Infor XA Setup Guide for EGL

Release 9.2

Contents

About this guide

This guide provides information and instructions to set up Infor XA (XA) with Enterprise General for System i (EGL). The instructions provide the setup steps in XA and EGL that are specific to this implementation. This guide also provides information for IFM users about migrating data from XA to EGL.

For the purpose of this document, note these terms:

- Infor10 ERP Discrete iEnterprise XA is referred to as XA.
- Batch Transaction Processing (BTP) is now the IDF External GL Transactions object.

Intended audience

The intended audiences for this guide are IT professionals, system administrators, and system analysts or business analysts who install and configure Infor Development Framework (IDF) and who implement integrations between XA and other Infor products.

Related documents

You can find the documents in the product documentation section of the Infor Xtreme Support portal, as described in "Contacting Infor" on page 7.

Contacting Infor

If you have questions about Infor products, go to the Infor Xtreme Support portal at www.infor.com/inforxtreme.

If we update this document after the product release, we will post the new version on this Web site. We recommend that you check this Web site periodically for updated documentation.

If you have comments about Infor documentation, contact documentation@infor.com.

Chapter 1 Introduction

Enterprise General Ledger for System i (EGL) is an event-driven general ledger application that creates journal entries from XA transactions. EGL uses the Advanced Transaction Processing (ATP) posting engine to enable configurable transaction processing. You can use the ATP posting engine to dynamically generate comprehensive journal entries from the XA subsystems, such as XA Production (OBPM or RBPM) and XA Materials Management (MM), without modifying the XA applications.

When you configure EGL for use with XA, you can optionally define a set of prioritized rules that assign transactions created or generated in XA to the appropriate journal entries in EGL. You maintain and post the journal entries in the EGL objects. You can automatically post the journals to multiple books and ledgers.

EGL is designed to integrate with Enterprise Financials (IFM) and Accounting Management (AMPlus). However, you are not required to have Enterprise Financials or AMPlus installed to send XA transactions to EGL from Customer Service Management (CSM), MM, OBPM, or RBPM.

IFM users can automatically configure EGL with XA data and transfer GL account balances from IFM to EGL using XA migration objects. See "Setting up IFM migration to EGL " on page 29.

Post transactions from subsystem activities

When XA subsystems and the general ledger are integrated, subsystem activities generate journal entries and use automated accounting decisions to post the journal entries to the general ledger. For example, you can enter a vendor invoice and automatically post the accounts payable and expense entries to the appropriate accounts without user intervention.

The financial event class rules defined within a financial event class determines the ledger and books that are updated with a subsystem transaction. Each financial event class rule specifies a particular ledger and book to update.

Parallel posting

In EGL, events can be posted to multiple charts of accounts, ledgers, and books simultaneously. These examples show how you can take advantage of the flexibility provided by EGL:

* Keep separate charts of accounts for IFRS and GAAP accounting

- Maintain financial activity in a region that is autonomous from other regions and from corporate headquarters
- Maintain books in multiple currencies
- Use flexible financial calendars
- Maintain separate books for corporate and business units
- Record taxes by country, state, region
- Track sales by posting to sales books

External transactions

You can receive transactions from third-party sources and use the External GL Transactions object to view and maintain the transactions. You can use the External GL Transactions object perform these tasks:

- Add journal entries and post transaction data from third-party applications or other Infor products directly to the general ledger
- Generate multiple entries across different chart of accounts, ledgers, and books within the ledger from one transaction line
- Automatically post transaction amounts across different books using the designated exchange rate between the transaction currency and target book currency
- Use validation to identify and correct errors within the transaction data

Deferred posting

When you define subsystem rules, you can define the journal process as "Defer posting." Use the Deferred GL Transactions object to post the transactions that have a "Defer posting" subsystem rule. You can use this object to restart transactions that did not complete the posting process.

Ledger account rules

Create rules that define how segment values are combined to form an account for a specific chart of accounts. The rules apply to a particular chart of accounts but can optionally apply to a ledger. You can, for example, define a reject rule that prevents ATP from posting a particular account to a chart of accounts. You can apply a start date to the rule so that you can set up accounts but delay posting until the effective date.

Currency and exchange rates

EGL uses ERP common objects Currencies and Exchange Rate Sets to process accounting transactions in multiple currencies. You can update books with all transactions or only transactions in which the transaction currency matches the book currency. For example, if you enter transactions in euros and US dollars for a ledger, you can maintain three books: a book for each transaction currency (US dollars and euro) and a reporting book that records both US dollars and euros in the book's currency.

Upload journal entries from a spreadsheet

If you prefer to create manual journal entries in a Microsoft® Excel® spreadsheet, you can upload the journals to EGL. Run the journal upload installation on your PC. The installation adds an Add-Ins tab to Excel spreadsheets. The Add-Ins tab provides a template for a journal entry and options that allow you to connect to the server where EGL is installed. See "EGL journal upload" on page 26.

Terminology

Sometimes XA and EGL use different terms for the same business function. This table shows the equivalent terms for those business functions:

XA term	EGL term	Comment
Unit	Non-natural account segment	Units can be concatenated with Natures to form the EGL account numbers
Nature	Natural account segment	
Period structure	Financial calendars	EGL requires a financial calendar for each fiscal year. Period structures are not required in IFM

Chapter 2   Setting up XA for EGL

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This chapter discusses the steps you must complete to set up XA for use with EGL.

Install requirements

This table shows the software requirements that must be installed and configured for standard operation:

Application	Level	Comments
XA R9.2 Client	Required: • Depending on your environment, one of these: • Infor XA R9.2 business environments with an existing R9.1 global environment at 02.09.00.03.45 or higher • Infor XA R9.2 global environment with R9.2 business environments • SH16073	 SH16073 (EGL Enhancement) is available in Client fix build level 02.09.02.01.07 or higher, and must be applied to the global environment in Link-Manager.
XA 9.2 Server	Required: • SH16055 (PTF 20079) • SH58634 • SH58924	 PCM Upgrades R9.1 EP2 to R9.2 EGL Enhancements EGL minor correction EGL for R9.1 must exist and up to date with fixes before applying SH58634 and S58924

Application	Level	Comments
	Options:	
	• SH15970	EGL Journal Upload Installer
	•	
XA help	Help build level 02.09.00.03.13 or higher	
EGL BOD publishing client		Ensure that EGL BODs are using BOD_2_11_0 schema and can be produced by maintaining business objects or executing Host jobs.
		Ensure that you have installed and configured the necessary hardware and software for all of these components:
		• Infor ION Connect release 11.1 or later
		• Infor Business Vault 11.1 or later
		• Infor Base Data Store 10.4.0 or higher
		• Infor XA 9.2
		• Server PTF SH59231
		• Server PTF SH59417
		• Client PTF "06.03.00.03.17" or later
		• Infor IDF System-Link
		• Infor EGL
Enterprise General Ledger (EGL)		EGL must be installed for the XA environment in Link Manager. See "Activating EGL in XA" on page 15.

Additional requirements

To use EGL, an XA environment must meet these requirements:

- You must have the appropriate licenses for EGL and XA.

- You must set the Activate currency and exchange rate objects option in the Enterprise Financials Application Settings object to Yes before EGL is installed in Link Manager. Note that this option cannot be changed after this option is set to Yes. This option disables currency and exchange rate maintenance in the green screen application and IDF level 1. This option enables currency and exchange rate maintenance in Power-Link, Net-Link, and System-Link. When this option is enabled, the CAS EXRATE file is no longer used to store and retrieve exchange rates. The XA Exchange Rate object is used instead.

- If you use IFM and intend to use the migration tools, we recommend that you install EGL into a test environment and then run the migration programs. See "Setting up IFM migration to EGL " on page 29.

Note: You are not required to have Enterprise Financials or AMPlus installed to send XA transactions to EGL from CSM, MM, OBPM, or RBPM.

Setting up XA

Perform these tasks to configure EGL to generate GL journal entries for XA transactions.

Activating EGL in XA

Enterprise General Ledger must be installed for the XA environment.

To install Enterprise General Ledger for an environment:

1   Select the XA environment in Link Manager.

2   Select the Applications card for that environment.

3   Select Enterprise General Ledger and click **Maintain > Change**.

4   In the Change Installed Applications dialog box, select **Installed**.

5   Click **Update**.

Activating the General Ledger Interface

To enable XA to send sales, inventory, and production general ledger transactions to EGL; activate the General Ledger Interface function in XA. Activate the interface for the CSM, MM, OBPM, and RBPM applications.

You are not required to activate the General Ledger Interface to send transactions from Finance.

Perform these steps for each application from which you intend to send general ledger transactions:

1   For each application ensure that the General Ledger distribution tailoring option is set to **Yes**. See the *Planning and Installing Infor ERP XA* Guide.

2   For each application ensure that the General Ledger distribution interface for the application is active. See option 4, Activate/Deactivate Interfaces on the CAS Maintenance/Change menu (AMZM30). See the *Cross Application Support User's Guide*.

3   In the General Ledger Interface function for each application, ensure that the Interface to General Ledger option for each type of transaction you intend to send to EGL is set to Yes. EGL provides macros and models that are used instead of rules and priorities to assign GL account numbers. If you do not require EGL to assign account numbers, you will define the rules and priorities in the General Ledger Interface.

This table shows where to define rules and priorities for each application:

	COM/CSM	IM/MM	PC&C/OBPM	REP/RBPM
Transaction	Sales transactions	Inventory transactions	Order-based production transactions	Rate-based production transactions
IDF Level 1 Task	Maintain Transaction Types	Maintain Transaction Types	Maintain Transaction Types	Maintain Transaction Types
Power-Link Application	Finance	Finance	Finance	Finance
Power-Link Application Tab	Customer Service GL Interface	Materials GL Interface	Order Based Production GL Interface	Rate Based Production GL Interface
Power-Link Icon/IDF Level 1 Menu	Customer Service GL Interface Tasks	Materials GL Interface Tasks	Order Based Production GL Interface Tasks	Rate Based Production GL Interface Tasks
IDF Level 1 Tab	Transaction Types	Transaction Types	Transaction Types	Transaction Types
Host Menu/Host Option	AMBM73, Option 4, Maintain Interface Control File	AMIMB3, Option 4, Maintain Interface Control File	AMCM93, Option 4, Maintain Interface Control File	AMQM63, Option 4, Maintain Interface Control File
For more information	See "Using the General Ledger Interface," in the *Customer Order Management User's Guide*	See "General Ledger Interface," in the *Inventory Management User's Guide*	See "General Ledger Interface," in the *Production Control and Costing User's Guide*	See "General Ledger Interface," in the *Repetitive Production Management User's Guide*

Activating XA Application Interfaces to EGL

The Application Settings object contains Enterprise General Ledger options you can use to specify the start date from which each XA application will begin to send transactions to EGL. From the specified date for an application, any type of transaction that XA sends to the General Ledger Interface is also sent automatically to EGL.

