Infor ERP LN 6.1 FP5 Financials

User's Guide for Integration Mapping

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About this document

Objectives

This User Guide describes the concepts on which the mapping of integration transactions is based and to design and set up an integration mapping scheme for your organization.

Intended audience

This document is intended for persons in charge of the design, implementation, and maintenance of the integration mapping scheme, which defines the mapping of integration transactions to ledger accounts and dimensions. Consequently, the intended audience can include key users, implementation consultants, product architects, support specialists, and so on.

Assumed knowledge

To use this guide, you must have some basic knowledge of the functionality of the various logistic Infor ERP LN packages as well as a general understanding of Financials.

Document summary

This document contains the following chapters:

- **Financial Integration**
  Provides an introduction to the mapping of integration transactions to the General Ledger.
- **Integration Mapping Scheme Concepts**
  Provides descriptions, definitions and further explanations of concepts and components that are related to integration mapping.
- **The Financial Integrations Module**
  Describes the function and contents of the Financial Integrations module in Common Data.
- **Integration Mapping Scheme Procedures**
  Provides instructions on how to set up an integration mapping scheme.
- **Integration Mapping Details**
  Provides instructions for alternative ways to map integration transactions.
- **Integration Transactions**
  Describes how you can log, map, and post the integration transactions.
- **Multicompany Aspects**
  Discusses several general aspects of integration transaction mapping and processing in a multicompany structure.
- **Glossary**
  Provides definitions of the terms and concepts used in this document, in alphabetical order.

How to read this document

This document was assembled from online Help topics. As a result, references to other sections in the manual are presented as shown in the following example:

For details, refer to *To set up an integration mapping scheme*. To locate the referred section, please refer to the Table of Contents or use the Index at the end of the document.

Underlined terms indicate a link to a glossary definition. If you view this document online, you can click the underlined term to go to the glossary definition at the end of the document .

Related documents

- *Reconciliation and Analysis User Guide (U8942B US)*

Customer Support

If you have questions regarding the Infor products described, go to Infor's Customer Support portal at www.infor365.com .

- To access Infor365, go to www.infor365.com and log in. If you do not have an Infor365 account, click **Account Request**, complete the registration form, and a login will be sent to you within 24 hours.
- To access Infor knowledgebases, documentation, downloads, communities, and incidents, click the appropriate link in the top menu of the home page.
- To find your local support phone number, click **Contact Infor** in the top right corner of the home page, enter a product name, and click **Search**.

Chapter 1
The Financial Integrations Module

<div style="text-align: right">1</div>

Financial Integrations (FIN)

For the creation an logging of integration transactions and reconciliation transactions, the Financial Integrations module provides the interface between the <u>Operations Management</u> packages and Financials. The module contains the data required for the setup of the financial <u>integration mapping scheme</u> and for reconciliation, which must be available to both the Operations Management packages and Financials.

The Financial Integrations module provides the following functions:

- To generate the integration document types and the Business Objects and integration elements during initialization of the mapping scheme data. The data is only generated for the packages and modules that you select in the Implemented Software Components (tccom0100s000) session.

- To contain the master data for financial integration and reconciliation. Some of this data is predefined in the system, and some data is generated during initialization and further defined and selected by you.

- To log the Operations Management transactions as integration transactions and for reconciliation. Based on the master data, the Financial Integrations module copies the Operations Management transaction data to the Reconciliation (tfgld495) table, the Integration Transactions (tfgld482) table, and other integration related tables in the General Ledger module.

The sessions of the Financial Integrations module are mainly used to view the available integration and reconciliation setup data and to print reports of this data.

You can perform only two actions in the Financial Integrations module:

- Initialize the mapping scheme data, in the Initialize Mapping Scheme Data (tcfin0210m000) session.

- Set up reconciliation, using the various reconciliation-related sessions.

Note

The authorization to use the sessions of the Financial Integrations module must be restricted to users who have sufficient knowledge and understanding of reconciliation and of the integration mapping scheme.

To initialize the reconciliation data

Before you can set up the integration mapping scheme and/or the reconciliation data, you must use the Initialize Mapping Scheme Data (tcfin0210m000) session. The session generates the data listed here.

Entity	Session	Table
Integration Document Types	tfgld4557m000	tfgld457
Integration Document Types by Transaction Origin/Financial Transaction.	tcfin0110m000	tcfin 010
Reconciliation Groups.	tcfin0120m000	tcfin 020
Reconciliation Elements.	tcfin0130m000	tcfin 030
Possible Reconciliation Elements by Reconciliation Group.	tcfin0125m000	tcfin 025
Integration Document Types by Reconciliation Group.	tcfin0115m000	tcfin 015
Reconciliation/Mapping Elements.	tfgld4556m000	tfgld456
Elements by Integration Document Type.	tfgld4558m000	tfgld458

The data is only generated for the packages and modules that are selected in the Implemented Software Components (tccom0100s000) session.

A number of integration document types are automatically created for currency differences, rounding differences, corrections, and opening balances. You can only use these integration document types to log the reconciliation data. You cannot map these integration document types and the **Mapping Allowed** check box is cleared in the Integration Document Types (tfgld4557m000) session. For details, refer to Currency differences accounts.

> **Note**
>
> After you include additional ERP LN packages or modules, or add integration document types for newly integrated external applications, you must run the Initialize Mapping Scheme Data (tcfin0210m000) session again. The previously initialized data is unaffected.

To log the integration and reconciliation transactions

The Operations Management transactions are simultaneously logged to the following tables in Financials:

- Integration Transactions (tfgld482)
- Reconciliation Data (tfgld495)

All the available data of the Operations Management transactions is logged. ERP LN performs a check to see whether the fiscal period that corresponds with the transaction date is **Open** for integration transactions. If the period is **Closed**, the transaction cannot be logged. For more information, refer to *Period handling for integration transactions (p. 6-6)* .

The reconciliation data is logged independently of the integration transactions. If you do not want to perform financial reconciliation, you can still use the reconciliation data for various types of reports. The logged data consists mostly of the integration transactions that originate from Operations Management, however, some types of purely financial transactions, such as the invoice approval transactions, are also logged.

All reconciliation analysis processes and reports are based on the information in the Reconciliation (tfgld495) table. In addition, from the ledger history and the dimension history, you can zoom to the reconciliation table and the integration table and, from those tables, you can even drill down to the related transactions in Operation Management.

Chapter 2
Integration Mapping Scheme Concepts

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Financial integrations - concepts and components

Business object

In the context of financial integration transaction processing, a business object is a logistic entity or event such as an item, a purchase order, a business partner, or a warehouse issue.

The integration document types supplied by ERP LN each have the corresponding business object attached to them. For example, the integration document types for the various **Sales Order** transactions have the **Sales Order** business object linked to them.

Business object attribute

Each business object has various attributes, such as item, warehouse, and department. These attributes are characteristics of the business object that can be used to map the integration transaction to specific ledger accounts and dimensions. For example, the **Sales Order** business object has the **Sales Office** attribute and the **Sales Order Type** attribute, among others.

Business object ID

The business object ID is the unique code that identifies a specific business object. For example, business object ID of a **Sales Order** business object is the sales order number.

Integration document type

An integration document type represents an <u>integration transaction</u> type in Financials for the mapping and posting of the integration transactions and for the reconciliation process.

The non-financial ERP LN packages are collectively referred to as Operations Management. In Operations Management, each integration transaction is

represented by its combination of operational transaction origin and financial transaction (in technical terms, the `tror`/`fitr` combination). For example, **Sales Order/Issue**.

In the Finance/Logistics module of Common Data, the transaction origin/financial transaction combinations are translated to integration document types. For example, the **Sales Order/Issue** transaction is translated to the **10002052** integration document type with the description **Sales Order/Issue**. ERP LN provides predefined integration document types for all the integration transactions that can occur.

Integration document types are required:

- To map integration transactions.
- To log the reconciliation data of a transaction.

A number of predefined integration document types are only used to log the reconciliation data, for example, the **Currency Difference** integration document types. You cannot map these integration document types and the **Mapping Allowed** check box is cleared in the Integration Document Types (tfgld4557m000) session.

For a list of the integraton document types, refer to Integration document types. For each Integration document type, the mapping is given as defined in the demo companies that are delivered with the ERP LN application.

Mapping element

A mapping element is a characteristic of a logistic transaction that you can map to a ledger account or dimension. Some examples of the mapping elements of a warehouse receipt transaction are: **Item**, **Item Group**, **Warehouse**, and **Manufacturer**. You can map specific values, ranges, or the full range of a mapping element to specific ledger accounts and dimensions.

A mapping element consists of the combination of a business object and a business object attribute. For example, the mapping element item group/item represents the business object attribute item group of the business object item.

ERP LN supplies a complete list (about 1800) of the mapping elements that correspond to the business object attributes. For each integration document type, you can select the mapping elements from the attributes of its related business objects. You cannot add, change, or delete mapping elements.

Parent element

A mapping element consists of the combination of a business object and a business object attribute. Business object attributes can themselves be business objects. The business objects of attributes appear as child business objects, with a higher level number. The attributes of child business objects are also available as mapping elements for the integration document types.

