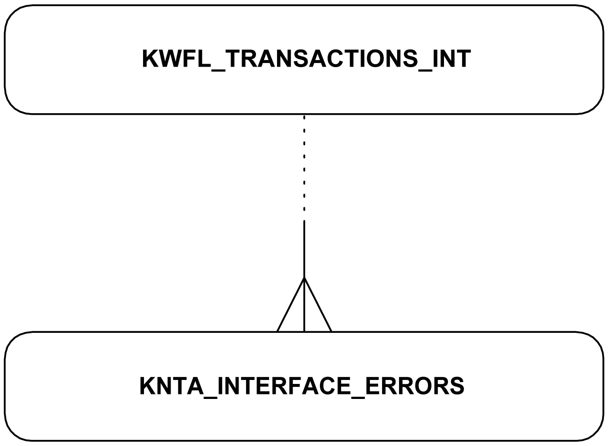


Figure 6-1 Interface and Supporting Tables

Note

Each table includes a “Required for Import” column. This column, and other related requirements, are discussed in *“Loading Data into the Workflow Interface Tables”* on page 127.

The KNTA_INTERFACE_ERRORS table is displayed for reference only and should *not* be altered by the user.

Table 6-1. KWFL_TRANSACTIONS_INT

Column	Required for Import?	DataType	Description
TRANSACTION_ID	N	Number	Required column. A unique identifier for the record. A value for this column is derived from the sequence KNTA_INTERFACE_TXNS_S.
CREATION_DATE	N	Date	The date that the transaction is performed.
CREATED_USERNAME	Y (See Note)	Varchar2(30)	Required column. The USERNAME from the KNTA_USERS table for the user that is performing the transaction. This will be used only if the CREATED_BY is null. *Note: You must populate either this column or the CREATED_BY column.*
CREATED_BY	Y (See Note)	Number	The USER_ID from the KNTA_USERS table for the user that is performing the transaction. If null, the column is derived from CREATED_USERNAME. *Note: You must populate either this column or the CREATED_USERNAME column.*
LAST_UPDATE_DATE	N	Date	The date that the transaction is performed.
LAST_UPDATED_USERNAME	Y (See Note)	Varchar2(30)	The USERNAME from the KNTA_USERS table for the user that is performing the transaction. This will be used only if the LAST_UPDATED_BY is null. *Note: You must populate either this or the LAST_UPDATED_BY column.*
LAST_UPDATED_BY	Y (See Note)	Number	The USER_ID from the KNTA_USERS table for the user that is performing the transaction. If null, the column is derived from LAST_UPDATED_USERNAME. *Note: You must populate either this or the LAST_UPDATED_USERNAME column.*
EVENT	N	Varchar2(40)	Required column. The type of Workflow transaction.

Table 6-1. KWFL_TRANSACTIONS_INT

Column	Required for Import?	DataType	Description
GROUP_ID	Y	Number	A unique identifier for the group of records that are being processed. A value for this column is derived from the sequence KNTA_INTERFACE_GROUPS_S.
WORKFLOW_ENGINE_BATCH_ID	N	Number	Derived from other information in the record. This value should always be inserted as null.
PROCESS_PHASE	N	Number	Required column. Indicates the current stage of the record as it is being processed. A record goes through the following stages as it is processed. The value should initially be set to 1. • 1 - Pending • 2 - Derivation • 3 - Validation • 6 - Final Validation • 7 - Batch Processing • 5 - Completed
PROCESS_STATUS	N	Number	Required column. Indicates the current disposition of the record. The value should initially be set to 1. • 1 - Pending • 2 - In Process • 3 - Error • 7 - Completed
SOURCE_TYPE_CODE	N	Varchar2(30)	This column should either be null or have the value 'INTERFACE_WF'.
SOURCE	N	Varchar2 (100)	This is an optional, non-validated column that can be used to indicate the exact source of the Workflow Transaction (the name of the Third Party Application, the text string 'Conversion', etc.).
INSTANCE_SOURCE_TYPE_CODE	Y	Varchar2(30)	Indicates whether the transaction is for a Package Line (‘CR’) or a Request (‘IR').