Note: If you are using the IFM migration process, see "Setting up IFM migration to EGL " on page 29. This step is part of the migration process.

To specify the start date for an application:

1   In the Application Settings object, select the Enterprise General Ledger application and then select **Maintain > Change**.

2   In the Enterprise General Ledger Application Settings card file, specify the interface activation date for these application functions:

Production

Specify the date from which you require production GL transactions from Order Based Production Management (OBPM) and Rate Based Production Management (RBPM) to be sent to EGL.

Customer Service

Specify the date from which you require sales GL transactions from Customer Service Management (CSM) to be sent to EGL.

Finance

Specify the date from which you require financial transactions from Enterprise Financials (Finance) to be sent to EGL.

Materials

Specify the date from which you require inventory GL transactions from Materials Management (MM) to be sent to EGL.

AM Accounts Payable

Specify the date from which you require payable financial transactions from Accounting Management (AMPlus) to be sent to EGL.

AM Accounts Receivable

Specify the date from which you require receivable financial transactions from AMPlus to be sent to EGL.

3   Click **Update.**

Activating Currencies and Exchange Rate Sets

The Currencies, Exchange Rate Sets, and Exchange Rates objects are required for use with EGL. To enable these objects in the XA environment, the Activate currency and exchange rate objects option in the Enterprise Financials settings in the Application Settings object must be set to **Yes** before EGL is installed in Link Manager. You cannot change this option after this option is set to **Yes**. EGL uses the currency information defined in the Currencies object. You also define the type of rounding method used with currencies in EGL in the Currencies object.

EGL uses the exchange rate information defined in the Exchange Rate Sets and Exchange Rates objects for currency conversions. Previously, XA applications used the exchange rates from Cross Application Support (CAS). Now, you specify and maintain all exchange rates in the Exchange Rate Sets and Exchange Rates objects. Any exchange rate sets you intend to use with EGL must have IDs of six characters or less.

Chapter 3   Setting up EGL manual process

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This chapter discusses the objects that you use to set up EGL manually. See the online help for additional information. We recommend that you use the AM to EGL migration tool to migrate AM or AMPlus to set up EGL instead of setting it up manually. See the *Infor XA Accounting Management to Enterprise Financials Migration Guide*.

If you use IFM, we recommend that you use the migration tools provided with the EGL installation. These tools migrate your data from IFM to EGL and eliminate the manual set up of EGL. See "Setting up IFM migration to EGL " on page 29.

After you complete the migration or manual set up, perform all maintenance of EGL objects; such as financial calendars, charts of accounts, accounts, ledgers, and books in EGL.

Account segments

Use Natural Account Segments and Non-Natural Account Segments to define account segments and account segment values. Account segments are user-defined categories used to track information within a chart of accounts. Examples of segments include: Account, Warehouse, Project, Region, and Profit Center.

After you create the account segment, add the segment values. Account segment values are codes that you define for a specific segment. For example, within a segment called Region, you can define its segment values as North, South, East, and West. For natural account segments these values are commonly numeric values. For example, you can define values as10001, 10002, 20001, and 20002.

For natural account segment values, you can define the summarization rules and other attributes.

If a subsystem transaction generates in an EGL journal entry with multiple lines for the same GL account, the summarization option controls whether those lines are summarized into a single line for that GL account. The option also controls whether the original lines are kept as details.

This table shows the summarization options that are available if the segment is defined as a natural account:

Selection	Description
None	Journal lines are not summarized (detail lines are kept).
Summary Only	Only the summary journal line is kept. Detail journal lines are discarded.
Summary with Detail	Both the summary journal line and the original detail lines are kept.

Chart of accounts

Use these guidelines to define a chart of accounts:

• Define a sequence of up to 14 unique segments for a single chart of accounts.

• Each segment can be up to 16 characters long.

• The natural account segment in a chart of accounts determines an account's type. For example, an asset. There must be only one natural account segment for each chart of accounts.

• The delimiter defined for a chart of accounts cannot be used as a character within any segment values associated with this chart of accounts. For example, if you define a period (.) as the delimiter for a chart of accounts, no segment values within this chart of accounts can contain a period.

Financial calendars

A financial calendar is a user-defined calendar that contains up to 998 user-defined accounting periods, including up to one audit period. For example, you can define a financial calendar for a fiscal year, a quarterly report, a five-year forecast, or a capital project. Periods 0 and 999 are reserved for the Create Opening Balance task. This process moves closing balances from the end of the year into opening balances at the beginning of the following year. Perform this task in the Ledger Books object.

After you create a financial calendar, you can use the financial calendar with a ledger. The financial calendar you choose applies to all books created for that ledger. However, individual books are opened for a specific year.

Review these considerations for a financial calendar:

• EGL requires the use of an opening balance period to store the beginning balances for all balance sheet accounts in the Create Opening Balances process. The opening balance period is 0 and is created automatically.

• EGL requires the use of a closing balance period to store the closing balances for all balance sheet accounts in the Create Opening Balances process. The closing balance period is 999 and is created automatically. You can have multiple years or multiple budgets (or both multiple years and multiple budgets) open simultaneously.

• EGL provides automatic period creation. EGL generates the individual periods for a financial calendar that uses a Twelve Month Period calendar based on a user-defined Start date. You can override the EGL-generated To dates for each period and EGL will automatically update the From dates. EGL adjusts generated periods for leap years.

• For a calendar that does not start at the beginning of the month or is not 12 periods, the application will create the number of periods indicated using a From date equal to the Start date

and a To date of 12/31/2999. You must revise the To date for each period to get the correct From and To dates for each period. Select all of the periods and use the Quick change icon.

Ledgers and ledger books

Ledgers represent the organizational entity in EGL. A ledger can be a legal entity; such as a corporation, a capital projects ledger, or an operating ledger for a business unit or division. Select the financial calendar and chart of accounts to define a ledger and then assign books to that ledger.

You can use Ledger Books to maintain several types of information within a ledger. Each book inherits the ledger's financial calendar and chart of accounts. The book includes additional information such as period close overrides, book currency, journal numbering options, and book close status. Examples of books include: Actual Dollars, Budget Dollars, Actual Euros, and Statistics.

ATP uses the transaction posting date to retrieve the associated rate from the Exchange Rates object. If you select the Override exchange rate attribute, the system uses the exchange rate entered as part of the ERP transaction when the system calculates book amounts and posts journals to the book. This process occurs when the book currency is equal to the transaction company's currency or financial division currency.

You can use the journal source to group like journal entries created for a book.

Financial consolidations

Use the Financial Consolidations object to create and maintain consolidations map sets used during the consolidation process. A map set is a group of segments and segment values in a source ledger that are mapped to segments and segment values in a target ledger.

A map set includes these combinations:

- One-to-one maps. For example, source segment value 1010 could be mapped to target segment value 2020.
- Many-to-one or many-to-many maps using wildcard. In a many-to-one example, you can map segment values 1010 and 1020 to a target segment value of 2020 by entering 10* as the source value and 2020 as the target value. In a many-to-many example, you can map all segment values beginning with two to the same segment values in the target by entering 2* as the source value and * as the target value.

You can map at the chart of accounts level or at the ledger level. If you map at the chart of accounts level, that is you do not select a source and target ledger, then you can use the map for all ledgers with the same chart of accounts. A map defined at the ledger level for the same chart of accounts can override the default chart of accounts map during processing.

You can maintain consolidation segment mappings. After you have selected a financial consolidation, you can add ranges of consolidation account segments or change the target source value.

This object is optional and does not require set up.

Financial processes

Use the Financial Processes object to define and maintain processes. A process is a unique set of instructions that defines a process's execution parameters, process type, and output event. These process types are included:

- Consolidate
- Translate
- Allocation event

Consolidate

Use the Consolidate process types to combine source or account balances into a target ledger/book. This process creates journal lines in the target ledger or book. You can also consolidate financial structures as the basis for consolidations.

Translate

Use the Translate process types to define the translation financial process. A translate process converts the currency of a source ledger and book into the currency of a target ledger and book. The translate process includes these attributes:

- Chart of accounts
- Ledgers and books
- Segments and segment values
- Models
- Events with event origin of translation
- Period end and average rate types
- Gain loss and rounding accounts in target ledger

Allocation event

Use the Allocation event process types to pick a financial event to distribute actual or budgeted balances.

This object is optional and does not require set up.

Financial process lists

Use the Financial Processes List object to create and maintain process sequences. Multiple processes can be executed in a specific order. After you have selected a financial process, you can add more processes and specify the order of the process.

You can maintain financial process list lines. A financial process list line represents a step in the process sequence. You can add or maintain a financial process list line to the financial process list.

Financial structures

Financial structures are used optionally by the Financial processes. The Financial structure's purpose is to filter accounts to be processed.

You can use the Financial structures object to maintain linked and component financial structures. A linked structure connects different types of structures to a chart of accounts. Linked structures can have parent structures with multiple child structures.

Financial structure sequences

The Financial Structure Sequences object shows the relationship between the parent financial structure and the child structures for linked financial structures. You can link multiple financial structures to a parent financial structure. A parent and child structure relationship is called a financial structure tree.

Financial structure sequence components

A component structure contains accounts, account segments, or other components. When you select a component structure, you can maintain financial structure sequence components.

Financial macros

Financial macros are attribute references defined to retrieve ERP details that determine the account segments or other information that are used to create journal entries. Use financial macros in financial models to define any part of a model. For example, you can define an account segment, the amount that posts to an account balance, a reference, or an analysis attribute. The ATP posting engine resolves the macros when it creates journal entries from the financial models.