For example, a **Sales Order** business object has the **Item** attribute. **Item** is also a business object which has the **Item Group** and the **Manufacturer** attributes, among others. As a result, you can select the manufacturer of the item of the sales order as a mapping element for **Sales Order** integration document types.

If a mapping element has parent attributes, ERP LN displays the parent attributes and their levels in the various mapping scheme related sessions.

Sort element

The sort element is a mapping element on which the integration transactions can be sorted. You can use the sort element to group the integration transactions that belong to different integration document types.

For example, the integration transactions for a project or for a service order belong to various integration document types. If you assign **PCS Project** or **Service Type** as the sort element to those integration document types, you can group the integration transactions by project, or by service order.

To every integration document type, you can assign one of the available mapping elements as the sort element in the Integration Document Types (tfgld4557m000) session. The sort element can be an element that you do not actually use for the mapping. In the Integration Transactions (tfgld4582m000) session, you can display the integration transactions in the order of the values of the sort element.

Element group

An element group is a selection of mapping element and in this way represents a mapping. To map the integration transactions, or integration document types, you must link one or more element groups to the integration document types. An element group must contain at least one mapping element and can contain up to 15 mapping elements.

Before you select the elements of an element group, it is recommended that you link the element group to an integration document type. For the selection, ERP LN only displays the mapping elements that apply to the integration document type.

You can link an element group to multiple integration document types, provided that the mapping elements of the group are available for all the integration document types. If you do this, the ledger account mapping or the dimension mapping of those integration document types will be exactly the same.

You can use the Print Where Used Element Groups (tfgld4466m000) session to generate a report of a range of element groups and the integration document types to which they are linked. You can use this report to see which integration document types are affected if you change the mapping for an element group.

> **Note**
>
> The element group, not the integration document type, defines the ledger account mapping and the dimension mapping. If you change the mapping for one integration document type, you change the mapping of all the integration document types that use the element group.

Mapping priority

You can define the ledger mapping and dimension mapping of the element groups on decreasing priority levels, where level one represents the highest priority. If ERP LN cannot map the transaction based on the mapping with priority one, ERP LN uses the mapping with priority two, and so on. If the transaction cannot be mapped, ERP LN reports an error.

If you want to ensure that each integration transaction can be mapped and posted, it is recommended that for the lowest priority, you map the full range of each mapping element to a default ledger account or dimension as applicable.

Mapping sequence

Within every mapping priority every mapping has a mapping sequence. The mapping sequence is the order in which ERP LN searches the values of the mapping elements to find the mapping of an integration transaction. As you define the mapping for various combinations of the elements of an element group, ERP LN generates a sequence number for every mapping. For performance reasons it is recommended that the most specific mapping has mapping sequence number one.

> **Note**
>
> The following rules apply to the mapping priority and the mapping sequence:
> - For different priorities, the mapped values and value ranges of the mapping elements can overlap.
> - For the mapping sequences within a mapping priority, the mapped values and values ranges of the mapping elements cannot overlap.

Default account

If you do not wish to define a detailed mapping to various ledger accounts for specific integration transactions, you can map the corresponding integration document type to a default account. All the transactions of the integration document type for which ERP LN cannot determine an account based on the mapping scheme details, are posted to the default account.

The mapping of an integration document type to a default account is direct, without the need for element groups and mapping elements. No distinction is made on any of the transaction details.

Default accounts can be used in two ways:

■ Instead of a detailed mapping to various ledger accounts. All the transactions are posted to the same account. For example, all warehouse receipts are posted to the Inventory ledger account, without any distinction.

■ In addition to a detailed mapping. If a transaction cannot be mapped based on the detailed mapping scheme, it is posted to the default account.

You cannot set up the dimension mapping for the default ledger accounts in this way. If dimension mapping is required for an integration document type, you must define the dimension mapping in the regular way by means of an element group and mapping elements.

GL code

A GL code represents a ledger account and the corresponding dimensions. GL codes are used to represent ledger accounts to users who are not familiar with the structure of the chart of accounts. For some logistic transactions, you can use a GL code to indicate the ledger account and the dimensions to which the transaction must be posted.

You can define GL codes in the GL Codes (tfgld4575m000) session. Every GL code refers to one ledger account. The ledger account must be an integration account. If mandatory or optional dimensions are linked to the ledger account, these are included in the GL code definition.

Before you can use the GL code, in the GL Codes (tfgld4575m000) session you must select the **Active** check box. To block the GL code for use, you can clear the **Active** check box. If you block a GL code, new lines of existing orders are still mapped using the GL code but you cannot select the GL code for newly created orders.

As soon as any integration transactions are mapped using the GL code, you cannot change the ledger account or the dimensions of the GL code, or delete the GL code.

If you enter a GL code for the transaction, the integration transactions are not included in the mapping process but mapped directly to the ledger account and dimensions of the GL code. The values of the mapping elements of such transactions do not have any effect on the mapping. In the Integration Transactions (tfgld4582m000) session, ERP LN indicates that a GL code was used to map the transaction, and displays the GL code.

Mapping through GL codes can be used for the following transactions:

■ The credit posting of manual sales invoices created in the Manual Sales Invoice Data (cisli2520s000)

■ The debit or credit posting of any type of integration transaction that you want to remap in the Remap Posted Integration Transactions (tfgld4282m100) session.

- The debit postings of:
  - **Purchase Order / General Costs**.
  - **Purchase Order / General Costs Variance**.
  - **Purchase Order / Costs to be Specified**.
  - **Purchase Order / Costs to be Specified Variance**.
  - **Purchase Schedule / General Costs**.
  - **Purchase Schedule / General Costs Variance**.
  - **Purchase Schedule / Costs to be Specified**.
  - **Purchase Schedule / Costs to be Specified Variance**.

Transaction type and series

ERP LN generates the document numbers for the integration transactions based on a transaction type and series. On the **Document Numbering/Compression** tab in the Mapping Scheme (tfgld4573m000) session, you can define a transaction type and a series for each integration document type. If you use different transaction types and series, each type of integration transaction gets its own range of document numbers in the General Ledger.

One exception to this rule exists: Fixed Assets Management transactions use the transaction type entered in the FAM Parameter (tffam0100s000) session.

Compression

Integration transactions can be compressed before they are posted. For each integration document type, you can indicate whether the debit transactions and /or the credit transactions must be compressed.

Transactions can be compressed if the following transaction details have the same value:

- The source financial company.
- The destination financial company.
- The transaction type and series.
- The ledger account and dimensions.
- The transaction currency.
- The fiscal year and the financial period, the tax period, and the reporting period.
- The integration document type and the **Debit/Credit** indicator.
- If related gain and loss transactions are generated, the same compression criteria are used to compress these.

Note

Intergroup transactions are not compressed.

Reconciliation group

A reconciliation group is used to group related integration transactions for reconciliation purposes. Every integration document type belongs to a reconciliation group.

For example, the **Purchase Order/Receipt** and the **Purchase Order/Price Variance** integration document types both belong to the same reconciliation group (reconciliation group **Invoice Accrual 3**).

Integration account

To support full reconciliation possibilities, the integration transactions can only be posted to ledger accounts that are marked as Integration accounts in the Chart of Accounts (tfgld0508m000) session. If an account is marked as **Integration Account**, you cannot manually enter transactions on the account.

As you cannot create manual transactions on the integration accounts to make corrections, the posting of the integration transactions is irreversible. You can only make corrections to the postings on the integration ledger accounts in the reconciliation sessions. You must make the corrections to other ledger accounts with the same parent as the integration ledger account. The result will then appear in the parent account.

The integration mapping scheme status

Two fields indicate a mapping scheme version status:

- **The active indicator**
  Every mapping scheme version has an **Active** indicator which is either on or off. If a versions is **Active**, ERP LN uses that version to map integration transactions. Before you can make a mapping scheme version active, it must have been validated and it must not contain any blocking errors. Only one integration mapping scheme version can be **Active** at a time.

- **The check status**
  The check status indicates the stage reached in the mapping scheme definition process. A mapping scheme version can have the following check statuses:

  - **Not Checked**
    The version has not been checked for consistency. The version cannot be made **Active**.

  - **Inconsistent - Blocking**
    The version has been checked for consistency and blocking errors were found. The version cannot be made **Active**.

- **Inconsistent - Not Blocking**
  The version has been checked for consistency and no blocking errors were found. However, inconsistencies were found that resulted in warning messages. You can make the version **Active** if you wish.
- **Consistent**
  The version has been checked for consistency and no errors were found. You can make the version **Active**.

Other concepts

Other mapping-scheme related concepts are:

- *Integration user groups (p. 4-3)*

Chapter 3
The Financial Integrations Module

Financial Integrations (FIN)

For the creation an logging of integration transactions and reconciliation transactions, the Financial Integrations module provides the interface between the <u>Operations Management</u> packages and Financials. The module contains the data required for the setup of the financial <u>integration mapping scheme</u> and for reconciliation, which must be available to both the Operations Management packages and Financials.

The Financial Integrations module provides the following functions:

- To generate the integration document types and the Business Objects and integration elements during initialization of the mapping scheme data. The data is only generated for the packages and modules that you select in the Implemented Software Components (tccom0100s000) session.