Table 6-1. KWFL_TRANSACTIONS_INT

Column	Required for Import?	DataType	Description
INSTANCE_SOURCE_SET_NUMBER	N	Varchar2(40)	The Package Number (PACKAGE_NUMBER from KDLV_PACKAGES) or Request Number (REQUEST_NUMBER from KCRT_REQUESTS). This will be used only if the INSTANCE_SOURCE_SET_ID is null.
INSTANCE_SOURCE_SET_ID	N	Number	The Package ID (PACKAGE_ID from KDLV_PACKAGES) or Request ID (REQUEST_ID from KCRT_REQUESTS) for the Workflow transaction. If null, the column is derived from INSTANCE_SOURCE_SET_NUMBER.
INSTANCE_SOURCE_LINE_SEQ	N	Number	The Package Line Sequence Number. This will be used only if the INSTANCE_SOURCE_ID is null.
INSTANCE_SOURCE_ID	N	Number	The Package Line ID (PACKAGE_LINE_ID from KDLV_PACKAGE_LINES) or Request ID (REQUEST_ID from KCRT_REQUESTS). If null, the column is derived from INSTANCE_SOURE_LINE_SEQ (for Package Lines) or INSTANCE_SOURCE_SET_NUMBER (for Requests).
WORKFLOW_STEP_NAME	N	Varchar2(80)	The name of the Workflow Step (STEP_NAME from KWFL_WORKFLOW_STEPS). This will be used only if the WORKFLOW_STEP_ID is null.
WORKFLOW_STEP_SEQ	N	Varchar2(30)	The sequence number of the Workflow Step. This will be used only if the WORKFLOW_STEP_ID is null. In the case of Subworkflows, the sequence numbers of the Workflow Steps could be in the form of 2.4.5, etc.
RESULT_VALUE	N	Varchar2 (200)	The result of the step. This is normally not displayed to the user, so it may be an ID or internal code.
VISIBLE_RESULT_VALUE	N	Varchar2 (200)	The displayed result of the step. This is the result value that a user normally sees.

Table 6-1. KWFL_TRANSACTIONS_INT

Column	Required for Import?	DataType	Description
USER_COMMENTS	N	Varchar2 (200)	Comments for the transaction. Any comments are appended to the notes for the Package or Request.
DELEGATED_TO_USERNAME	N	Varchar2(30)	The USERNAME from the KNTA_USERS table for the user that the decision is being delegated to. This will be used only if the DELEGATED_TO_USER_ID is null.
DELEGATED_TO_USER_ID	N	Number	The USER_ID from the KNTA_USERS table for the user that the decision is being delegated to. If null, the column is derived from DELEGATED_TO_USERNAME.
SCHEDULE_DATE	N	Date	For scheduled executions, the date when the execution is to be performed.
WORKFLOW_ID	N	Number	Derived from other information in the record. This value should always be inserted as null.
WORKFLOW_INSTANCE_ID	N	Number	Derived from other information in the record. This value should always be inserted as null.
WORKFLOW_STEP_ID	N	Number	The Workflow Step ID (WORKFLOW_STEP_ID from KWFL_WORKFLOW_STEPS). If null, the column is derived from WORKFLOW_STEP_NAME or WORKFLOW_STEP_SEQ.
WORKFLOW_INSTANCE_STEP_ID	N	Number	Derived from other information in the record. This value should always be inserted as null.
CURRENT_STEP_TRANSACTION_ID	N	Number	Derived from other information in the record. This value should always be inserted as null.
APPROVALS_REQUIRED_CODE	N	Number	Derived from other information in the record. This value should always be inserted as null.
EVENT_GROUP_ID	N	Number	Derived from other information in the record. This value should always be inserted as null.
CMD_EXECUTION_SCHD_TASK_ID	N	Number	Derived from other information in the record. This value should always be inserted as null.
TO_WORKFLOW_STEP_SEQ	N	Varchar2(30)	The sequence number of the Workflow Step for the step that the Package Line, Request, or Project should transition to. This will be used only if the TO_WORKFLOW_STEP_ID is null.

Table 6-1. KWFL_TRANSACTIONS_INT

Column	Required for Import?	DataType	Description
TO_WORKFLOW_STEP_NAME	N	Varchar2(80)	The name of the Workflow Step (STEP_NAME from KWFL_WORKFLOW_STEPS) for the step that the Package Line, Request, or Project should transition to. This will be used only if the TO_WORKFLOW_STEP_ID is null.
TO_WORKFLOW_STEP_ID	N	Number	The Workflow Step ID (WORKFLOW_STEP_ID from KWFL_WORKFLOW_STEPS) for the step that the Package Line or Request should transition to. If null, the column is derived from TO_WORKFLOW_STEP_NAME or TO_WORKFLOW_STEP_SEQ.