This object does not require set up. EGL includes predefined macros to use with XA. You can configure additional macros for a specific business situation. See the *Configurable Macro User Guide*.

Financial macro aliases

An alias macro is used to substitute an alternative value into the EGL journal entry, based on a macro value retrieved from the ERP. For example, if the unit value is "01DIV" on the ERP transaction, you can use an alias macro to set the corresponding EGL account segment value to "01" instead of "01DIV". An alias macro can also be used to specify the value of multiple segment values in the EGL journal entry.

An alias can represent any number of contiguous segments in a chart of accounts. Aliases cannot contain wild card characters (? and *), equal signs (=) or quotation marks (" "). Aliases are resolved into segment values during Events Processing.

If account validation encounters an alias, account validation will resolve that alias. For example, if Segment 1 contains Alias 1 that defines three segments, account validation will resolve Alias 1 for Segments 1, 2, and 3. An error message will be returned if you specify overlapping aliases.

Financial models

You can use the Financial Models object to create and maintain journal models. Journal models are the basis of all journal entry activity in EGL. A model is a template used to create a journal entry based on characteristics of the ERP subsystem transaction. An event class rule identifies the model to be used to create journal entries during event processing.

Models correspond to a specific chart of accounts and journal source. Models contain one or more model lines that contain accounts, an amount, statistical values, reference information, and other information.

The Model Lines card contains ATP attributes and several attributes that you can only use when the model is for a subsystem event.

Financial event classes

Use the Financial Event Classes object to define the business transactions with financial impact that should be recorded in the general ledger. Financial event classes can be defined to post to any combination of Ledger and Books.

Financial event classes consist of one or more event class rules. Each event class rule identifies a ledger, book, and model.

Financial event classes contain one or more models or allocations that define the accounting for that particular transaction. Each model creates a journal entry during events processing. Within an event, a model is assigned to a specific ledger and book. Therefore, an event can post the same accounting entry to multiple ledgers and books simultaneously by assigning a model to a specific ledger and book. Events then post to all or none of the models. The update of all or none of the affected ledgers and books retains the integrity of the transaction. EGL does not support posting multiple models to the same Ledger and Book.

Subsystems

Subsystem events determine which financial event class is used to create journal entries. EGL includes these predefined subsystem processes to classify subsystem transactions in XA:

- XA AM Accounts Payable (AMPlus)
- XA AM Accounts Receivable (AMPlus)
- XA Customer Service (CSM)
- XA Finance (IFM)
- XA Materials (MM)
- XA Production (OBPM)
- XA Production (RBPM)

In the Subsystems object, create Subsystem Event Rules to link the subsystem processes with user-defined event classes. You can specify the journal process. For example, you can specify to post journal entries when they are created or to defer posting. Reason codes are used by the subsystem to identify the financial event class associated with a financial model.

External GL transactions

The External GL Transactions object consists of a required header and optional lines. You can use the External GL Transactions object to load GL transaction data from external applications into EGL. You can enter the data into the External GL Transactions object through System-Link, Power-Link or Net-Link.

After the data has been loaded, you can run the Process Transactions host job to create corresponding journal entries in EGL. If the journal entries cannot be created, the transaction is marked "Error" and errors are listed on the bottom of the detail card. If you selected the Allow Journals in Error parameter for a financial event class, the journal entry is created if possible and the external GL transaction is marked as "Processed."

To process external GL transactions in EGL, you must set up one or more:

• Models with subsystem origin = Batch Transactions, using macros from the External GL Transactions object

• Event classes with subsystem origin = Batch Transactions, using these models

• Subsystem event rules in the Batch Transactions subsystem, using these event classes

When you run the Load Enterprise GL Balances host job in the XA Ledger object, the application uses External GL Transactions to load the GL account balances from XA into EGL. For more information, see "Load Enterprise GL Balances" on page 36.

For an example of how to configure EGL to process external GL transactions, review these objects that are used by the XA to EGL migration process:

• **Subsystems:** Subsystem event rules in the Batch Transactions subsystem

• **Financial Event Classes:** Event classes with subsystem origin = Batch Transactions

• **Financial Models:** Model LOADBAL

EGL journal upload

EGL users who maintain journal entries in a Microsoft Excel spreadsheet can use the Journal Upload installation program to upload journal entries to EGL. The Journal Upload installation program adds an Add-ins tab to Microsoft Excel. This tab includes the ability to connect to the server that has EGL installed and to open a spreadsheet template for manual journal entry. When the spreadsheet is finished, the Add-ins tab is then used to upload the spreadsheet.

The Journal Upload requires this software:

• EGL 1.1

• Microsoft Excel 2010 or later

For more information, see the *Infor Enterprise General Ledger for System i Journal Upload Installation and Configuration Guide* in Xtreme under System i Common Components.

EGL Journal Upload Installation

To install the EGL Journal Upload program, you must first download the EGL Journal Add-In Installer. This download adds a new link to the Power-Link Installation page that you can use to install the EGL Journal Upload Add-In for Microsoft Excel.

Installing EGL Journal Add-In Installer

To install the EGL Journal Add-In installer to the host system:

1   Download and unzip the installer from the Windows executable (EXE) associated with Infor PTF SH15970 to C:\temp on your local workstation.

Caution: You must use a workstation connected directly to the same local network as your System i. Do not perform the install over a dial-up, broadband, or Wide Area Network (WAN) connection.

2   Execute these commands from System i command line to end the global environment:

ADDLIBLE AMCESLIB

ENDGBLSRV REQUEST(*BOTH)

3   From Windows Explorer, launch the installer: c:\temp\IDF_EGLiAddIn.exe

4   Follow the instructions in the install dialog boxes. In the Host Machine Information dialog box, you must provide information to configure the IFS correctly. Specify the name of your host machine, then specify the user ID and password for an XA user whose user profile has *SECADM, *ALLOBJ and *JOBCTL authority.

5   Click **Next** when you have provided the required information. At this point, the credentials of the user ID you entered is checked to ensure the user is authorized to install the EGL add-in. You can follow the progress of the install in the Transfer IFS dialog box.

6   Execute these commends from System i command line to start the global IDF environment:

ADDLIBLE AMCESLIB

STRGBLSRV

7   After the global environment is started, verify that the new EGL Journal Upload link is available on the Power-Link Installation page. You will use this link to install the EGL Journal Upload add-in to your PC. To access this page, use the web address below with your own values for system and NetLinkport:

http://system:NetLinkport/Installs/ClientInstall/Install.html

The system is the server where IDF is installed and NetLinkport is the Net-Link port, typically 36001.

Installing Excel Add-In

To install the Excel Add-In on your workstation:

1   Navigate to the Power-Link Installation page.

http://system:NetLinkport/Installs/ClientInstall/Install.html

The system is the server where IDF is installed and NetLinkport is the Net-Link port, typically 36001.

2   Click the link provided to install the EGL Journal Upload Add-In.

Power-Link Installation

INFOR

The client software for Infor ERP XA **Power-Link** Release 9 runs on Windows, Mac OS X, and Linux operating systems and requires 512 MB of available physical memory. Download the installation software from these links.

Operating System	Power-Link Installation
XA Client for Windows	Download
XA Client for Mac OS X	Download
XA Client for Linux	Download
Other platforms	Download

The optional Microsoft Outlook integration for CRMi (Microsoft Windows only) can be downloaded from these links.

Outlook version	MS Outlook integration for CRMi Installation
MS Outlook 2003	Download
MS Outlook 2007	Download

Enterprise General Ledger for IBM i (EGLi) Journal Upload provides a way to upload financial events to EGLi. EGLi Journal Upload installs to the Add-in ribbon in Microsoft Excel. Click **here** to download/install.

3 Follow the screen prompts to install the Journal Upload on your PC.

4 To verify the installation was successful, open Microsoft Excel and click the **Add-Ins** tab. The EGL Journal Upload Add-Ins ribbon is displayed.

Chapter 4   Setting up IFM migration to EGL

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IFM users can configure EGL with XA data and transfer GL account balances from IFM to EGL using XA migration objects. After you complete the migration or manual setup, perform all maintenance of EGL objects; such as financial calendars, charts of accounts, accounts, ledgers, and books in EGL.

IFM migration overview

To take full advantage of the IFM migration tools, we recommend that you install EGL and complete the migration tasks in a test environment with data from your production environment. After you test transaction processing, you can transfer the EGL configuration to your production environment.

The IFM migration automatically configures EGL to process transactions from XA applications. The migration updates EGL objects with XA data so that you are not required to manually set up EGL objects. The migration transfers general ledger account balances from IFM and provides a process to check balances migrated successfully.

This table shows the EGL objects the migration automatically creates from these IFM objects:

From IFM object	To EGL object
Fiscal Years	Financial Calendars
Financial Division Periods	Financial Calendar Periods
Units	Charts of Accounts
Natures	Chart of Accounts Segments
	Account Segments
	Account Segment Values
Financial Divisions	Ledgers
Ledgers	Ledger Books
	Ledger Book Journal Sources
GL Account Period Balances	Ledger Accounts
	Ledger Book Balance Summary

The migration automatically populates these EGL objects that are used to process XA transactions:

- Subsystem Event Rules
- Reason Codes

- Financial Event Classes
- Financial Event Class Rules
- Financial Models
- Financial Model Lines

When you finish the migration process, EGL is ready to use.

User authorization

To run the migration process, the user must be authorized to these IFM security tasks:

- Maintain Financial Divisions to select fiscal years and periods to migrate
- Host job "Load EGL Configuration" to automatically load the EGL
- Host job "Load Enterprise GL Balances' to automatically load EGL balances
- Host job "Export EGL Configuration" to optionally copy the EGL configuration from a test environment to a production environment export library
- Host job "Import EGL Configuration" to optionally copy EGL configuration from the production environment export library to the EGL application file library
- Action "Change GL Account Period Balance" or "Mass Change GL Account Period Balance" to approve an initial balance discrepancy between a GL account period balance in IFM and the corresponding ledger book balance summary in EGL

IFM migration process

The IFM migration uses the objects on the **Finance > Enterprise General Ledger > General Ledger Migration** card. To successfully migrate the XA data to EGL, you must perform the tasks in this sequence:

Note: The migration processes, Load Configuration and Load Balances, can only be run once for a Financial Division and Ledger. This rule applies to both the test and production environments. If you have run them in the test environment, then they cannot be run again in the test environment. If you used the import and export host jobs to load the production environment and Load Configuration and Load Balances were run in the test environment, then you cannot run them again in the production environment.