- To contain the master data for financial integration and reconciliation. Some of this data is predefined in the system, and some data is generated during initialization and further defined and selected by you.

- To log the Operations Management transactions as integration transactions and for reconciliation. Based on the master data, the Financial Integrations module copies the Operations Management transaction data to the Reconciliation (tfgld495) table, the Integration Transactions (tfgld482) table, and other integration related tables in the General Ledger module.

The sessions of the Financial Integrations module are mainly used to view the available integration and reconciliation setup data and to print reports of this data.

You can perform only two actions in the Financial Integrations module:

- Initialize the mapping scheme data, in the Initialize Mapping Scheme Data (tcfin0210m000) session.

- Set up reconciliation, using the various reconciliation-related sessions.

Note

The authorization to use the sessions of the Financial Integrations module must be restricted to users who have sufficient knowledge and understanding of reconciliation and of the integration mapping scheme.

To initialize the reconciliation data

Before you can set up the integration mapping scheme and/or the reconciliation data, you must use the Initialize Mapping Scheme Data (tcfin0210m000) session. The session generates the data listed here.

Entity	Session	Table
Integration Document Types	tfgld4557m000	tfgld457
Integration Document Types by Transaction Origin/Financial Transaction.	tcfin0110m000	tcfin 010
Reconciliation Groups.	tcfin0120m000	tcfin 020
Reconciliation Elements.	tcfin0130m000	tcfin 030
Possible Reconciliation Elements by Reconciliation Group.	tcfin0125m000	tcfin 025
Integration Document Types by Reconciliation Group.	tcfin0115m000	tcfin 015
Reconciliation/Mapping Elements.	tfgld4556m000	tfgld456
Elements by Integration Document Type.	tfgld4558m000	tfgld458

The data is only generated for the packages and modules that are selected in the Implemented Software Components (tccom0100s000) session.

A number of integration document types are automatically created for currency differences, rounding differences, corrections, and opening balances. You can only use these integration document types to log the reconciliation data. You cannot map these integration document types and the **Mapping Allowed** check box is cleared in the Integration Document Types (tfgld4557m000) session. For details, refer to Currency differences accounts.

> **Note**
>
> After you include additional ERP LN packages or modules, or add integration document types for newly integrated external applications, you must run the Initialize Mapping Scheme Data (tcfin0210m000) session again. The previously initialized data is unaffected.

To log the integration and reconciliation transactions

The <u>Operations Management</u> transactions are simultaneously logged to the following tables in Financials:

- Integration Transactions (tfgld482)
- Reconciliation Data (tfgld495)

All the available data of the Operations Management transactions is logged. ERP LN performs a check to see whether the fiscal period that corresponds with the transaction date is **Open** for integration transactions. If the period is **Closed**, the transaction cannot be logged. For more information, refer to *Period handling for integration transactions (p. 6-6)* .

The reconciliation data is logged independently of the integration transactions. If you do not want to perform financial reconciliation, you can still use the reconciliation data for various types of reports. The logged data consists mostly of the integration transactions that originate from Operations Management, however, some types of purely financial transactions, such as the invoice approval transactions, are also logged.

All reconciliation analysis processes and reports are based on the information in the Reconciliation (tfgld495) table. In addition, from the ledger history and the dimension history, you can zoom to the reconciliation table and the integration table and, from those tables, you can even drill down to the related transactions in Operation Management.

Chapter 4
Integration Mapping Scheme Procedures

<div style="text-align: right">4</div>

To set up an integration mapping scheme

Transactions to be mapped

In the mapping scheme, you must define the ledger mapping and the dimension mapping for the following types of transactions:

- Financial integration transactions resulting from logistic events in <u>Operations Management</u>.
- General Ledger transactions.
- Procurement card transactions in Accounts Payable.

In addition, to support dimension accounting you must define the dimension mapping of financial transactions from Accounts Payable and from Sales Invoicing to the various dimensions.

The setup procedure

To create, change, or extend an integration mapping scheme, consists of the following steps:

1. *Mapping scheme prerequisites (p. 4-2)* .
2. If no mapping scheme exists, *create a mapping scheme (p. 4-5)* .
3. To create a mapping scheme version.
4. *To add integration document types to the mapping scheme (p. 4-5)* .
5. *To create element groups (p. 4-6)* and link element groups to each integration document type.
6. *To link mapping elements to the element groups (p. 4-7)* .
7. *To view and adjust the element sequence (p. 5-1)*
8. *To map an element group to ledger accounts or dimensions (p. 4-7)* .
9. *To adapt the mapping (p. 4-11)* for the remaining integration document types of the same reconciliation group.

10. *To set up the integration transaction document numbers (p. 4-10)* for the integration transactions.

11. *To set up compression of the transactions (p. 5-2)* .

12. *To check and activate a mapping scheme (p. 4-11)* for your mapping scheme version.

Mapping scheme prerequisites

Before you can set up an <u>integration mapping scheme</u>, the following actions must have been performed:

- **Set up the table sharing.**
  In a multifinancial company structure, it is recommended that the financial companies share the mapping scheme tables and the reconciliation tables (tables tfgld430 to tfgld495). The financial companies then all map the integration transactions to the same ledger accounts and dimensions. You can define exceptions to the shared mapping for individual integration document types.

- **Note**
  When you start the Mapping Scheme (tfgld4573m000) session, ERP LN checks whether the required tables are correctly shared. If this is not the case, an error message is displayed listing the tables that are not correctly shared and you cannot start the session.

- **Initialize Mapping Scheme Data**
  In the Initialize Mapping Scheme Data (tcfin0210m000) session, select the transaction origins and the mapping elements that must be mapped and then click **Initialize**. ERP LN generates the <u>integration document types</u> and retrieves the business objects and <u>mapping elements</u> required for the packages and modules that are selected in the Implemented Software Components (tccom0100s000) session.

- Initialize the integration document types required within Financials:
  - To map the procurement card transactions to ledger accounts and dimensions, and to map the financial transactions from Accounts Payable to the various dimensions for dimension accounting. On the **Specific** menu of the ACP Parameters (tfacp0100s000) session, click **Initialize Document Types**.
  - To map the financial transactions from Sales Invoicing to the various dimensions for dimension accounting. On the **Specific** menu of the SLI Parameters (cisli1500m000) session, click **Initialize Document Types**.
  - To map the financial transactions of the Fixed Assets Management module to ledger accounts and dimensions. On the **Specific** menu of the FAM Parameter (tffam0100s000) session, click **Initialize FAM Mapping Scheme Data**.

- **Authorize users to post integration transactions**
  Users can only post integration transactions if they belong to an <u>integration user group</u>. In the Integration User Groups (tfgld4135m000) session, you can define user groups.

- **Set up the integration parameters**
  In the Integration Parameters (tfgld4150s000) session, take the following actions:

  - Initialize the descriptions of the business objects, integration document types, and business object attributes, in the installed languages. On the **Specific** menu, click **Initialize Descriptions**.

  - Enter a default transaction type and series for the integration transactions. Newly entered integration document types are only inserted automatically on the **Document Numbering and Compression** tab of the Mapping Scheme (tfgld4573m000) session if a default transaction type and series are available.

  - Select the way in which you want to handle the document numbers and the batch numbers for the integration transactions.

  - Optionally select the **Delete Logged Elements during Posting** check box. Removing integration information that is not longer needed can save space and avoid a possible low performance.

- **Define the <u>integration accounts</u>**
  In the Chart of Accounts (tfgld0508m000) session, define the ledger accounts to be used for the integration transactions. You must select the **Integration Account** check box. Integration accounts cannot be used for any other type of transactions, for example, manual transactions.

- **Define integration user groups for Operations Management areas**
  For information purposes, you can group the <u>Operations Management</u> users who create integration transactions in user groups.

- To support dimension mapping in the integration mapping scheme, in the Dimensions (tfgld0510m000) session you can import the codes of various entities and properties defined in the Tables module of Common Data to create the dimensions.

Integration user groups

Integration user groups

You can use <u>integration user groups</u> for two different purposes:

- To allow employees to post integration transactions, you must create at least one <u>integration user group</u> and add the employees to the integration user group. Only employees who belong to an integration user group can post the integration transactions. This type of use is mandatory.

■ To group the employees who create transactions in the various areas of Operations Management, you can create integration user groups. The integration user group is part of the integration transaction data that is logged. This allows you to select the integration transactions for mapping and posting by Operations Management area. If the employee does not belong to an integration transaction user group, this field remains blank. This type of use is optional and serves for information only.

You can enter a range of integration user groups as selection criterion for the integration transactions to be processed in the following sessions:

■ Map Integration Transactions (tfgld4281m000)

■ Post Integration Transactions (tfgld4282m000)

■ Print Integration Transactions Error Log (tfgld4484m000)

To reduce the batch sizes, in the Integration Parameters (tfgld4150s000) session, you can specify that batches for the posting of the integration transactions must be created per transaction type and integration user group of the user who posts the transactions.

Note

If you post integration transactions and you use the integration user group as a selection criterion in the Post Integration Transactions (tfgld4282m000) session, it is not mandatory that the range includes the integration user group to which you belong.

To define integration user groups

To define an integration user group, take the following steps:

1. In the Integration User Groups (tfgld4135m000) session, enter the code and a description for the integration user group.