The following columns are used for internal processing and are always derived from other information in the record. These columns should always be inserted as null.

- WORKFLOW_ID
- WORKFLOW_INSTANCE_ID
- WORKFLOW_INSTANCE_STEP_ID
- CURRENT_STEP_TRANSACTION_ID
- APPROVALS_REQUIRED_CODE
- WORKFLOW_ENGINE_BATCH_ID
- EVENT_GROUP_ID
- CMD_EXECUTION_SCHD_TASK_ID

Running the Workflow Open Interface

The following sections discuss the Workflow Open Interface in more detail:

- *Loading Data into the Workflow Interface Tables*
- *Using the Run Workflow Transaction Interface Program*

Loading Data into the Workflow Interface Tables

The first step in using the Workflow Transactions Open Interface is placing information into the interface table. Instead of directly inserting records into the table, a PL/SQL procedure has been provided to hide some of the overhead in generating records in the table. For example, the PL/SQL procedure automatically initializes the Process Phase and Process Status columns.

Required Data for Workflow Transactions

Certain columns in the KWFL_TRANSACTIONS_INT tables must be populated for a Workflow Transaction. Additionally, different types of Workflow transactions require different data to first be populated. The following sections discuss any required data as well as other data population instructions:

- *Columns Inserted as Null*
- *Columns Required*
- *Parameters Required Based on Transaction Type*

Columns Inserted as Null

The following columns are used for internal processing and are always derived from other information in the record. These columns should always be inserted as null.

- WORKFLOW_ID
- WORKFLOW_INSTANCE_ID
- WORKFLOW_INSTANCE_STEP_ID
- CURRENT_STEP_TRANSACTION_ID
- APPROVALS_REQUIRED_CODE
- WORKFLOW_ENGINE_BATCH_ID
- EVENT_GROUP_ID
- CMD_EXECUTION_SCHD_TASK_ID

Columns Required

The following table lists the columns that must be populated. Refer to *Table 6-1* for a complete list of the KWKFL_TXN_INT columns.

Table 6-2. KWFL_TRANSACTIONS_INT

Column	Required for Import?	DataType	Description
CREATED_USERNAME	Y (See Note)	Varchar2(30)	Required column. The USERNAME from the KNTA_USERS table for the user that is performing the transaction. This will be used only if the CREATED_BY is null. *Note: You must populate either this column or the CREATED_BY column.*
CREATED_BY	Y (See Note)	Number	The USER_ID from the KNTA_USERS table for the user that is performing the transaction. If null, the column is derived from CREATED_USERNAME. *Note: You must populate either this column or the CREATED_USERNAME column.*
LAST_UPDATED_USERNAME	Y (See Note)	Varchar2(30)	The USERNAME from the KNTA_USERS table for the user that is performing the transaction. This will be used only if the LAST_UPDATED_BY is null. *Note: You must populate either this column or the LAST_UPDATED_BY column.*
LAST_UPDATED_BY	Y (See Note)	Number	The USER_ID from the KNTA_USERS table for the user that is performing the transaction. If null, the column is derived from LAST_UPDATED_USERNAME. *Note: You must populate either this column or the LAST_UPDATED_USERNAME column.*
GROUP_ID	Y	Number	A unique identifier for the group of records that are being processed. A value for this column is derived from the sequence KNTA_INTERFACE_GROUPS_S.
INSTANCE_SOURCE_TYPE_CODE	Y	Varchar2(30)	Indicates whether the transaction is for a Package Line (‘CR’) or a Request (‘IR’).