Installing and configuring XA and EGL in your test environment

Before EGLi is installed in Link Manager, make sure that the Activate currency and exchange rate objects option in the Enterprise Financials settings in the Application Settings object is set to **Yes**. Note that this option cannot be changed after this option is set to **Yes**.

To prepare your test environment:

1   Install XA R9.2 SH16055PTF 0920079.

2   Install SH52219 - Migration tool.

3   The Activate currency and exchange rate objects option in the Enterprise Financials settings in the Application Settings object must be set to **Yes** before EGL is installed in Link Manager. Note that this option cannot be changed after this option is set to **Yes**.

4   Copy the production data to your test environment.

5   Install EGL. The installation automatically updates the IFM Financial Division Periods and Fiscal Years.

Performing migration process in the test environment

To perform the migration process, you use the objects on the Migration application card in the sequence they are shown. This table shows how to use these objects to migrate data:

Object	Task	Details
XA Financial Division Periods	Check the fiscal periods before migration	Unlike IFM periods, EGL periods must be assigned to a fiscal year. The EGL installation automatically assigns each IFM financial division period to a fiscal year based on period structures or period dates.
		The application assigns one of these values for fiscal year confidence to each record:
		• High: if the fiscal year was manually set by a user
		• Medium: if the fiscal year was automatically set by the application based on an IFM period structure with period structure ID in the format YYYYXXXXXX or YYYY, where YYYY is the fiscal year and XXXXXX is the financial division ID
		• Low: if the fiscal year was automatically set by the application based on the start date and end date of the financial division period
		The fiscal year confidence value identifies the periods that require review before migration. When the fiscal year values are correct, use the Fiscal Years object Change or Quick Change task to set the status of each period to Ready to migrate.
		If you change the period structures in IFM after you install EGL, you can run the Load Periods host job to reset the fiscal year value on the financial division periods. The host job will not change or delete any fiscal year value where Fiscal year confidence is High, or EGL migration status is Ready to migrate, or EGL migration status is Complete. See "IFM migration host jobs" on page 35.
XA Fiscal Years	Specify the year-end retained earnings unit and nature for each fiscal year before migration	EGL requires the year-end retained earnings account to be defined for each fiscal year. Separate fiscal years are defined for each financial division.
		Use the Quick Change task to specify the unit and nature for retained earnings and to set the status of each fiscal year to Ready to migrate.
		To see all the financial periods defined for the fiscal year, select a fiscal year record and display the detail.

Object	Task	Details
XA General Ledgers	Migrate configurations and account balances	The Ledgers object includes host jobs to configure EGL and to load the existing account balances into EGL. • Load EGL Configuration • Load Enterprise GL Balances • Audit EGL Balances See "IFM migration host jobs" on page 35.
XA GL Account Period Balances	Check that balances were migrated successfully	Use the EGL Migration view to see any discrepancies between the XA and EGL balances. Correct or approve the discrepancies as appropriate.
Enterprise GL Migration	Reactivate transaction posting in IFM	The application automatically suspends financial transaction posting in IFM to prevent data corruption as you are migrating the account balances. When the account balances have been migrated successfully, you can use the Activate Financial Transaction Posting menu option to reactivate posting.
Application Settings	Activate the interfaces from XA to EGL	The Application Settings object in XA contains Enterprise General Ledger options that allow you to specify the start date from which each XA application will begin to send transactions to EGL. From the specified date for an application, any type of transaction that XA sends to the General Ledger Interface is also sent automatically to EGL. See "Activating XA Application Interfaces to EGL" on page 17.

Installing XA and EGL in the production environment

After you have validated that the migration was successful in the test environment, you must migrate the configuration from the test environment to the production environment. Before EGLi is installed in Link Manager, make sure that the Activate currency and exchange rate objects option in the Enterprise Financials settings in the Application Settings object is set to **Yes**. Note that this option cannot be changed after this option is set to **Yes**.

1   Install XA R9.2 SH16055PTF 0920079.

2   Install SH52219 - Migration tool.

3   Install EGL. The installation automatically updates the IFM Financial Division Periods and Fiscal Years.

Exporting and importing configuration

Run the Export EGL Configuration host job from the Enterprise GL Migration object in the test environment. This host job copies the configuration into a user created System i library that is used to export files from the test environment. Run the Import EGL Configuration host job to import the configuration using the library specified on the export host job into your production environment. See "IFM migration host jobs" on page 35.

Performing migration process in the production environment

If you used the export and import host jobs in the test environment to load the configuration, then you will not need to perform the migration again for the companies in the test environment.

To perform the migration process, you use the objects on the Migration application card in the sequence they are shown. This table shows how to use these objects to migrate data:

Object	Task	Details
General Ledgers	Migrate account balances	The Ledgers object includes host jobs to configure EGL and to load the existing account balances into EGL. The object includes these host jobs: • Load EGL Configuration. **Note:** Do not run this host job if you have already loaded the EGL configuration using the Import EGL Configuration host job. When using the Import EGL Configuration host job, the periods migrate over; thus, you no longer need to set any periods as ready to migrate. • Load Enterprise GL Balances • Audit EGL Balances See "IFM migration host jobs" on page 35.
GL Account Period Balances	Check that balances were migrated successfully	Use the EGL Migration view to see any discrepancies between the XA and EGL balances. Correct or approve the discrepancies as appropriate.
Application Settings	Specify the start date for each application for which you intend to send GL transactions to EGL	The Application Settings object in XA contains Enterprise General Ledger options that allow you to specify the start date from which each XA application will begin to send transactions to EGL. From the specified date for an application, any type of transaction that XA sends to the General Ledger Interface is also sent automatically to EGL. See "Activating XA Application Interfaces to EGL" on page 17.

Activating Posting

The application automatically suspends financial transaction posting in IFM to prevent data corruption during your migration of the account balances. When the account balances have been migrated successfully, you can use the Activate Financial Transaction Posting menu option to reactivate posting. This menu option is available in the IFM objects: Ledgers, GL Account Period Balances, and Enterprise EGL Migration.

IFM migration host jobs

Host jobs are used in the migration process. See the online help for how to run these host jobs.

Audit Enterprise GL Balances

The audit process runs automatically when you run the Load EGL Balances host job the first time. The audit process compares GL account balances in XA and EGL and records any discrepancies in the GL Account Period Balances object in IFM. You can manually rerun this host job in the XA Ledgers object.

Export EGL Configuration

After you complete the migration tasks in your test environment and have verified the results, you can move the EGL configuration to your production environment. Create a library that will be used to hold export files. Run the Export EGL Configuration host job in Enterprise GL Migration in the test environment specifying the library created for the export files. This host job copies the configuration, and object files, into the export library. You must copy the export files into your production environment. In your production environment, run the Import EGL Configuration host job in Enterprise GL Migration to import the configuration from the exported files specifying the library that contains the export files.

These object files are copied:

- Account Segments
- Account Segment Values
- Charts of Accounts
- Charts of Accounts Segments
- Ledgers
- Ledger Books
- Ledger Book Journal Sources
- Financial Calendars

- Financial Calendar Periods
- Subsystems
- Subsystem Event Rules
- Financial Reason Codes
- Financial Event Classes
- Financial Event Class Rules
- Financial Models
- Financial Model Lines
- Financial Macros
- Financial Macro Aliases
- Financial Division Periods
- Fiscal Years

Import EGL Configuration

After you have exported files using the Export EGL Configuration host job, copy the export files to your production environment. Run the Import EGL Configuration host job in the Enterprise GL Migration object to copy the configuration from the exported files into your production environment. On the library prompt, enter the library name that contains the exported files.

The Import EGL Configuration host job will create or change records in the production environment based on the data in the import files. For each Ledger in the import files, this host job sets the IFM Ledger's EGL Migration status to 1 (Configuration loaded).

Load EGL Configuration

This host job in the XA Ledgers object loads the data from the Financial Division Periods, Fiscal Years, and XA Ledgers into the appropriate EGL objects. When you run this host job you are prompted for a fiscal year. The year that you specify (From fiscal year) and all years forward to the first year set to 'Do not migrate' are loaded into EGL. The prior year is also loaded so that the opening balances for the From fiscal year can be calculated correctly in EGL. The XA opening balances of the From fiscal year is put into the last EGL period of the previous fiscal year.

Do not run this host job if you have already loaded the EGL configuration using the Import EGL Configuration host job.

Load Enterprise GL Balances

Run this host job in the XA Ledgers object to migrate the GL account balances from XA to EGL. This host job creates journal entries in EGL and initializes the opening balances in each EGL ledger

book. The host job uses the External GL Transactions object to load the journal entries. After the journal entries are posted, the host job uses the Create Opening Balances transaction to initialize the opening balances. If any of the external GL transactions could not be processed, or if any of the journal entries could not be posted, the host job will not attempt to create the opening balances. In this scenario, you can correct the errors in EGL and then rerun the Load EGL Balances host job to initialize the opening balances.

To correct errors:

1 On the Transactions tab open External GL Transactions to see the status.

2 If a status for a transaction is Unprocessed, display the detail card to see the error message.

3 Check Financial Journal Entry to see if entries are not posted.

4 Correct the errors and post the journal entries.

Load Periods

The Load Periods host job is run automatically when EGL is installed. If you make changes to period structures in IFM, you can optionally rerun this host job in the Financial Division Periods object to reset the fiscal year value on the financial division periods. The host job will not change any fiscal year value where Fiscal year confidence is High, or EGL migration status is Ready to migrate, or EGL migration status is Complete.