2. Select the user group and on the **Specific** menu, click **Integration Transaction Users**. The Integration Transaction Users (tfgld4136m000) session starts.

3. In the Integration Transaction Users (tfgld4136m000) session, click **New**.

4. In the **User** field, zoom to the User Data (ttaad2500m000) session and select a user.

To create a mapping scheme

If Financials was just installed and no integration mapping scheme exists, you must create a completely new integration mapping scheme. Take the following steps:

1. To create a new integration mapping scheme, start the Mapping Scheme (tfgld4573m000) session and on the **File** menu, click **New Mapping Scheme**. ERP LN asks you to confirm that you want to start with an empty mapping scheme.

2. Enter a code and a description for the new mapping scheme. As ERP LN automatically creates version one of the mapping scheme, you do not need to create a mapping scheme version.

Continue with *To add integration document types to the mapping scheme (p. 4-5)* .

To add integration document types to the mapping scheme

For every integration transaction, you must add the corresponding <u>integration document type</u> to the mapping scheme.

When you set up a new mapping scheme version, you can add the integration document types in two ways:

1. **Add each integration document type individually**
   Use this method if you want to define the mapping for comparatively few integration document types, for example, if for many transactions you use a default mapping.

2. **Automatically add all the integration document types**
   Use this method if you define a mapping for a great number integration document types. Later, you can easily remove the integration document types for which you did not define a mapping from the mapping scheme version.

Add each integration document type individually

To add each integration document type to the mapping scheme version individually, take the following steps:

1. In the Mapping Scheme (tfgld4573m000) session, ensure that the version you just created appears. On the **Mapping Scheme Details** tab, click **New**.

2. Click the browse arrow in the **Integration Document Type** field to start the Integration Document Types (tfgld4557m000) session.

3. Select an integration document type from the predefined integration document types that ERP LN supplies. Only the integration document types for which you have not yet defined a mapping appear.

4. Select the side for which you want to define the mapping in the **Debit/ Credit** field. For most integration document types, you must define the mapping for both sides.

Automatically add all the integration document types

To automatically add all the available integration document types to the mapping scheme version, perform the following action:

1. In the Mapping Scheme (tfgld4573m000) session, display the version you just created. On the **Specific** menu of the **Mapping Scheme Details** tab, click **Insert Integration Document Types**.

ERP LN adds all the available integration document types to the mapping scheme version. The action is incremental. Integration document types for which you already defined a mapping are not overwritten.

After you finish defining the mapping for the integration document types, on the **Specific** menu of the **Mapping Scheme Details** tab, you can click **Delete Unused Integration Document Types** to remove the integration document types for which you did not define a ledger mapping, a dimension mapping, or default accounts.

Continue with *To create element groups (p. 4-6)* .

To create element groups

Generally, for every integration document type you must map both the debit side and the credit side. Some exceptions to this rule exist. For details, refer to *Integration document types that are not used (p. 5-3)* .

For each side of an integration document type, you must link at least one <u>element group</u> to the integration document type.

1. On the **Mapping Scheme Details** tab of the Mapping Scheme (tfgld4573m000) session, in the **Ledger Element Group Code** field zoom to the Element Groups (tfgld4567m000) display session.
   You can do one of the following:
   - To create a new element group, click **New**. The Element Groups (tfgld4567m000) overview session starts, and this time you can enter new data. Enter the code and the description for the new element group, then click **Save and Close**. You return to the Element Groups (tfgld4567m000) display session.

■ If an element group with the required mapping already exists, you can select this element group. In this case, you do not need to create a new element group.

2. In the Element Groups (tfgld4567m000) session, select the element group you just created and click **OK**. You return to the Mapping Scheme (tfgld4573m000) session.

Continue with: *To link mapping elements to the element groups (p. 4-7)*

To link mapping elements to the element groups

To link mapping elements to an element group, take the following steps:

1. In the Mapping Scheme (tfgld4573m000) session, on the **Mapping Scheme Details** tab select the new integration document type and on the **Specific** menu, click **Elements by Element Group**, and next, click **Ledger element group** or **Dimension element group**. The Elements by Element Group (tfgld4556m100) session starts.

2. To add elements to the element group, in the Elements by Element Group (tfgld4556m100) session, select the corresponding check boxes in the **Use Element** column on the right in the session window. If the **Use Element** column is not visible, scroll the session window as necessary.

3. To add the selected elements to the element group before you scroll down to select more elements, you can click **Apply**.

4. After you finish selecting the elements for the element group, click **Save and Close** to return to the Mapping Scheme (tfgld4573m000) session.

On the **Specific** menu, you can click **Only Used Elements** to list only the elements for which you selected the **Use Element** check box.

For performance reasons, only select those elements for which you want to define a specific mapping.

Continue with: *To view and adjust the element sequence (p. 5-1)*

To map an element group to ledger accounts or dimensions

Next, you must define the ledger account mapping and optionally, the dimension mapping for the integration document type on which you are working. To do this, you map the element group or groups linked to the integration document type to ledger accounts and dimensions.

Note

If you select the same element group in more that one field, for example, in the **Ledger Element Group Code** field and in one or more **Dimension Element Group** fields, you map the transaction to exactly the same ledger accounts or dimensions. Therefore, ERP LN displays a warning message if you select the same element group.

To map an element group to a ledger account, you map values or ranges of the mapping elements to a ledger account. You must define a mapping for all the elements of the element group.

If the ledger mapping and/or dimension mapping is already defined for the element group, you can continue with *To set up the integration transaction document numbers (p. 4-10)* .

To define the ledger account mapping, take the following steps:

1. In the Mapping Scheme (tfgld4573m000) session, on the **Mapping Scheme Details** tab select an integration document type and on the **Specific** menu, click **Ledger Mapping**. The Ledger Mapping (tfgld4569m000) session starts. *Note*: If the **Ledger Mapping** command is not available, check that the element group contains at least one element. As you must map elements to the ledger accounts, you cannot define the mapping if the element group is empty.

2. In a multicompany structure, if you enter zero in the **Logistic Company** field and /or the **Financial Company** field, the mapping applies to all the companies. To define an exception to the shared mapping, you can enter company numbers in these fields.

3. In the **Ledger Account** field, zoom to the Chart of Accounts (tfgld0508m000) session and select a ledger account. ERP LN only displays the ledger accounts for which you selected the **Integration Account** check box.

4. The **Elements** tab of the Ledger Mapping (tfgld4569m000) session contains a line for every element of the element group. By default, the full range of values of each element is mapped on the ledger account.

5. If you want to map specific values of the elements to the ledger account, enter the values of the range, or double click an element. The Elements by Ledger Mapping (tfgld4570m000) details session starts. In the **Element Value From** and **Element Value To** fields, enter the range of values of this element that you want to map to the ledger account, and save the data.

6. Close the Elements by Ledger Mapping (tfgld4570m000) overview session. You return to the Ledger Mapping (tfgld4569m000) session.

7. To map another value or range of the same element to a different ledger account, in the Ledger Mapping (tfgld4569m000) session, click **New**. ERP LN asks whether you want to add a priority or a sequence.
    Click **Sequence** to add a ledger account to the mapping with the same

priority. The Elements by Ledger Mapping (tfgld4570m000) details session starts.

8. In the **Element Value From** and the **Element Value To** fields, enter the range of values of this element that you want to map to the ledger account and save the data. You return to the Ledger Mapping (tfgld4569m000) session.

9. In the Ledger Mapping (tfgld4569m000) session, you can see that for the other elements of the group, the **Element Value From** and the **Element Value To** fields are now empty. That means that for this mapping sequence, the mapping of those elements is not yet defined. For every mapping sequence, you must define the mapping of all the elements of the element group. To map the full range of the other elements to the ledger account, on the **Specific** menu you can click **Set Not Defined Ranges to Full Range**.

10. For performance reasons, it is important that you put the elements in the correct element sequence. The most specific element must have the sequence number one and the least specific element must have the highest sequence number. To change an element's sequence number, select the element and on the **Specific** menu of the Used Elements by Element Group (tfgld4568m000) session, click **Move Record Up** or **Move Record Down**.

11. If you wish, you can map the full range of each integration element to a default ledger account at a low priority. In this way, ERP LN will always find a ledger account for the transaction. The result is similar to defining default ledger accounts as described in *To define default account mapping (p. 5-1)* .

12. Repeat steps 6 to 8 to map various values or ranges of values of one element to different ledger accounts. For every new ledger account, you must specify the mapping for each element of the element group. If you want to map ranges of only one element to different ledger accounts, you must set the other elements to their full range for every ledger account, that is, for every new sequence number of the element mapping.

13. Repeat steps 3 to 10 above to define the ledger account mapping of all the elements of the element groups linked to the integration document type. In the various sessions, the priorities indicate the sequence in which ERP LN determines the mapping of the transaction. Within each priority, the sequence numbers indicate the sequence in which ERP LN checks the values of the elements.

    The following rules apply to the mapping priority and the mapping sequence:
    - For different priorities, the mapped values and value ranges of the mapping elements can overlap.
    - If the mapped values and values ranges of the mapping elements of the mapping sequences in a mapping priority overlap, ERP LN generates a warning.