Parameters Required Based on Transaction Type

The Workflow Transaction Interface can be used for different types of transactions. Different parameters are required or optional depending upon the type of transaction. *Table 6-3* describes all of the parameters for the procedure INSERT_ROW in the Package KWFL_TXN_INT. The list of parameters used for each type of transaction or event is provided in *Table 6-4* through *Table 6-13*:

Table 6-3. KWFL_TXN_INT.INSERT_ROW Parameters and Descriptions

Parameter	Data Type	Description
P_EVENT	Varchar2(40)	The type of Workflow transaction. An event must always be passed to the procedure.
P_GROUP_ID	Number	An identifier for a group of records to be processed. If this is not specified, the Workflow Transaction Interface program will generate a new Group ID.
P_CREATED_USERNAME	Varchar2(80)	The USERNAME from the KNTA_USERS table for the user that is performing the transaction. A Created By Username must always be passed to the procedure.
P_SOURCE	Varchar2(100)	This is an optional, non-validated field that can be used to indicate the exact source of the Workflow Transaction (the name of the Third Party Application, the text string 'Conversion', etc.). The Source is optional.
P_REQUEST_NUMBER	Varchar2(40)	The Request Number for the Request that is being transacted.
P_PACKAGE_NUMBER	Varchar2(40)	The Package Number for the Package that is being transacted.
P_PACKAGE_LINE_SEQ	Number	The sequence number for the Package Line that is being transacted.
P_WORKFLOW_STEP_NAME	Varchar2(80)	The name of the Workflow Step that is being transacted.
P_WORKFLOW_STEP_SEQ	Varchar2(30)	The sequence number of the Workflow Step that is being transacted.

Table 6-3. KWFL_TXN_INT.INSERT_ROW Parameters and Descriptions

Parameter	Data Type	Description
P_VISIBLE_RESULT_VALUE	Varchar2 (200)	The result of the Workflow transaction. This could be a value such as 'Approved' or 'Not Approved'.
P_USER_COMMENTS	Varchar2 (200)	Comments for the transaction. Any comments are appended to the notes for the Package or Request. The User Comments are optional.
P_DELEGATED_TO_USERNAME	Varchar2(30)	The username for the user to whom the Decision step is being delegated.
P_SCHEDULE_DATE	Date	For Execution steps, the date for which the execution has been scheduled to run.
P_TO_WORKFLOW_STEP_NAME	Varchar2(80)	The name of the Workflow Step that is being transitioned to.
P_TO_WORKFLOW_STEP_SEQ	Varchar2(30)	The sequence number of the Workflow Step that is being transitioned to.
O_MESSAGE_TYPE	Number	An output parameter that indicates what type of error occurred. This parameter can have one of the following values, constants for these values are defined in the Package KNTA_Constant: • SUCCESS - No error occurred. • USER_ERR - User error • INTERNAL_ERR - An internal error occurred. • WARNING - A non-fatal warning is returned.
O_MESSAGE_NAME	Varchar2(80)	The internal message name of the error that was returned. This is used mainly for debugging purposes.
O_MESSAGE	Varchar2 (1000)	The error message.

The following tables describe the parameters used for specific events:

- Table 6-4, “Parameters Used For All Events,” on page 131
- Table 6-5, “Parameters for Package or Request Submission,” on page 131
- Table 6-6, “Parameters for Decision Step Results,” on page 132

- Table 6-7, “Parameters for Decision Step Delegation,” on page 132
- Table 6-8, “Parameters for Execution Step,” on page 133
- Table 6-9, “Parameters for Execution Step Schedule,” on page 133
- Table 6-10, “Parameters for Execution Step Bypass,” on page 133
- Table 6-11, “Parameters for Changing Step Result,” on page 134
- Table 6-12, “Parameters for Forced Workflow Step Transition,” on page 134
- Table 6-13, “Parameters for Package Line or Request Cancellation,” on page 135

Table 6-4. Parameters Used For All Events

Parameter	Input/Output	Required?
P_EVENT	Input	Yes
P_GROUP_ID	Input	No
P_CREATED_USERNAME	Input	Yes
P_SOURCE	Input	No
P_REQUEST_NUMBER	Input	No (but either the Request Number or Package Number is required)
P_PACKAGE_NUMBER	Input	No (but either the Package Number or Request Number is required)
P_USER_COMMENTS	Input	No
O_MESSAGE_TYPE	Output	N/A
O_MESSAGE_NAME	Output	N/A
O_MESSAGE	Output	N/A

Table 6-5. Parameters for Package or Request Submission

Parameter	Input/Output	Required?