Viewing activity from Host jobs

EGL Migration History records are created to record the status of the migration process. This table shows the host job and activity that generates migration history records in the Enterprise GL Migration object:

Host job	Activity
Load EGL Configuration	Load configuration
Load Enterprise GL Balances	Load balances to External GL Transactions
	Load balances to Journal Entries (Process External GL Transaction to create Journal Entries)
	Load balances to Accounts (Post journal entries and calculate opening balances)
Export EGL Configuration	Replicate configuration

Chapter 5   Setting up AM Plus to EGL migration

5

Accounting Management Plus (AM Plus) users can configure EGL with XA data and transfer general ledger account balances from AM Plus to EGL using XA migration objects. After you complete the migration or manual setup, perform all maintenance of EGL objects; such as financial calendars, charts of accounts, accounts, ledgers, and books in EGL.

AM Plus migration overview

To take full advantage of the AM Plus migration tools, we recommend that you install EGL and complete the migration tasks in a test environment with data from your production environment. After you test transaction processing, you can transfer the EGL configuration to your production environment.

The AM Plus migration tool is used to configure EGL to process transactions from XA applications. You can use the migration tool to update EGL objects with XA data without having to manually set them up. General ledger account balances are transferred during migration from AM Plus to EGL. The migration process provides a way to check that balances migrated successfully.

This table shows the EGL objects the migration automatically creates from these AM Plus objects:

From AM Plus object	To EGL object
Fiscal Years	Financial Calendars
Company Periods	Financial Calendar Periods
Charts of Accounts	Charts of Accounts
	Chart of Accounts Segments
	Account Segments
	Account Segment Values
Company	Ledgers
	Ledger Books
	Ledger Book Journal Sources
Legacy GL Account Period Balances	Ledger Accounts
	Ledger Book Balance Summary

During migration, these EGL objects that are used to process XA transactions are automatically populated:

- Account Segments
- Account Segment Values
- Charts of Accounts
- Charts of Accounts Segments
- Ledgers
- Ledger Books
- Ledger Book Journal Sources
- Financial Calendars
- Financial Calendar Periods
- Subsystems
- Subsystem Event Rules
- Financial Reason Codes
- Financial Event Classes
- Financial Event Class Rules
- Financial Models
- Financial Model Lines
- Financial Macros

When you finish the migration process, EGL is ready to use.

User authorization

To run the migration process, the user must be authorized to these AM Plus security tasks:

- Maintain Fiscal year to select fiscal years and periods to migrate
- Host job "Load Enterprise GL Configuration" to automatically load the EGL
- Host job "Load Enterprise GL Balances' to automatically load EGL balances
- Host job "Export EGL Configuration" to optionally copy the EGL configuration from a test environment to a production environment export library
- Host job "Import EGL Configuration" to optionally copy EGL configuration from the production environment export library to the EGL application file library
- Action "Change Legacy GL Account Period Balances" or "Mass Change Legacy GL Account Period Balances" to approve an initial balance discrepancy between a GL account period balance in AM Plus and the corresponding ledger book balance summary in EGL

AM Plus migration process

The AM Plus migration uses the objects on the **AM Plus > Enterprise General Ledger > General Ledger Migration** card. To successfully migrate the XA data to EGL, you must perform the tasks in this sequence:

Note: The migration processes, Load Configuration and Load Balances, can only be run once for a Company and Ledger. This rule applies to both the test and production environments. If you have run them in the test environment, then they cannot be run again in the test environment. If you used the import and export host jobs to load the production environment and Load Configuration and Load Balances were run in the test environment, then you cannot run them again in the production environment.

Installing and configuring XA and EGL in your test environment

Before you install EGL in Link Manager, the Activate currency and exchange rate objects attribute in the Enterprise Financials settings in the Application settings object must be set to **Yes**. This attribute cannot be changed after it is set to **Yes**.

To prepare your test environment:

1 Install XA R9.2 SH16055 PTF 0920079.

2 Install SH58561 - Migration tool.

3 Copy the production data to your test environment.

4 Install EGL.

Performing migration process in the test environment

To perform the migration process, you use the objects on the General Ledger Migration application card in the sequence they are shown. This table shows how to use these objects to migrate data:

Object	Task	Details
Fiscal Years	Load the fiscal years, specify the retained earnings account and set the migration status to **Ready to migrate** before migration	EGL requires the year-end retained earnings account to be defined for each fiscal year. Separate fiscal years are defined for each company. The Fiscal Years object includes these host jobs: • Calculate GL Account Period Balances • Load Fiscal Years • Update EGL Discrepancy Status See "IFM migration host jobs" on page 44. Use **Quick Change** to specify the retained earnings account and to set the status of each fiscal year to Ready to migrate**.**
Companies	Load the EGL configuration and GL account balances	The Companies object includes host jobs to configure EGL and to load the existing account balances into EGL. • Load EGL Configuration • Ledgers are migrated for each installed XA company. Financial calendars are created for three years, the current year, the previous year, and the year prior to the previous year. • Load Enterprise GL Balances • Audit EGL Balances See "IFM migration host jobs" on page 44. To see all the company periods defined for the fiscal year, select a ledger and display the Company periods.
Legacy GL Account Period Balances	Check that balances were migrated successfully	Use the EGL Migration view to see any discrepancies between the XA and EGL balances. Correct or approve the discrepancies as appropriate.
Enterprise GL Migration	Export EGL Configuration	This host job copies the configuration into a user defined library that is used to later import the configuration to the production environment.
	Import EGL Configuration	This host job imports the configuration from the library used in the export host job into your production environment.

Installing XA and EGL data in the production environment

After you have validated that the migration was successful in the EGL test environment, you must migrate the configuration from the test environment to the production environment.

Before you install EGL in Link Manager, the Activate currency and exchange rate objects attribute in the Enterprise Financials settings in the Application settings object must be set to **Yes**. This attribute cannot be changed after it is set to **Yes**.

1 Install XA R9.2 SH16055 PTF 0920079.

2 Install SH58561 - Migration tool.

3 Install EGL.

Exporting and importing configuration

Run the **Export EGL Configuration** host job from the Enterprise GL Migration object in the test environment. This host job copies the configuration into a user created System i library that is used to export files from the test environment. Run the **Import EGL Configuration** host job to import the configuration using the library specified on the export host job into your production environment. See "AM Plus migration host jobs" on page 44.

Performing migration process in the production environment

If you used the export and import host jobs in the test environment to load the configuration you do not need to perform the migration again for the companies in the test environment.

To perform the migration process, you use the objects on the Migration application card in the sequence they are shown. This table shows how to use these objects to migrate data:

Object	Task	Details
Fiscal Years	Load the fiscal years, specify the retained earnings account before migration	EGL requires the year-end retained earnings account to be defined for each fiscal year. Separate fiscal years are defined for each company. The Fiscal Years object includes these host jobs: • Calculate GL Account Period Balances • Load Fiscal Years • Update EGL Discrepancy Status See "AM Plus migration host jobs" on page 44. Use **Quick Change** to specify the retained earnings account and to set the status of each fiscal year to Ready to migrate**.**

Object	Task	Details
Companies	Migrate account balances	The Companies object includes host jobs to configure EGL and to load the existing account balances into EGL. The object includes these host jobs: • Load Enterprise GL Configuration **Note:** Do not run this host job if you have already loaded the EGL configuration in your test environment before executing the Import Enterprise GL Configuration host job. When using the Import Enterprise GL Configuration host job, periods migrate over; thus, you no longer need to set any periods as ready to migrate. • Load Enterprise GL Balances **Note:** Do not run this host job if you have already loaded balances in your test environment before executing the Import Enterprise GL Configuration host job. You can only load balances once for a company. • Audit Enterprise GL Balances See "AM Plus migration host jobs" on page 44.
Legacy GL Account Period Balances	Check that balances were migrated successfully	Use the EGL Migration view to see any discrepancies between the XA and EGL balances. Correct or approve the discrepancies as appropriate.

AM Plus migration host jobs

Host jobs are used in the migration process. See the online help for how to run these host jobs.

Load Fiscal Years

This host job in the Fiscal Years object is used to load fiscal years and periods for each matching company in the Company Master file and the Fiscal Table file. If a matching company record is not found in the Fiscal Table file, then company 01 period end dates are used to create company periods. When you run this host job, a record is created for the current fiscal year and two previous fiscal years, current fiscal year – 1 and current fiscal year – 2 for each company.

Calculate GL Account Period Balances

This host job in the Fiscal Years object is used to calculate current period year to date balances for the current fiscal year and for the previous fiscal year. When you run this host job, period year to date balances are calculated and added to the Legacy GL Account Period Balances object.

Update EGL Discrepancy Status

The audit process runs automatically when you run the Load EGL Balances host job the first time. The audit process compares GL account balances in XA and EGL and records any discrepancies in the Legacy GL Account Period Balances object in AM Plus. You can manually rerun this host job on the Companies object.

Load Enterprise GL Configuration

This host job in the Companies object loads the data from the company periods, fiscal years, and company ledgers into the appropriate EGL objects. When you run this host job for a company or all companies the current system year (From fiscal year) and previous year's data are loaded. The previous year -1 is also loaded so that the opening balances for the From fiscal year can be calculated correctly in EGL. The opening balances of the From fiscal year is put into the last EGL period of the previous -1 fiscal year.

Do not run this host job if you have already loaded the EGL configuration using the Import EGL Configuration host job.

Load Enterprise GL Balances

Run this host job in the Companies object to migrate the GL account balances from XA to EGL. This host job creates Ledger Balance Summary records in EGL and initializes the opening balances in each EGL ledger book. The host job uses the External GL Transactions object to load the journal entries. After they are posted, the host job uses the Create Opening Balances transaction to initialize the opening balances. If any of the external GL transactions could not be processed, or if any of them could not be posted, the host job will not attempt to create the opening balances. In this scenario, you can correct the errors in EGL and then rerun the Load Enterprise GL Balances host job to initialize the opening balances.

To correct errors:

1   On the **Transactions** tab, open External GL Transactions to see the status.

2   If a status for a transaction is Unprocessed, display the detail card to see the error message.

3   Check Financial Journal Entry to see if entries are not posted.

4   Correct the errors and post the journal entries.

Audit Enterprise GL Balances

The audit process runs automatically when you run the Load Enterprise GL Balances host job. The audit process compares GL account balances in XA and EGL and records any discrepancies in the Legacy GL Account Period Balances object in AM Plus. You can manually rerun this host job in the Companies object.