14. If the ledger accounts used in the ledger mapping have a mandatory or optional link with dimension types, define the dimension mapping in the same way as the ledger account mapping.

15. For each integration document type, you must define the mapping for the debit side and the credit side. If you have mapped only one side, define the mapping for the other side starting at *To add integration document types to the mapping scheme (p. 4-5)* or, if you already added the integration document type, start at *To create element groups (p. 4-6)* .

For the remaining integration document types of the same reconciliation group, you can define a similar mapping very quickly as described in *To adapt the mapping (p. 4-11)* .

Continue with *To set up the integration transaction document numbers (p. 4-10)* .

To set up the integration transaction document numbers

For each integration document type, a transaction type and series for document numbering must exist. If no default transaction type and series is available, you must define these.

If you defined a default transaction type and series in the Integration Parameters (tfgld4150s000) session, these are used as default values for all the integration document types. In a multicompany structure, by default the transaction type and series apply to all the companies.

If you wish, you can define specific document numbering details for specific integration document types and for specific combinations of originating logistic company and financial company.

To define specific document numbering for the integration transactions, take the following steps:

1. In the Mapping Scheme (tfgld4573m000) session, click the **Document Numbering and Compression** tab.

2. If you defined a default transaction type and series in the Integration Parameters (tfgld4150s000) session, ERP LN has automatically inserted the integration document type in the list. Click **Find** to find the integration document type for which you are defining the mapping. Otherwise, click **New** to add the integration document type to the list.

3. In the **Transaction Type** and **Series** fields, select a transaction type and series for the integration transaction.

4. In a multicompany structure, you can define the posting data for the integration transactions from a specific logistic company and in a specific financial company. Click **New** to add the posting data for each combination

of companies. If you enter zero the **Business Object Company** field and the **Financial Company** field, the posting details apply to all the companies.

Continue with: *To set up compression of the transactions (p. 5-2)*

To adapt the mapping

For the integration document types that belong to the same <u>reconciliation group</u> and for which the reconciliation group description is other than **End Account**, ERP LN can copy the mapping and adapt it where necessary.

To copy and adapt the mapping, take the following steps:

1. On the **Mapping Scheme Details** tab of the Mapping Scheme (tfgld4573m000) session, select the new integration document type and on the **Specific** menu, click **Adapt Element Groups**.
    ERP LN performs the following actions:

    -   Adds the integration document types of the same reconciliation group to the mapping scheme, if they are not already present.
    -   Links the following element groups to these integration document types:
        -   The same element groups that are linked to the first integration document type, if the elements of these groups are also available for the other integration document type.
        -   Newly generated element groups derived from the element groups of the first integration document type. Elements that are not available for the integration document type are replaced with similar elements that are available. The codes of the generated element groups consist of the code of the original element group with the suffix 1, 2, 3, and so on.

2. To change the mapping for an integration document type, select the integration document type and use the instructions listed in *To set up an integration mapping scheme (p. 4-1)* that correspond with the changes you want to make.

Continue with *To set up the integration transaction document numbers (p. 4-10)*.

To check and activate a mapping scheme

Before you can make the new or changed mapping scheme version active, ERP LN checks whether the mapping scheme does contain blocking errors.

When you check a mapping scheme version, ERP LN automatically removes the integration document types for which you did not define a ledger mapping, a dimension mapping, or default accounts.

To check and activate a mapping scheme version, take the following steps:

1.   In the Mapping Scheme (tfgld4573m000) session, display your version and in the **Specific** menu, click **Check Mapping Scheme**.

2.   To view the result of the check, click the **Errors and Warnings** tab. The **Message Type** field indicates whether the defect is an error or a warning. To see only the error messages, on the **Specific** menu click **Show Errors**. A mapping scheme that contains errors cannot be used. You must solve the errors. As a result of the check, ERP LN updates the mapping scheme version status. Refer to Mapping Scheme Check Status for details.

3.   Solve the errors. Depending on your mapping and reconciliation requirements, you can either accept or solve the warnings. You can select an error or a warning and on the **Specific** menu, click **Take action on Error / Warning**. ERP LN starts the session in which you can solve the error. For example, if you have selected a non-valid ledger account, the Chart of Accounts (tfgld0508m000) session starts.

4.   Check the mapping scheme again. If the mapping scheme is error free, you can activate the mapping scheme.

5.   If you have not done this earlier, you must create a revision text for the version. On the **Edit** menu of the Mapping Scheme (tfgld4573m000) session, click **Texts** and then click **Revision Text**. For example, you can use the revision text to indicate the differences with the previously active version.

6.   On the **Specific** menu of the Mapping Scheme (tfgld4573m000) session, click **Activate Mapping Scheme** to make the version active. From this moment, ERP LN posts integration transactions according to this version of the mapping scheme.

Chapter 5
Integration Mapping Details

To view and adjust the element sequence

As you add mapping elements to an element group, ERP LN assigns an element sequence number to each element.

For performance reasons, be sure to place the elements in the correct element sequence. The most specific element must have the sequence number one, and the least specific element must have the highest sequence number. In the Used Elements by Element Group (tfgld4568m000) session, you can change an element's sequence number.

To view and change the sequence of the elements of an element group, start the Used Elements by Element Group (tfgld4568m000) session as follows:

1. In the Mapping Scheme (tfgld4573m000) session, on the **Mapping Scheme Details** tab, select the integration document type and, on the **Specific** menu, click **Element Groups**. The Element Groups (tfgld4567m000) session starts.

2. Select the element group and, on the **Specific** menu, click **Used Elements by Element Group**. The Used Elements by Element Group (tfgld4568m000) session starts.

To change an element's sequence number, select the element and, on the **Specific** menu, click **Move Record Up** or **Move Record Down**. You can also perform this step later if you want to see whether this improves the performance.

Continue with *To map an element group to ledger accounts or dimensions (p. 4-7)* .

To define default account mapping

If you are not interested in the detailed mapping to ledger accounts of some integration transactions, you can optionally map the integration document type to a default account. All the transactions for the integration document type for

which ERP LN cannot determine an account based on the mapping scheme details, are posted to the default account.

You can map the debit side or the credit side of an integration transaction, or both, to a default account. For example, you can map the debit side to a default account and define a detailed mapping for the credit side.

To define the default account mapping, take the following steps:

1. In the Mapping Scheme (tfgld4573m000) session, click the **Default Accounts** tab.

2. On the **Specific** menu, click **Insert Integration Document Types**. ERP LN adds all the available integration document types to the mapping scheme version. The action is incremental. Integration document types for which you already defined a default ledger account are not overwritten.

3. Select the **Credit** side or the **Debit** side of the integration document type and in the **Ledger Account** field, select the default ledger account. The integration document type is mapped directly to the default account, without the need for element groups and element mapping.

After you finish defining the default accounts for the integration document types, on the **Specific** menu of the **Default Accounts** tab you can click **Delete Unused Integration Document Types** to remove the integration document types for which you did not define a ledger mapping, a dimension mapping, or default accounts.

Note

- You can define default accounts as an alternative to mapping the full range of elements to a default ledger account at a low priority, which is described in *To map an element group to ledger accounts or dimensions (p. 4-7)* .

- You cannot set up the dimension mapping in this way. If dimension mapping is required for the integration document type, you must still define the dimension mapping on the **Mapping Details** tab of the Mapping Scheme (tfgld4573m000) session. As you use a default account, you do not need to define an element group for the ledger mapping.

To set up compression of the transactions

For each integration document type you can specify whether the non-finalized debit transactions and/or credit transactions must be compressed to one transaction before posting. By default, the transactions are not compressed.

To compress the transactions, in the Mapping Scheme (tfgld4573m000) session on the **Document Numbering and Compression** tab select the **Debit** and/or **Credit** check box.

If the following properties have the same values, the transactions can be compressed:

- The business partner
- The financial source company
- The financial destination company
- The transaction type / document series
- The ledger account and dimensions
- The transaction currency
- The financial year and period, the tax year and period, and the reporting year and period
- The integration document type and the debit/credit indicator

ERP LN uses the same compression-criteria for any related gain and loss postings that occur.

Intergroup postings are not compressed.

Next, you can continue with one of the following actions:

- To map the remaining integration document types of the same reconciliation group, continue with *To adapt the mapping (p. 4-11)* .
- To map the integration document types of the next reconciliation group, depending on what you did earlier, continue in one of the following ways:
  - To add new integration document types to the mapping scheme, continue with *To add integration document types to the mapping scheme (p. 4-5)* .
  - If you already added the integration document types to the mapping scheme, continue with *To create element groups (p. 4-6)* .
- If you have finished mapping the integration document types, continue with: *To check and activate a mapping scheme (p. 4-11)* .

Integration document types that are not used

A number of integration document types is generated during the initialization which are not used to find the ledger accounts or dimensions. You cannot map these integration document types.

For example, a number of integration document types is used to map the debit postings on the accounts receivable control account and the credit postings on the accounts payable control account to the correct dimensions for dimension accounting. For these integration document types, you only need to define the dimension mapping for either the debit or the credit side of the transaction. The ledger accounts for these transactions are not defined in the integration mapping scheme but as the control accounts of the financial business partner groups.