Table 6-5. Parameters for Package or Request Submission

P_EVENT = 'INSTANCE_SET_CREATE'	Input	Use this event to submit a Package or a Request - no further parameters are necessary

Table 6-6. Parameters for Decision Step Results

Parameter	Input/Output	Required?
P_EVENT = 'APPROVAL_VOTE'	Input	For Decision steps, use this event to provide a result for a decision, such as ‘Approved’ or ‘Not Approved’
P_PACKAGE_LINE_SEQ	Input	Yes (if the transaction is for a Package Line)
P_WORKFLOW_STEP_NAME	Input	No (but either the Step Name or Step Sequence is required)
P_WORKFLOW_STEP_SEQ	Input	No (but either the Step Sequence or Step Name is required)
P_VISIBLE_RESULT_VALUE	Input	Yes

Table 6-7. Parameters for Decision Step Delegation

Parameter	Input/Output	Required?
P_EVENT = 'APPROVAL_DELEGATE'	Input	For Decision steps, use this event to delegate a decision to another user
P_PACKAGE_LINE_SEQ	Input	Yes (if the transaction is for a Package Line) - not required for Projects
P_WORKFLOW_STEP_NAME	Input	No (but either the Step Name or Step Sequence is required)
P_WORKFLOW_STEP_SEQ	Input	No (but either the Step Sequence or Step Name is required) - not required for Projects
P_DELEGATED_TO_USERNAME	Input	Yes

Table 6-8. Parameters for Execution Step

Parameter	Input/Output	Required?
P_EVENT = 'EXECUTION_EXECUTE'	Input	For Execution steps, use this event to perform an execution at a workflow step
P_PACKAGE_LINE_SEQ	Input	Yes (if the transaction is for a Package Line)
P_WORKFLOW_STEP_NAME	Input	No (but either the Step Name or Step Sequence is required)
P_WORKFLOW_STEP_SEQ	Input	No (but either the Step Sequence or Step Name is required) - not required for Projects

Table 6-9. Parameters for Execution Step Schedule

Parameter	Input/Output	Required?
P_EVENT = 'EXECUTION_SCHEDULE'	Input	For Execution steps, use this event to schedule an execution for a future date
P_PACKAGE_LINE_SEQ	Input	Yes (if the transaction is for a Package Line)
P_WORKFLOW_STEP_NAME	Input	No (but either the Step Name or Step Sequence is required)
P_WORKFLOW_STEP_SEQ	Input	No (but either the Step Sequence or Step Name is required) - not required for Projects
P_SCHEDULE_DATE	Input	Yes

Table 6-10. Parameters for Execution Step Bypass

Parameter	Input/Output	Required?
P_EVENT = 'BYPASS_EXECUTION'	Input	For Execution steps, use this event to bypass an eligible execution

Table 6-10. Parameters for Execution Step Bypass

P_PACKAGE_LINE_SEQ	Input	Yes (if the transaction is for a Package Line)
P_WORKFLOW_STEP_NAME	Input	No (but either the Step Name or Step Sequence is required)
P_WORKFLOW_STEP_SEQ	Input	No (but either the Step Sequence or Step Name is required)
P_VISIBLE_RESULT_VALUE	Input	Yes

Table 6-11. Parameters for Changing Step Result

Parameter	Input/Output	Required?
P_EVENT = 'RESULT_OVERRIDE'	Input	For Decision, Execution, and sub-workflow steps, use this event to change the result of an active step that has not transitioned to another step
P_PACKAGE_LINE_SEQ	Input	Yes (if the transaction is for a Package Line)
P_WORKFLOW_STEP_NAME	Input	No (but either the Step Name or Step Sequence is required)
P_WORKFLOW_STEP_SEQ	Input	No (but either the Step Sequence or Step Name is required)
P_VISIBLE_RESULT_VALUE	Input	Yes

Table 6-12. Parameters for Forced Workflow Step Transition

Parameter	Input/Output	Required?
P_EVENT = 'FORCE_TRANSITION'	Input	Use this event to transition from a workflow step to any other step in the workflow, regardless of whether a transition is defined; force transition only works for transitions within the same level of the Workflow (i.e. does not work between a Subworkflow and its parent Workflow)
P_PACKAGE_LINE_SEQ	Input	Yes (if the transaction is for a Package Line)