Viewing activity from Host jobs

Enterprise GL migration history records are created to record the status of the migration process. This table shows the host job and activity that generates migration history records in the Enterprise GL Migration object:

Host job	Activity
Load Enterprise GL Configuration	Load configuration
	Load Account Segments
	Load Chart of Account
	Load Account Values
	Load Ledgers
	Load Financial Calendars
Load Enterprise GL Balances	Load balances to External GL Transactions
	Load balances to Journal Entries (Process External GL Transaction to create Journal Entries)
	Load balances to Accounts (Post journal entries and calculate opening balances)
Export EGL Configuration	Replicate configuration

Chapter 6 Using XA

<div style="text-align: right">6</div>

XA applications send ERP transactions to the General Ledger and to EGL when the General Ledger Interface function in XA is enabled and the EGL interface activation date is today's date or before today's date. These XA applications send GL transactions to the General Ledger and to EGL:

- Accounting Management (AMPlus).

- Customer Service Management (CSM).

- Enterprise Financials (Finance).

- Materials Management (MM).

- Procurement Management (PM). Procurement Management transactions are sent to EGL through the Finance subsystem.

- Production Management (OBPM and RBPM).

Accounting Management

After you configure AMPlus for use with EGL, XA automatically sends payable and receivable GL transactions to EGL.

If a payable journal entry is posted to the XA General Ledger, the transaction header is saved in the Payable GL Transactions object and the transaction details are saved in the Payable GL Transaction Activities object.

If a receivable journal entry is posted to the XA General Ledger, the transaction header is saved in the Receivable GL Transactions object and the transaction details are saved in the Receivable GL Transaction Activities object.

After the GL journal entries are created in EGL, EGL assigns the journal entries to accounts based on characteristics of the transactions. For example, journal entries for payable and receivable transactions are assigned to accounts based on characteristics such as company, vendor or customer, and reason code. The reason code identifies the source of the transaction. The transaction type identifies the GL account to which each GL amount should be posted. The EGL model can also be configured to use accounts assigned in AMPlus.

Macro availability in AMPlus

To see the list of macros available from this subsystem:

1   In EGL, open the Financial Macros object.

2   If you do not already have a subset for viewing the Subsystem origin, see "Creating a subset" on page 73.

3   Select the Subsystem origin subset.

4   Select 64 = XA AM Accounts Receivable or 65 = XA AM Accounts Payable.

5   Click **Continue**.

In addition, you can also use some macros that are shared with other Subsystems. To view these macros, use the Subsystem origin subset and select [blank] = Shared.

These objects have macros that you can use with XA Accounts Payable and Accounts Receivable and other subsystems:

- Customers (AR)
- Vendors (AP)
- Purchase Orders (AP)

Reason codes and accounting entries

AMPlus sends transactions to EGL with a reason code that is used to determine how to process the financial transaction. You use these reason codes to set up subsystem processes in EGL.

Transaction types identify the source of the transaction within a subsystem.

In models for the XA AM, AP, and AR subsystems, there will typically be one model line. The model line has the macros for the account string. Typically, the company macro and account macro. The line also includes:

- Debit macro = Payable/Receivable GL Transaction Activity - Transaction amount - debit, and
- Credit macro = Payable/Receivable GL Transaction Activity - Transaction amount - credit.

This table shows the GL natural account types that apply for each reason code in the XA AM Accounts Receivable and XA AM Accounts Payable Subsystem:

Reason code	Reason code description	Transaction type	Transaction type description
	AP Transaction Types		
AP1	Entered payable invoice	PJAP	Purchase journal, AP
		PJEX	Purchase journal, expense
	Generated purchase order invoice	PJLC	Purchase journal, landed cost
		PJTX	Purchase journal, taxes
AM1	Entered invoice payment from manual check	MPAP	Manual payment, AP
		MPBA	Manual payment, bank charge

Reason code	Reason code description	Transaction type	Transaction type description
	Manual check reversal	MPCA	Manual payment, cash
		MPDI	Manual payment, discount
		MPEX	Manual payment, expense
		MPIN	Manual payment, invoice clearing
AC1	Cash payment	CDAP	Cash disbursement, AP
		CDCA	Cash disbursement, cash
		CDDI	Cash disbursement, discount
		CDIN	Cash disbursement, invoice
		CDTX	Cash disbursement, taxes paid
		PRAP	Payment reversal, AP
		PRBA	Payment reversal, bank charge
		PRCA	Payment reversal, cash
		PRDI	Payment reversal, discount
		PREX	Payment reversal, expense
		PRIN	Payment reversal, invoice clearing
	AR Transaction Types		
AC2	Cash receipt	CRAJ	Cash receipt, adjustment
		CRAR	Cash receipt, AR
		CRBA	Cash receipt, bank charge
		CRCA	Cash receipt, cash
		CRDI	Cash receipt, discount
		CRMR	Cash receipt, miscellaneous
		CRWO	Cash receipt, write off
		SCAR	Service charge, AR
		SCSC	Service charge, charge

Currency processing for payable and receivable GL transactions

The Currencies, Exchange Rate Sets, and Exchange Rates objects are required for use with AMPlus and EGL. To enable these objects in the XA environment, the Activate currency and exchange rate objects option in the Enterprise Financials settings in the Application Settings object must be set to **Yes** before EGL is installed in Link Manager. Note that this option cannot be changed after this option is set to Yes. All maintenance of currencies and exchange rates must then occur in the Currencies object and the Exchange Rates object.

Note: In multiple currency processing, EGL amounts on transaction macros use trading currency.

Before you activate the Currencies and Exchange Rate Sets objects, you must specify exchange rates in the Exchange Rate Sets object. The exchange rates from the CAS/AM Plus file (EXRATE) are no longer used and they are not automatically copied into the Exchange Rate Sets object. Any exchange rate sets you intend to use with EGL must be six characters or less.

A financial transaction in AMPlus can have an override exchange rate and an override exchange rate date that were entered for the journal entry. EGL can process a payable or receivable GL transaction with override exchange rate information when the ledger book in EGL can override an exchange rate and either of these conditions applies:

- The currency in the EGL ledger book is the same as the local currency for the XA environment and the financial journal entry has an override exchange rate or an override exchange rate.
- The currency in the EGL ledger book is different from the local currency in the XA environment and the financial journal entry has an override exchange rate date.

Otherwise, EGL ignores override exchange rates in the payable or receivable GL transaction and uses the exchange rate in effect for the transaction currency on the transaction posting date.

Posting date

In XA, AMPlus users indicate if they use 12 month accounting or 13 period accounting.

When 12 month accounting is used:

Users specify a journal entry date when they create GL transactions. This date determines the posting period. When AMPlus is interfacing with EGL and 12 month accounting is used, the journal entry date is passed to EGL. EGL will use the journal entry date as the posting date when a journal is posted for the transactions.

When 13 period accounting is used:

Users specify a two digit period when they create GL transactions. The period determines the posting date in AMPlus. When 13 period accounting is used in AMPlus and the EGL interface is active, a date field will be available that can be used to add a posting override date in EGL. This is an optional field. When a date is not entered, EGL will use the transaction date on the transaction as the posting date when a journal is posted. The EGL journal entry override date field will also be displayed when Materials and Production are interfacing with EGL when either AMPlus or Finance (IFM) is installed.

Customer Service Management

When you create a customer invoice, CSM generates records in the Sales GL Transactions object. When the interface with EGL is active, XA sends sales GL transactions to EGL.

When IFM/Finance is installed, the sales GL transactions are sent to EGL when the customer invoice is generated. If the sales GL transactions cannot be processed in EGL (for example, if the posting period is not open and the event class does not allow journals in error), then the sales GL transactions can be resent to EGL later using the Generate Sales GL Journal Entries host job. When IFM/Finance is not installed, the sales GL transactions are not sent to EGL when the customer invoice is generated. The sales GL transactions are sent only from the Generate Sales GL Journal Entries host job.

CSM sends transactions to EGL with a reason code to identify the source of the transaction. You can use these reason codes to set up models in EGL for posting each type of sales transaction that XA sends.

A single customer invoice can have multiple sales GL transactions. For example, a customer invoice can contain several transactions for cost of sales and several transactions for sales revenue. From these transactions; the item amounts might go to one GL account, tax amounts to another GL account, and service amounts to a third GL account based on the type assigned to each transaction.

Each GL amount has a transaction type that you can use in the EGL model to identify the GL account to which the amount should be posted. Revenue transaction types start with "R". Cost transaction types start with "C".

For sales transactions, General Ledger Interface supports four character transaction types. EGL supports additional six character transaction types, which provide the means to specify additional accounts for sales transactions. The six character transaction types in EGL correspond to the four character transaction type in the General Ledger Interface plus the two character GL transaction type detail in EGL. For example, the transaction type RILI applies to revenue from invoices of inventory items. The transaction type RILI06 applies to revenue from invoices of inventory items that are kit components.

When a four-character transaction type is active in the General Ledger Interface function, the corresponding six-character transaction types are automatically active for use with EGL. For example, if the transaction type RILI is active in the General Ledger Interface for Customer Order Management (COM), the transaction types RILI06, RILIDI, RILI02, and RILI03 are also automatically active and available for processing transactions in EGL.

Currency processing for sales GL transactions

A customer invoice in CSM can have an override exchange rate and an override exchange rate date that were entered in the customer order. EGL can process a sales GL transaction with override exchange rate information when the ledger book in EGL allows an override exchange rate and one of these conditions applies:

- The currency in the EGL ledger book is the same as the local currency for the XA environment and the customer invoice has an override exchange rate or an override exchange rate date.

- The currency in the EGL ledger book is different from the local currency in the XA environment and the customer invoice has an override exchange rate date.

Otherwise, EGL uses the exchange rate in effect for the transaction currency on the invoice posting date.

Materials Management

When the General Ledger Interface for MM is active, XA creates a record in the Inventory GL Transactions object for any transaction set up for the GL interface that affects inventory balances or inventory values created in these applications:

- Inventory Management (IM)
- Maintenance Management System (MMS)
- Repetitive Production Management (REP)
- Production Monitoring and Control (PM&C)
- Manufacturing Performance Analysis (MPA)
- Production Control and Costing (PC&C)
- CSM/ Customer Order Management (COM)
- Finance /International Financial Management (IFM)

When these applications create inventory transactions, the data flows to the Inventory Management History (IMHIST) file. Inventory GL Transactions is installed only when MM is installed.