In Fixed Assets Management, some integration document types are only used to find the ledger account for one side (debit or credit) of the transaction. ERP LN takes the ledger account for the other side from the mapping of a different Fixed Assets Management integration document type. For such integration document types, you only need to define the mapping for one side of the transactions.

Integration document type	Description	Map this Side
ACP00003	Dimension Accounting ACP/Self Billing	Credit
ACP00004	Dimension Accounting ACP/Internal Freight Invoices	Credit
ACP00005	Dimension Accounting ACP/Commissions	Credit
SLI00001	Dimension Accounting on Sales Invoicing	Debit
FAM_ACCU	Accumulated Depreciation	Credit
FAM_ASSE	Asset	Debit
FAM_CAPA	Capital Accumulation	Credit
FAM_CHAR	Charitable Contribution	Debit
FAM_DEPR	Depreciation Expense	Debit
FAM_GAIN	Gain	Credit
FAM_LOSS	Loss	Debit
FAM_PROC	Proceeds	Debit
FAM_SCRP	Scrap	Debit
SLI00002	Interim Revenue	Credit

Integration document types that are only partly used:

Chapter 6
Integration Transactions

6

To process integration transactions

To process integration transactions - overview

To process the integration transactions and to create the corresponding entries in the General Ledger consists of the following steps:

1. **Logging the transaction data.**
   Of every event in Operations Management, ERP LN automatically logs the logistic data in the Integration Transactions (tfgld482) table and in the Reconciliation Data (tfgld495).

2. **Optionally view the integration transactions.**
   In the Integration Transactions (tfgld4582m000) session, you can view the integration transaction details.

3. **Optionally map individual transactions.**
   In the Integration Transactions (tfgld4582m000) session, you can map individual transactions according to the current mapping scheme or a previous mapping scheme version.

4. **Map the integration transactions.**
   Use the Map Integration Transactions (tfgld4281m000) session to start the mapping. Ledger accounts and dimensions are assigned to the transactions.

5. **Solve the mapping errors.**
   Start the Print Integration Transactions Error Log (tfgld4484m000) session to print an error report. If mapping errors occurred, create a new version of the mapping scheme in which you solve the errors.

6. **Post the integration transactions**
   Use the Post Integration Transactions (tfgld4282m000) session to start the posting. Non-finalized journal entries are created for the integration transactions in the General Ledger. *Note*: Users can only post integration transactions if they belong to an integration user group. For details, refer to *Integration user groups (p. 4-3)* .

7. **Solve the posting errors.**
   Start the Print Integration Transactions Error Log (tfgld4484m000) session to print an error report. Solve the errors and post the integration transactions again.

8. **Finalize the transactions**
   In the Global Selection of Batches for Finalization (tfgld1210m000) session or the Attach Batches to Finalization Run (tfgld1111s000) session, finalize the batch. Final checks are carried out on the non-finalized integration transactions, finalized transactions are created in the General Ledger.

9. **Archive and/or delete the integration transactions.**
   After the transactions are posted, run the Archive / Delete Integration Elements and Integration Transactions (tfgld4283m000) session to clear up the database.

These steps are described in detail below.

You can remap **Posted** transactions that were mapped incorrectly. ERP LN reverses the posted integration transactions and generates a new integration transaction. If the mapping elements are still available, you can remap the integration transaction, for example, using a new version of the mapping scheme, or you can remap the transaction through a GL code. For details, refer to *To remap integration transactions (p. 6-10)* .

> **Note**
>
> For fixed assets transactions, procurement card transactions, and dimension accounting, ERP LN only uses the mapping scheme functionality to map the transactions to ledger accounts and dimensions. These processes do not result in integration transactions and the related transactions are not included when you map and post integration transactions.

To process integration transactions

Step 1: Logging the transaction data

When logistic events occur that result in financial postings, ERP LN automatically logs the logistic data such as the order amount, the order number, the quantity, and the business partner, in the Integration Transactions (tfgld482) table. Simultaneously, this data is stored in the Reconciliation Data (tfgld495) table, for inquiries, reporting, and reconciliation purposes.

Based on the transaction date, ERP LN determines the financial period in which the transaction must be posted. This is especially important for the reconciliation process. If the financial period is closed, ERP LN displays an error message. However, if you selected the **Posting to Next Open Period Allowed** check box in the Integration Parameters (tfgld4150s000) session, you can request permission to post the integration transactions to a closed fiscal period. For details, refer to *Period handling for integration transactions (p. 6-6)* .

The mapping elements of transactions for which you enter a GL code are not logged, as these are not needed to determine the ledger account and dimensions for the transaction.

Step 2: View the integration transactions

You can use the Integration Transactions (tfgld4582m000) session to view the integration transactions. On the various tabs you can view all the details of the integration transactions.

Step 3: Optionally map and post individual transactions

You can optionally map and post individual transactions, for example, to post a specific transaction or to map an antedated transaction with the mapping scheme version that was active on the transaction date.

In the Integration Transactions (tfgld4582m000) session, select the transaction and on the **Specific** menu, click:

- **Map Specific Transaction**, to map the selected transaction according to the currently active mapping scheme.
- **Map with Specific Mapping Scheme**, to map a selected transaction according to a specific mapping scheme version. You can select any mapping scheme version from the Mapping Schemes (tfgld4573m100) session. If the selected version has not been Active, you can only simulate the mapping. If the selected version has been **Active** at any time, you can simulate the mapping and you can actually map the transaction.
- **Post Specific Transaction**, to post a selected transaction manually.

Step 4: Map the integration transactions

In the Map Integration Transactions (tfgld4281m000) session, select a range of transactions to be mapped.

If you click the **Map** button, ERP LN assigns ledger accounts and dimensions to the transactions based on the integration mapping scheme and the values of the mapping elements.

ERP LN uses the currently **Active** mapping scheme version, independent of the transaction dates.

You can select transactions with specific statuses for the mapping. By default, ERP LN maps transactions that have the following statuses:

- **Logged**
  The transaction data has been logged. Usually this check box is selected.
- **Mapping error**
  Previous mapping of the transaction has resulted in an error message.

■ **Posting error**
Previous posting of the transaction has resulted in an error message.

The transactions for which you enter a <u>GL code</u> are not mapped, as these can be immediately posted to the ledger account and dimensions of the GL code.

To remap transactions that were previously mapped, select the **Mapped** check box. The previous mapping is replaced with the new mapping. For example, if you wish to overrule the individual mapping of transactions performed in the Integration Transactions (tfgld4582m000) session, you can use this option.

After the mapping, you can still map individual transactions according to previously active mapping scheme versions. Use the commands on the **Specific** menu of the Integration Transactions (tfgld4582m000) session.

Step 5: Solve the mapping errors

After mapping the integration transactions, to see whether any errors occurred, you can start the Print Integration Transactions Error Log (tfgld4484m000) session to display or print an error report.

If mapping errors occurred, create a new version of the mapping scheme in which you solve the errors. Alternatively, in the Integration Transactions (tfgld4582m000) session you can manually map individual transactions according to a previously active mapping scheme.

Step 6: Post the integration transactions

In the Post Integration Transactions (tfgld4282m000) session, select a range of transactions to be posted.

You can only post integration transactions if you belong to an <u>integration user group</u>. For details, refer to *Integration user groups (p. 4-3)* .

If you click the **Post** command button, ERP LN creates non-finalized journal entries in the General Ledger. Debit and credit transactions are compressed if this is indicated in the mapping scheme. The batch numbers are assigned according to the setting of the **Handling of Batch Numbers** parameter in the Integration Parameters (tfgld4150s000) session.

If you select the **Continuous Process Frequency** check box, as long as the session is open ERP LN posts newly mapped transactions in the selected range at regular intervals. You can enter the time in minutes between two runs of the posting process. If you enter zero, the process is not repeated.

Step 7: Solve the posting errors

After posting the integration transactions, to see whether any errors occurred, you can start the Print Integration Transactions Error Log (tfgld4484m000) session to display or print an error report.

The following main types of posting errors can occur:

- In a multifinancial company structure, the intercompany relations or the intergroup relations are not set up correctly in the Intercompany Relations (tfgld0115s000) session and the Intergroup Relations (tfgld2501m000) session. For example, check that the ledger accounts exist.

- The fiscal period corresponding to the transaction date is already **Closed**. To post the transaction, you must set the period to **Open** for General Ledger (GLD) transactions in the Period Status (tfgld0107m000) session.

- General transaction processing errors, for example, the highest free number of a document number series has been reached.

Solve the errors and post the integration transactions again.

Step 8: Finalize the transactions

In the Global Selection of Batches for Finalization (tfgld1210m000) session or the Attach Batches to Finalization Run (tfgld1111s000) session, finalize the batch. ERP LN checks whether the transactions of the batch are balanced.

If the debit and the credit side of a transaction must be posted in different financial companies, intercompany transactions are generated. In addition, currency exchange gain and loss amounts are calculated and posted.

The finalized transactions are stored in the General Ledger and the corresponding non-finalized transactions are removed.

Step 9: Remap posted transactions

Before you archive and delete the integration transactions, you can remap **Posted** transactions that were mapped incorrectly. For details, refer to *To remap integration transactions (p. 6-10)* .