Table 6-12. Parameters for Forced Workflow Step Transition

P_WORKFLOW_STEP_NAME	Input	No (but either the Step Name or Step Sequence is required)
P_WORKFLOW_STEP_SEQ	Input	No (but either the Step Sequence or Step Name is required)
P_VISIBLE_RESULT_VALUE	Input	Yes (but for this event, the Result Value is not validated against the Workflow step)
P_TO_WORKFLOW_STEP_NAME	Input	No (but either the To Step Name or To Step Sequence is required)
P_TO_WORKFLOW_STEP_SEQ	Input	No (but either the To Step Sequence or To Step Name is required)

Table 6-13. Parameters for Package Line or Request Cancellation

Parameter	Input/Output	Required?
P_EVENT = 'INSTANCE_SET_CANCEL'	Input	Use this event to cancel a Package Line or a Request
P_PACKAGE_LINE_SEQ	Input	Yes (if the transaction is for a Package Line)

The procedure INSERT_ROW needs to be called by another PL/SQL procedure, function, or anonymous block.

Example

The following anonymous PL/SQL block could be used to insert rows into the interface table for transactions for Decisions steps for Requests. Note that some optional parameters are not used.

```
set serveroutput on;
set verify off;

define p_created_username = '&1';
define p_request_number = '&2';
define p_workflow_step_seq = '&3';
define p_visible_result_value = '&4';

declare
         x_message_type          number;
         x_message_name          varchar2(80);
         x_message               varchar2(1000);

begin
        clwf_txn_int.insert_row
          (p_event => 'APPROVAL_VOTE',
           p_group_id => NULL,
           p_created_username => '&p_created_username',
           p_source => NULL,
           p_request_number => '&p_request_number',
           p_package_number => NULL,
           p_package_line_seq => NULL,
           p_workflow_step_name => NULL,
           p_workflow_step_seq => '&p_workflow_step_seq',
           p_visible_result_value => '&p_visible_result_value',
           p_user_comments => NULL,
           p_delegated_to_username => NULL,
           p_schedule_date => NULL,
           p_to_workflow_step_name => NULL,
           p_to_workflow_step_seq => NULL,
           o_message_type => x_message_type,
           o_message_name => x_message_name,
           o_message => x_message);
  if (x_message_type != KNTA_Constant.SUCCESS) then
    dbms_output.put_line(x_message_name);
    dbms_output.put_line(x_message);
    end if;
end;
/
```

If the previous code is located in a file called run_interface.sql, the following command can be used at the operating system to run the code:

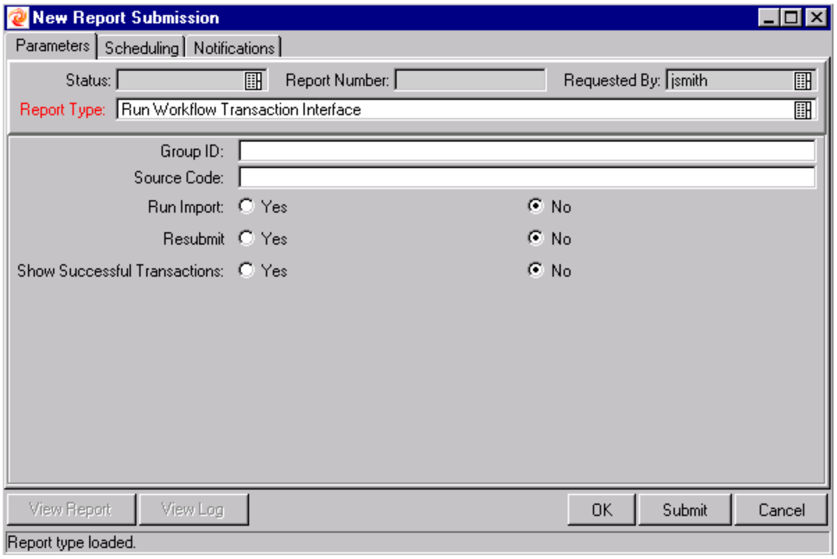
```
sqlplus <username>/<password> @run_interface.sql 'jsmith'
   '12345' '1' 'Approved'
```

Using the Run Workflow Transaction Interface Program

To process the data in the interface tables, use the ‘Run Workflow Transaction Interface’ program. This program is defined as a standard Kintana Report Type and is launched through the Kintana Deliver Reports window or the Kintana Create Reports window.