When inventory transactions are created in XA and XA is configured for use with EGL, inventory GL transactions can be used to create inventory GL journal entries in EGL. To create inventory GL journal entries in EGL, you must run the Generate Inventory GL Journal Entries host job from the File menu in the Inventory GL Transactions object. EGL accounts are assigned by EGL using rules based on the warehouse, transaction type, item, and order information. When you migrate the XA configuration to EGL, the application automatically creates EGL rules that will use the account numbers assigned by the XA GL interface. You can create your own rules based on any characteristics of the inventory GL transaction.

Macro availability in MM

To see the list of macros available from this subsystem:

1   In EGL, open the Financial Macros object.

2   If you do not already have a subset for viewing the Subsystem origin, see "Creating a subset" on page 73.

3   Select the Subsystem origin subset.

4 Select 60 = XA Materials.

5 Click **Continue**.

In addition, you can also use some macros that are shared with other Subsystems. To view these macros, use the Subsystem origin subset and select [blank] = Shared.

These objects have macros that you can use with XA Materials Management and other subsystems:

- Item Warehouses
- Items
- Manufacturing Orders
- Schedules
- Purchase Orders
- Purchase Order Items
- Purchase Order Item Releases
- Vendors
- Warehouses

Reason codes and accounting entries

EGL uses the reason codes to determine how to process a material transaction. In the General Ledger Interface, you specify the transaction types that correspond to the reason codes for the material transactions you intend to send to EGL.

In models for the XA Materials subsystem, you will typically have at least two model lines.

The first model line will be for the charge GL account, with

- Debit macro = Inventory GL Transaction - Charge amount - debit, and
- Credit macro = Inventory GL Transaction - Charge amount - credit.

The second model line will be for the offset GL account, with

- Debit macro = Inventory GL Transaction - Offset - debit, and
- Credit macro = Inventory GL Transaction - Offset - credit.

For reason codes that have a variance GL account, the model will have a third line, with

- Debit macro = Inventory GL Transaction - Variance - debit, and
- Credit macro = Inventory GL Transaction - Variance - credit.

This table shows the GL natural account types that apply for each reason code in the XA Materials Subsystem:

Reason code	Description	Charge account	Offset account	Variance account
	Issue Transaction Types			

Reason code	Description	Charge account	Offset account	Variance account
IP	Planned manufacture issue	Inventory	Work in process	None
IS	Miscellaneous issue	Inventory	Depends on issue	None
IU	Unplanned component issue	Inventory	Work in process	None
IW	Interwarehouse issue	Inventory	Inventory in transit	None
IX	Uncontrolled floor stock	Work in process	Inventory in transit	None
NS	Issue shipped item	Inventory	Cost of transferred items	None
SA	Sales shipment	Inventory	Cost of sales	None
SC	Manufacturing component scrap	Work in process	Scrap expense	None
SM	Manufacturing order scrap	Work in process	Scrap expense	None
SP	Purchase order scrap	Inventory cost clearing	Scrap expense	None
SQ	QC status change	Inventory	Inventory cost clearing	Purchase price variance or inventory cost clearing
SS	Scrap from stock	Inventory	Scrap expense	None
VR	Purchase return to vendor	Inventory	Debit memos in process	Purchase price variance or inventory cost clearing
	Adjustment transaction types			
CR	Average cost replacement	Inventory	Always zero	Cost variance
CS	Standard cost replacement	Inventory	Always zero	Cost variance
CU	Standard unit cost default replacement	Inventory	Always zero	Cost variance
IA	Inventory adjustment	Inventory	Always zero	Quality variance

Reason code	Description	Charge account	Offset account	Variance account
PH	Physical inventory update	Inventory	Always zero	Quality variance
	Receipt transaction types			
CA	Cost adjustment	Inventory cost clearing	Accounts payable clearing	Purchase price variance
RC	Miscellaneous receipt	Inventory	Depends on receipt	None
RM MQ	Production receipt	Inventory	Work in process	Manufacturing cost variance
RP PQ	Purchase order Receipt to stock	Inventory	Inventory cost clearing	Purchase price variance or inventory cost clearing
RS	Component return to stock	Inventory	Work in process	Manufacturing cost variance
RW	Interwarehouse receipt	Inventory	Interwarehouse in transit	Cost variance

Currency processing for inventory GL transactions

All amounts in the inventory transactions sent to EGL are in the local currency for the XA environment. EGL will perform currency conversions for inventory transactions when the EGL Ledger Book currency does not match the XA local currency.

Production Management

When the General Ledger interface for OBPM and RBPM is active, XA creates records in the Production GL Transactions object. For manufacturing order cost and cost variance, records are included for order-based production in the Order Based Production GL Transactions workspace. For labor, machine, and overhead costs to manufacturing schedules, records are included for rate-based production in the Rate-Based Production GL Transactions workspace. Production GL Transactions is installed only when OBPM or RBPM is installed.

When production GL transactions are created in XA and XA is configured for use with EGL, production transactions can be sent to EGL. To create production GL journal entries in EGL, you

must run the Generate Production GL Journal Entries host job from the File menu in the Order Based/Rate Based Production GL Transactions object.

EGL accounts are assigned by EGL from user-defined rules based on the warehouse, transaction type, item, and order information. You define the transaction type for general ledger transmission when you set up the General Ledger interface for order based and rate based production transactions.

Macro availability in OBPM and RBPM

To see the list of macros available from this subsystem:

1   In EGL, open the Financial Macros object.

2   If you do not already have a subset for viewing the Subsystem origin, see "Creating a subset" on page 73.

3   Select the Subsystem origin subset.

4   Select 61 = XA Production.

5   Click **Continue**.

In addition, you can also use some macros that are shared with other Subsystems. To view these macros, use the Subsystem origin subset and select [blank] = Shared.

These objects have macros that you can use with XA Production and other subsystems:

- Item Warehouses
- Items
- Manufacturing Orders
- Schedules
- Warehouses

Reason codes and accounting entries

EGL uses the reason codes to determine how to process a production transaction. In the General Ledger Interface, you specify the transaction types that correspond to the reason codes for the production transactions you want to send to EGL.

In models for the XA Production subsystem, you will typically have two model lines.

The first model line will be for the charge GL account, with

- Debit macro = Production GL Transaction – Charge amount – debit, and
- Credit macro = Production GL Transaction – Charge amount – credit.

The second model line will be for the offset GL account, with

- Debit macro = Production GL Transaction - Offset - debit, and

- Credit macro = Production GL Transaction - Offset - credit.

This table shows the GL natural account types that apply for each reason code in the XA OBPM Subsystem:

Reason code	Description	Charge account	Offset account
	Setup labor		
LSPA	Payroll	WIP	Undistributed PR
LSSA	Shop activity	WIP	Undistributed PR
	Run labor		
LRPA	Payroll	WIP	Undistributed PR
LRSA	Shop activity	WIP	Undistributed PR
LRAP	Outside operations	WIP	Undistributed outside operations
	Machine cost		
LMAC	Machine cost	WIP	Machine cost applied
	Overhead cost		
LOHD	Overhead cost	WIP	Overhead applied
	Miscellaneous Charge		
MCAP	Accounts payable	WIP	AP clearing
MCSA	Shop activity	WIP	Undistributed PR Miscellaneous charge applied
	Order closeout variances		
VMUS	Material usage	Variance expense	WIP
VMCS	Material cost	Variance expense	WIP
VSUS	Labor setup efficiency	Variance expense	WIP
VSCO	Labor setup cost	Variance expense	WIP
VRUS	Labor run efficiency	Variance expense	WIP
VRCO	Labor run cost	Variance expense	WIP
VOUS	Overhead efficiency	Variance expense	WIP
VOCO	Overhead cost	Variance expense	WIP
VEAC	Miscellaneous charge	Variance expense	WIP
VCLO	Order closeout	Variance expense	WIP

Reason code	Description	Charge account	Offset account
SCRP	Scrap cost	Scrap expense	WIP

This table shows the GL natural account types that apply for each reason code in the XA RBPM Subsystem:

Reason code	Description	Charge account	Offset account
RSET	Setup labor	Work in process	Payroll cost applied
RRUN	Run labor	Work in process	Payroll cost applied
RMAC	Machine cost	Work in process	Machine cost applied
ROHD	Overhead cost	Work in process	Overhead applied
RVAR	Schedule variance	Variance expense	Work in process

Currency processing for production GL transactions

All amounts in the production GL transactions sent to EGL are in the local currency for the XA environment. EGL will perform currency conversions for production transactions when the EGL Ledger Book currency does not match the XA local currency.

Finance

When IFM/Enterprise Financials is interfacing with EGL, XA sends financial transactions to EGL when:

- A financial transaction is posted. This action sends a financial transaction to EGL unless the transaction originated from one of these applications that send GL transactions directly to EGL: CSM, MM, OBPM, or RBPM.

- New financial transaction allocations are posted for a financial transaction that was previously posted. For example, when a posted cash receipt is allocated later to clear an outstanding balance on an invoice, EGL processes only the new financial transaction allocations and the new financial transaction GL amounts.

- New financial transaction cash is posted for a financial transaction that was previously posted. For example, when the cash amount is corrected on a previously posted cash receipt, EGL processes only the new financial transaction cash and the new financial transaction GL amounts.

- New financial transaction GL amounts are posted for a transaction that was previously posted. For example, when a prepayment GL line is posted, EGL processes only the new financial transaction GL amounts.

IFM/Finance sends transactions to EGL with a reason code to identify the source of the transaction. You can use these reason codes to set up rules in EGL for posting each type of financial transaction that XA sends. For example, you can set up Subsystem Event Rules in EGL to define how to process receivable transactions that have a reason code of R01.

Financial transactions sent to EGL

Unlike the financial transactions sent from CSM, MM, OBPM, and RBPM, IFM/Enterprise Financials does not send financial transactions to EGL based on the transaction types specified in the General Ledger Interface. IFM/Enterprise Financials transactions are sent automatically to EGL when the Finance interface for EGL is activated in the Application Settings object. However, some general rules apply to the types of transactions IFM/Enterprise Financials can send to EGL.