Step 10: Archive and/or delete the integration transactions

After the transactions are posted, the integration transactions details are no longer needed. The logistic data required for inquiries, reporting, and reconciliation is stored separately in the Reconciliation Data (tfgld495) table.

A large amount of logged data that is no longer needed can have a negative impact on the performance of the processes that handle integration transactions and reconciliation transactions. To save space and avoid a possible low performance, at regular intervals you can run the Archive / Delete Integration Elements and Integration Transactions (tfgld4283m000) session which is part of the **Utilities** of the General Ledger module. All integration transactions and their mapping elements within the selection that have the **Posted** status are archived and/or deleted depending on the selected options.

The <u>mapping elements</u> reflect logistic data. If the logistic data changes, for example, if item codes or projects expire or you redefine the order types, you cannot at a later stage create a correction integration transaction or remap the integration transactions. In such a situation, you can also archive the mapping elements.

Period handling for integration transactions

Dates

If <u>Operations Management</u> transactions are posted to Financials, the following types of dates are involved:

- **Transaction date**
  The date you enter when you create the transaction such as a sales order or a warehouse receipt. Usually the transaction date is the current date. Only for backdated and antedated transactions, the transaction date differs from the current date. Internally, the transaction date is registered in <u>UTC time</u>.

- **Transaction entry date**
  The date you enter when you create the batch. Usually the transaction entry date is the current date. Only for backdated and antedated transactions, the transaction entry date differs from the current date. Internally, the transaction entry date is registered in local time.

- **Document date**
  The transaction date in Financials. The document date is always registered in local time. For invoices, the document date is the invoice date. Usually the document date is the same date as the transaction date, except if you manually enter a different transaction date in Financials or if the UTC time and the local time differ by a day. The document date is not used for integration transactions.

- **Creation date**
  The date and time when the transaction is created. For backdated and antedated transactions, the creation date differs from the transaction date. The creation date is only used for integration transactions.

- **Posting date**
  The date and time (local time) when the transaction is posted.

Periods

For every integration transaction, the following financial periods are recorded:
- Fiscal year and Fiscal period.
- Reporting year and Reporting period.
- Tax year and Tax period.

For details about the period types, refer to To use periods.

Usually, the financial transactions are posted in the financial periods that correspond with the transaction date. The posting date and the document date are in the same period.

To log the integration transactions, the financial period status must be **Open**. Usually, if the transaction date is the current date, the financial periods are **Open**. However, if a transaction is antedated or if the transaction date is near the end of a financial period, the period can be already **Closed** when the related financial transaction is posted.

If you create an integration transaction, the transaction is logged. Usually this is the moment when you approve an order or invoice. Because the financial periods of the postings are included in the logged information, ERP LN checks the period status before the transaction is logged. If the period is **Closed**, the transaction cannot be logged. The user cannot save the approved order or invoice.

You can select the period type of which ERP LN checks the status to detect whether the period is **Open** and the integration transaction can be logged.

You can select the following period types:

- **INT** for integration transactions.
- **ACP** for accounts payable transactions.
- **ACR** for accounts receivable transactions.
- **GLD** for general ledger transactions.

For example, if you select **ACP**, you cannot post an integration transaction if the **ACP** period is **Closed**, even if the **INT** period is still **Open**.

In the Integration Parameters (tfgld4150s000) session, you can select the default period type. In the Period Handling by Integration Document Type (tfgld4579m000) session, you can select the period type for individual integration document types.

It is usually correct to check the **INT** period. In exceptional situations, you can select the other period types.

If the period is Closed

If the period is **Closed**, ERP LN tries to post the transaction according to the **Closed Period Handling** option that applies to the integration transaction. In the Integration Parameters (tfgld4150s000) session, you can select the default **Closed Period Handling** option. In the Period Handling by Integration Document Type (tfgld4579m000) session, you can select the closed period handling option for specific integration document types.

You can select the following **Closed Period Handling** options:

- **Post to current period**
  ERP LN posts the transaction to the current financial period.

- **Post to next open period**
  ERP LN posts the transaction to the next open period.

- **Exception handling**
  In the Requested Exceptions for Integration Transactions (tfgld4585m000) session, enter a request to post integration transactions to specific financial periods of which the status is **Closed**.

  After an authorized user approves the request, the transaction can be logged and posted. You do not need to set a **Closed** period to **Open**. However, the corresponding **GLD** period must be **Open** at the time when you post the integration transaction. If required, you can manually set the **GLD** period to **Open** in the Period Status (tfgld0107m000) session.

- **Parameters' default**
  ERP LN uses the default **Closed Period Handling** option that you selected in the Integration Parameters (tfgld4150s000)

Requests for exceptions

In the Requested Exceptions for Integration Transactions (tfgld4585m000) session, enter a request to log and post integration transactions to specific financial periods.

You can enter the fiscal year and period, the reporting year and period, and/or the tax year and period to which the integration transaction must be posted. Only the fields that correspond to a **Closed** period are enabled.

By default, ERP LN displays the year and period that corresponds with the transaction date of the integration transaction.

You can perform one of the following actions:

- To create a request for posting the integration transaction to the **Closed** period, use the default value.
- To create a request for posting the integration transaction to a different period, enter the period number. The new period can be **Open** or **Closed**.

If the transaction still cannot be logged, ERP LN displays an error message on the user's screen when the transaction is created. For example, if the **Closed Period Handling** option is **Post to current period** and the current period is **Closed**, ERP LN cannot log the transaction. To solve the problem, you can change the transaction date to a date in the next **Open** fiscal period.

Note

The employees who have permission to run the Approve Requested Exceptions for Integration Transactions (tfgld4585m100) session are authorized to approve the requests.

You cannot post transactions to a financial period that has the **Finally Closed** status. Periods should only be set to **Finally Closed** when the financial year is closed.

Example

For example, the integration transaction was created in period two of the fiscal year 2005.

For the period type selected for the integration document type, the periods have the following status:

- Fiscal period 2005/2 is **Closed**
- Tax period 2005/2 is **Closed**
- Reporting period 2005/2 is still **Open**

ERP LN posts the integration transaction to Reporting period 2005/2. You cannot change this setting. For the Fiscal period and the Tax period, you can enter a period number.

If you accept the default value 2005/2, ERP LN creates a request to post the transaction to a **Closed** period.

If you enter a different number, for example, 2005/3, ERP LN creates a request to post the transaction to a period that does not correspond with the transaction date.

Period handling exceptions in reconciliation

If you post the transaction to the next **Open** fiscal period, the transaction date is outside the fiscal period to which the transaction is posted. This makes matching of logistic reports and financial reports more complex. You can print a report of the requests for exceptions in the Print Next-open-period Transactions (tfgld4485m000) session, and use this during reconciliation.

In the Print Reconciliation Data (tfgld4495m000) session, you can select the **Print Backdated Transactions** check box to print the reconciliation report for such transactions.

For the **Invoice Accrual 3** reconciliation group that represents the Goods Received not Invoiced (GRNI), if you print reconciliation reports with the Checklist Reconciliation Goods Received Not Invoiced (tfgld4495m200) session, the financial transaction is reported in the fiscal period of the document date instead of the posting date.

Note

In general, backdated transactions make the reconciliation process more complex. To avoid the generation of errors when the currency differences and rounding differences are calculated, logging antedated transactions with a transaction

date earlier than the most recent archiving date of the reconciliation data is not permitted for the following reconciliation areas:

- Inventory.
- Consignment Inventory.
- Assembly Line WIP.

Example

If you received goods late onJanuary 31 and you register the receipt on February 1 but with a transaction date of January 31, the following situation occurs. The posting date and the document date differ.

	Fiscal period 101/01 – 01/31	Fiscal period 202/01 – 02/28
Operations Management transaction	Receipt: Transaction date = 01/30 Document date = 01/30	
Financial transaction		Receipt: Posting date = 02/01 Backdated: Document date = 01/30

To remap integration transactions

You can remap **Posted** transactions that were mapped incorrectly. For example, you can remap transactions that were mapped and posted to an incorrect ledger account or dimensions.

If you remap a transaction, ERP LN performs the following actions:

- Generate a reversal transaction for the posted transaction.
- Create a new integration transaction.
- Map the new transaction according to the currently active version of the mapping scheme or to the specified GL code.

Usually, you must remap a range of transactions of an integration document type or an integration document type group.

In the Remap Posted Integration Transactions (tfgld4282m100) session, you can select:

- The integration transactions of a range of business objects.
- The integration transactions of a specific business object. You can then enter a range of business object IDs

To avoid multiple reversal transactions being generated for an integration transaction, you can only reverse integration transactions once. If mapping errors occur for the new integration transactions, after you solve error, you can run the Remap Posted Integration Transactions (tfgld4282m100) session again for the same selection of integration transactions, because ERP LN only processes the integration transactions that were not yet successfully remapped.

Reconciliation considerations

In the various reconciliation sessions, such as the Operations Management - Financial Reconciliation (tfgld4595m000) session, the **Kind of Entry** indicates the remapped transactions as follows:

■ **Integration Transaction (Reversed)** indicates the original transaction.

■ **Integration Transaction Reversal** indicates the reversal transaction.

■ **Integration Transaction** indicates the new integration transaction.