To generate an executable version of the program using the Report Types workbench:

1. Click the **Configuration** shortcut group and click the **Report Types** icon. The Report Types workbench opens.
2. Search for the ‘Run Workflow Transaction Interface’ program.
3. Click **Copy** to copy the reference Report Type.
4. Rename the copy ‘Run Workflow Transaction Interface.’
5. Click **Yes** to the ’Would you like to edit’ prompt to open the Report Type window. Select **Yes** next to Enabled to make this Report Type available in the Kintana Product Suite.



Status:
Report Number:
Requested By: jsmith
Report Type: Run Workflow Transaction Interface
Group ID:
Source Code:
Run Import: ○ Yes ● No
Resubmit ○ Yes ● No
Show Successful Transactions: ○ Yes ● No
Report type loaded.

Figure 6-2 The Run Workflow Transaction Interface Report

When executed, the Run Workflow Transaction Interface program:

- Queries the interface table for active records matching the given selection criteria.

- Derives all missing information in the interface table. For example, CREATED_BY is derived from CREATED_BY_USERNAME.
- Validates all data in the interface table, according to the same rules used when entering or updating data through the graphical user interface. For example, the CREATED_BY_USERNAME must exist in the Kintana Product Suite and must be enabled.
- Performs the Workflow transactions for all records that pass validation. This generates or updates records in the standard Workflow tables, and this may update information in the standard Package or Request tables.
- Schedules executions. For any Object Type or Request Type commands that need to be executed, scheduled tasks are generated to run.

Note

For these types of executions, the interface table will not correctly reflect the final results of the execution. However, Workflow step commands can be scheduled.

Additionally, the report shows all transactions that were processed by the Workflow Transaction Interface program. If desired, successful transactions can be eliminated from the report, so that only errors are displayed.

Run Workflow Transaction Interface Program Parameters

The Run Workflow Transaction Interface program has several parameters for controlling the behavior of the program execution.

Table 6-14. Run Workflow Transaction Interface Parameters

Parameter	Field Type	Description
Group ID	Text Field	Runs the interface for a specific Group ID. The interface program will only look for records with this value in the GROUP_ID column. This is useful when processing a specific batch of transactions. If this parameter is left blank, the program will only pick up records with a blank GROUP_ID value.

Table 6-14. Run Workflow Transaction Interface Parameters

Parameter	Field Type	Description
Source Code	Text Field	Runs the interface for records from a specific source. The interface program will only look for records with this value in the SOURCE_CODE column. This is useful for running the open interface at different frequencies depending on the driver of the Workflow transactions. For example, transactions initiated from the Project Management system could be imported once a day while transactions from the performance monitor could be processed within an hour.
Run Import	Radio Button	If set to **Yes**, the program will process the records in the interface table and try to import them. If set to **No**, the program will simply report on the records in the interface table. This option is useful when auditing prior executions of the Open Interface.
Resubmit	Radio Button	If set to **Yes**, the program will reset the appropriate values for the records in the interface table, remove any previous errors, and rerun the interface for the records. To resubmit failed transactions, it is necessary to provide a Group ID and optionally a Source Code.
Show Successful Transactions	Radio Button	Shows Workflow Transactions that were successfully processed.

Correcting Failures

When a Workflow Transaction is successfully processed, information stored in the interface table is not deleted, and no additional action is required. Users can view the results of the transaction through the Workflow transaction interface report. Successful transactions are deleted from the interface table daily.

For Workflow Transactions that fail to import, corrective actions are required. The first step is examining the audit report from the Open Interface program to identify the failed records and the specific reasons for each failure.

Depending on the reasons, it may be necessary to correct the problem through a variety of means. Some failure might occur due to a mapping problem between the source data and existing Kintana data.

Example

The source data might use a result value that does not exist in the Kintana product suite. Corrective measures for this specific problem would include adding the specific result to the validation for the Workflow Step or choosing a new result value.

Other failures might be due to missing required information that cannot be defaulted.

Example

If a Workflow Step is not provided for an execution, the records will fail validation. To correct this, the custom program or procedure that inserts records into the interface table needs to be modified to include this required data.

Failures could occur due to other configuration and mapping problems in either the source or in the Kintana Product Suite or could be the result of errors in the custom loading program.

Note

During initial implementation of the Open Interface, the mapping between the non-Kintana source and the Kintana Product Suite should be thoroughly reviewed and the load program(s) thoroughly tested. Additionally, it is good practice to monitor executions of the Open Interface and periodically monitor that the desired transactions are being processed in the Kintana Product Suite.

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