Prerequisites

You can remap an integration transaction if the following conditions are true:

■ The integration transaction has the status **Posted**.

■ The integration document type of the integration transaction is correctly mapped in the currently active version of the mapping scheme, unless you map the new integration transaction through a GL code.

■ The ledger account and dimensions to which the original integration transaction was mapped have the status **Free**, to be available for the mapping and posting of the reversal transaction.

■ The logged mapping elements are still available. If you have already deleted the mapping elements, you can only remap the integration transaction through a GL code.

■ The integration transaction has not been reversed previously. To avoid the repeated generation of reversal transactions for an integration transaction, you can remap an integration transaction only once. However, you can remap the newly generated integration transaction if required.

To remap integration transactions

To remap integration transactions, complete the following steps.

1. In the Remap Posted Integration Transactions (tfgld4282m100) session, select the integration transaction or range of integration transactions. You can select the integration transactions of a range of business objects or of a specific business object, and you must select a specific integration document type or an integration document type group.

2. On the **Options** tab, indicate the following details:
   - Whether you want to remap the debit side or the credit side or both
   - Whether you want to remap the new integration transaction with the current mapping scheme or use a <u>GL code</u>. If you already deleted the mapping elements of the integration transaction, you must use a GL code.
   - Whether you want to post the reversal transaction and the new integration transaction to the current financial period if the financial period oft he original integration transaction is **Closed**.
   - The home currency to be used for the report.

> **Note**
>
> If you use a GL code, you can only perform the remapping for a single financial company.

To evaluate the process before you perform the actual remapping, you can select the **Simulate** check box and the **Error Report** check box. After you solve errors, you can run the session again and clear the **Simulate** check box.

After successful completion of the remapping process, the reversal transactions and the new integration transactions have the status **Mapped**. You can use the Post Integration Transactions (tfgld4282m000) session to post the reversal transactions and the new integration transactions.

Example of remapped integration transactions

You can remap **Posted** transactions that were mapped incorrectly. For example, you can remap transactions that were mapped and posted to an incorrect ledger account or dimensions.

Usually, remapping is reqquired for a range of transactions of an <u>integration document type</u>.

If you remap a transaction, ERP LN performs the following actions:

- Generate a reversal transaction for the posted transaction
- Create a new integration transaction
- Map the new transaction according to the currently active version of the mapping scheme or to the specified <u>GL code</u>.

Example

The debit side of a Purchase Order/Receipt transaction has been incorrectly mappped and posted to an Inventory account. The transaction must be mapped to an Interim Transit - General account.

Integration document type	Debit/ Credit	Ledger account	Mapping scheme	Amount	Status
Purchase Order/ Receipt (10001074)	Debit	Inventory	MAP1	300.00	Posted
Purchase Order/ Receipt (10001074)	Credit	Goods Received not Invoiced	MAP1	300.00	Posted

Original integration transaction

You create a new version of the mapping scheme and you define the correct mapping for the Purchase Order/Receipt (10001074) integration document type.

In the Remap Posted Integration Transactions (tfgld4282m100) session, you select the integration transaction for remapping. You also select the **Map Debit Transaction** check box and in the **Base Debit Mapping on** field, select **Current Mapping Scheme**.

If you click **Continue**, ERP LN creates the reversal transaction and maps the transaction to the ledger accounts and dimensions of the original transaction.

Integration document type	Debit/ Credit	Ledger account	Mapping scheme	Amount	Status
Purchase Order/ Receipt (10001074)	Debit	Inventory	MAP1	- 300.00	Mapped
Purchase Order/ Receipt (10001074)	Credit	Goods Received not Invoiced	MAP1	- 300.00	Mapped

Reversal transaction

In addition, ERP LN creates a new integration transaction and maps the transaction according to the currently active version of the mapping scheme.

Integration document type	Debit/ Credit	Ledger account	Mapping scheme	Amount	Status
Purchase Order/ Receipt (10001074)	Debit	Interim Transit - General	MAP2	300.00	Mapped
Purchase Order/ Receipt (10001074)	Credit	Goods Received not Invoiced	MAP1	300.00	Mapped

New integration transaction

You can use the Post Integration Transactions (tfgld4282m000) session to post the reversal transaction and the new integration transaction.

Chapter 7
Multicompany Aspects

7

Reconciliation - multicompany aspects

The reconciliation data is stored in the financial company in which the integration transaction is posted. As a result, for intercompany and intergroup transactions, the debit and credit data is logged in various financial companies. If the financial companies do not share the Reconciliation Data (tfgld495) table, you cannot view the debit transaciton and the credit transaction together.

For best results, companies must not share the Reconciliation (tfgld495) table. In a multicompany environment, the most likely requirement is that reconciliation takes place on the level of a legal entity or enterprise unit. Because a financial company usually corresponds to a legal entity, this requires a non-shared setup. A non-shared setup also reduces the table size, as in that case the reconciliation data is divided over multiple physical tables.

Example

For a purchase order, the following situation occurs:

- The purchase office is linked to financial company 100.
- The warehouse of the receipt is linked to financial company 200.

The related postings appear in different reconciliation groups and in different financial companies.

Posting:	Ledger account	Reconciliation group	Amount	Financial company
Debit	Inventory	Inventory 1	1580	200
Credit	Interim Transit	Interim Transit 1	1580	200

Integration document type: **Warehouse Receipt/Receipt**

Posting:	Ledger account	Reconciliation group	Amount	Financial company
Debit	Interim Transit	Interim Transit 1	1580	200
Credit	Invoice Accrual	Invoice Accrual 3	1580	100

Integration document type: **Purchase Order/Receipt**

Posting:	Ledger account	Reconciliation group	Amount	Financial company
Debit	Invoice Accrual	Invoice Accrual 3	1580	100
Credit	Registered Invoices	None	1580	100

Integration document type: **Approval Purchase Invoice**

Within the reconciliation groups, the related transactions stay together. However, the reconciliation data in the **Interim Transit 1** and the **Inventory 1** reconciliation groups is stored in financial company 200, while the reconciliation data in the **Invoice Accrual 3** reconciliation group is stored in financial company 100. In the **Invoice Accrual 3** reconciliation group, the entries balance.

Appendix A
Glossary

A

business object

In the context of financial integration transaction processing, a business object is a logistic entity or event such as an item, a purchase order, a business partner, or a warehouse issue.

business object attribute

A characteristic of the business object that can be used to map the integration transaction to specific ledger accounts and dimensions. For example, the **Sales Order** business object has the **Order Series** attribute and the **Order Type** attribute, among others.

business object ID

The unique code that identifies a specific business object. For example, business object ID of a **Purchase Order** business object is the purchase order number.

element group

A selection of mapping elements used to define a mapping. To map the integration document types, you must link one or more element groups to the integration document types. An element group must contain at least one mapping element and can contain up to 15 mapping elements.

GL code

Represents a ledger account and the corresponding dimensions. GL codes are used to represent ledger accounts to users who are not familiar with the structure of the chart of accounts.

To specific logistic transactions, you can link a GL code. Such integration transactions are mapped directly to the ledger account and dimensions of the GL code, they are not included in the mapping process.

integration document type

Represents a type of Operations Management transaction for the purpose of mapping and posting the integration transactions to Financials and for financial reconciliation.

The integration document types supplied by ERP LN each have the corresponding business object attached to them. For example, the integration document types for the various **Sales Order** transactions have the **Sales Order** business object linked to them.

integration document type group

A way to group integration document types for reporting purposes.

integration mapping scheme

A scheme that defines the ledger accounts and dimensions to which the integration transactions are posted.

integration transaction

A financial transaction that is generated through ERP LN packages other than Financials. For each logistic transaction that must be reflected in Financials, ERP LN generates an integration transaction, for example, Purchase/Receipt, Production/WIP Transfer, and Project/Costs of Goods Sold. ERP LN posts the integration transaction to the ledger accounts and dimensions defined in the integration mapping scheme.

integration user group

A way to group users who create financial integration transactions and users who post financial integration transactions.

An integration user group can be used:

■ To allow employees to post the financial integration transactions.
■ To optionally group the employees who create transactions in Operations Management. For mapping and posting, you can select the integration transactions of a range of integration user groups.

mapping element

A property of a logistic transaction that you can use to define the ledger account and dimensions for an integration transaction. You can post the transactions with specific values of the mapping elements to specific ledger accounts. A mapping element consists of the combination of a business object and a business object attribute. For example, the **Item group/Item** mapping element represents the **Item group** business object attribute of the **Item** business object.

Example

Some examples of the mapping elements of a warehouse receipt transaction are: item, item group, warehouse, and cost component.

Operations Management

A collective name for the non-financial ERP LN packages. Operations Management represents all the logistic ERP LN packages.

reconciliation group

Represents a group of integration ledger accounts on which you can perform reconciliation. A reconciliation group consists of the combination of a reconciliation area and a subarea, for example, **Invoice Accrual**/ **Purchase Order**.

UTC time

The acronym for Universal Time Coordinated, the time system that is similar to Greenwich Mean Time (GMT). The UTC's reference point is Greenwich, England located at 0° longitude, the imaginary north-south line also known as the prime meridian. When it is noon at Greenwich, it is 12:00:00 UTC.

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