IFM/Enterprise Financials can send financial transactions related to purchase order invoices and credit/debit memos such as:

- AP invoice or credit memos you create manually.
- AP invoices generated automatically for a purchase order or inventory transaction.
- AP credit memos from purchase order debit memos.
- Installment interest accruals for an AP ledger.

IFM/Enterprise Financials does not send these types of financial transactions to EGL because these transactions can be generated in EGL:

- Generated opening balances.
- Generated balance sheet gain/loss.
- Generated revaluation of foreign currency ledger balances.
- Transactions in opening balance periods.
- Transactions in closing balance periods.

In addition, IFM/Enterprise Financials does not send these financial transactions to EGL:

- Financial transactions that are generated accruals/reverse-accruals for unposted invoices.
- Financial transaction allocations for invoice settlement gain/loss because those gain/loss values can be calculated in EGL.

Currency processing for financial GL transactions

The financial transactions that IFM/Enterprise Financials sends to EGL can contain an override exchange rate and override exchange rate date (document date). If the EGL ledger book allows an override exchange rate, EGL uses these rules to determine which exchange rate to use:

- If the EGL ledger book allows overrides, then EGL uses the exchange rate or the exchange rate date from XA financial transaction. EGL determines which override to use by comparing the EGL book currency and the XA financial division currency.

- • If the EGL book currency matches the XA financial division currency, the exchange rate from the transaction is used.
- • If EGL book currency does not match XA financial division currency, EGL uses the exchange rate date to look up the rate in the exchange rate set used by the EGL ledger book.
- • If the EGL ledger book does not allow overrides, EGL uses the exchange rate that is current in the exchange rate set for the ledger book on the posting date.

Multiple posting periods for financial GL transactions

If a single transaction in IFM/Enterprise Financials has lines in multiple different posting periods, EGL will create separate journal entries in EGL for each posting period.

Journal Grouping

EGL performs journal grouping, a process that groups like transactions together, if you select this option during event class set up at the event class rule level. If the current transaction qualifies for grouping, the current transaction acquires the journal number of a previous like transaction within the same session. Journal entries qualify as like transactions if they have the same financial event class, ledger, ledger book, journal posting date, ledger book journal source, transaction currency, and exchange rate.

For XA transactions, EGL handles journal grouping differently for each source application.

Journal Grouping for AP and AR transactions

Journal grouping occurs only for AP and AR transaction lines within a single posting period for a single XA financial transaction. Grouping does not occur across XA financial transactions.

Journal Grouping for sales transactions

For sales transactions generated in CSM, EGL performs journal grouping only for the revenue lines of a single XA invoice or credit memo. Grouping does not occur across invoices or credit memos. Grouping does not occur across both revenue lines and cost lines.

Journal Grouping for financial transactions

For financial transactions generated in Enterprise Financials, EGL performs journal grouping in these situations:

- Journal grouping occurs only for transaction lines within a single posting period for a single XA financial transaction. Grouping does not occur across XA financial transactions or across posting periods, even if a single XA financial transaction has multiple posting periods.

- When new financial transaction allocation lines are posted on a previously-posted financial transaction, grouping only occurs for the newly posted transaction lines within a single posting period for a single XA financial transaction. Grouping does not occur across XA financial transactions or across posting periods, even if a single XA financial transaction has multiple posting periods. The grouping does not include lines that were previously posted.

- When new financial transaction cash lines are posted on a previously-posted financial transaction, grouping only occurs for the newly posted transaction lines within a single posting period for a single XA financial transaction. Grouping does not occur across XA financial transactions or across posting periods, even if a single XA financial transaction has multiple posting periods. The grouping does not include lines that were previously posted.

- When new financial transaction GL lines are posted on a previously-posted financial transaction, grouping only occurs for the newly posted transaction lines within a single posting period for a single XA financial transaction. Grouping does not occur across XA financial transactions or across posting periods, even if a single XA financial transaction has multiple posting periods. The grouping does not include lines that were previously posted.

Manual Invoice Payments

The Manual Invoice Payments object in AMPlus contains information about manual payments and the invoices that have been applied against those payments. You cannot maintain manual payments in this object. You enter manual payments in IDF level 1 and then match the payments to invoices that are already open in the Open Payables file in IDF Level 1. Once manual payments are entered they are equivalent to system-generated payments.

Handling errors

When an XA application sends a transaction to EGL, EGL processes the transaction to create one or more journal entries. If EGL cannot create journal entries for a transaction, error messages are recorded in XA. You can find EGL errors in these locations:

- **XA GL transactions:** Use the Error transactions subset in the objects: Sales GL Transactions, Inventory GL Transactions, and Production GL Transactions. To display the error messages for a transaction, use the Error Messages menu option or view from the details card.

- **XA financial transactions:** Use a subset to select records where EGL error count is greater than zero. To display the error messages for a financial transaction, view the financial transaction overview.

- **AMPlus GL transactions:** Use the Error transactions subset in the Payable GL Transactions and Receivable Transactions objects. To display the error messages for a transaction, view the General card in the Payable GL Transaction Activities object or Receivable GL Transaction Activities object.

Correct the EGL errors in the EGL configuration of account segments, charts of accounts, financial calendars, ledgers, macros, models, event classes, and subsystems. Then, resend the GL transactions that have EGL error messages using the Generate GL Journal Entries host jobs.

Chapter 7   Using EGL

7

Multiple Currency Processing

Multiple currency processing of subsystems transactions includes translation of transaction to book (base) currency and calculation of realized or unrealized gains and losses. In addition, all rounding differences due to multiple currency processing are calculated and recorded. In ATP, translation of transaction to book currency occurs for all journal entry transactions when the transaction currency does not equal book currency. Realized gain and loss amounts can be recorded when cash payments are received in accounts receivable or when cash payments are made in accounts payable. Currency gain and loss amounts can also be calculated at period-end on all outstanding accounts receivable and accounts payable transactions to record either realized or unrealized gains and losses. The nature of these calculations is defined within the journal model.

Currencies

Define currencies, exchange rate types, and exchange rates in the Currencies and Exchange Rate Sets objects.

When you define a currency, select a rounding method and a rounding level.

Rounding

Rounding of subsystem journal entry amounts happens during ATP as part of multiple currency processing, including conversion of transaction to book currency and calculation of currency gains and losses. All amounts are rounded according to the currency rounding method when transaction amounts are calculated in the ERP subsystems. All book amounts and currency gain and loss amounts are calculated during ATP, so all rounding from these processes can only occur during ATP.

Specify one of these rounding methods in the Currencies object:

- **Half-Adjusting:** This method rounds up to the designated decimal place if the next decimal place out contains a value greater than or equal to five. If the value in the next decimal place out is less than five, all values following the designated decimal place are truncated.
- **Truncating:** The truncating method rounds down to the designated decimal place if any decimal place to the right contains an entry greater than zero.

- **Incrementing:** The incrementing method rounds up to the designated decimal place if any decimal place to the right contains a value greater than zero.

The rounding level can be set to 0.01, 0.05, 0.1, 0.5, 1, 5, 10, 50, 100, or 500.

Because amounts are translated from transaction to book currency during ATP, book amounts are rounded by the method designated for the currency being translated. If the transaction currency is the same as the book, currency rounding occurs in book amounts even though translation does not occur. This process ensures all book amounts are properly rounded when posted to EGL account balances.

As amounts are rounded, rounding errors can occur. You must record these amounts to create a balanced journal. If you do not record these amounts and the journal is not in balance, the journal cannot be posted to the EGL account balances in a balanced book. To avoid this situation, the system records all such differences to the first journal line created for the balancing points where rounding differences have occurred. See "Force balancing" on page 65.

Balancing points are designated for a chart of accounts and denote the account segment for which a balanced set of books is to occur (for which the total debits must match the total credits). Journal models can have lines with different balancing points if multiple ledgers are being updated, as in the case of inter-company journal entries. We recommend that you create journal model lines for each balancing point within a journal model to record rounding differences to a rounding account. This eliminates any variances that are retained in other accounts. Place these lines before all journal lines with the same balancing point and designate these lines as a "write zero amount" to ensure that these lines are created. See "Financial models" on page 66. If the line is not designated as a "write zero amount", the rounding differences will be posted to the first line created that potentially contains an inappropriate account string.

Rounding differences can occur not only when you convert book to base currency, but also when you calculate currency gain and loss amounts. The rounding differences that result from such calculations will be handled in the previously noted manner, with all amounts recorded to the first journal line created for the designated balancing point.

This table shows examples of the effects of rounding:

- Transaction currency is Euros
- Book currency is US dollars
- Exchange Rate is 1.5

Rounding	Transaction Amount	Book Amount Before Rounding	Book Amount After Rounding
Half Adjust to the 1.0 position	5.00 EUR 6.50 EUR 7.25 EUR 8.49 EUR	7.50 USD 9.75 USD 10.875 USD	8.00 USD 10.00 USD 11.00 USD
Half Adjust to the .10 position	5.00 EUR 6.50 EUR 7.25 EUR	7.50 USD 9.75 USD 10.875 USD	7.50 USD 9.80 USD 10.90 USD

Half Adjust to the .01 position	5.00 EUR	7.50 USD	7.50 USD
	6.50 EUR	9.75 USD	9.75 USD
	7.25 EUR	10.875 USD	10.88 USD

Force balancing

Amounts are rounded when they are calculated within the ERP subsystems. For example, tax or variance amounts. Therefore, debit transaction amounts might not equal credit transaction amounts. To create and maintain a journal entry in EGL, transaction amounts must be in balance. All differences are automatically put into the first journal entry line created for the balancing point that is out of balance. Debits and credits can be out of balance because of reasons other than rounding (for example, the journal model is defined incorrectly). The out-of-balance condition must be within a defined tolerance. This table shows the tolerances that are defined for each currency rounded position:

Currency and Position	Tolerance
1.00	99.00
0.01	.99

Any balancing differences within the tolerances noted above will be recorded to the first journal entry line of the balancing point that is out of balance. For rounding differences, create journal model lines for each balancing point within a journal model to record balancing differences to a force-balance account. These lines will be the same lines as those used to record rounding differences.

The same out of balance condition can also occur when book amounts that contain currency gain and loss amounts are created. The differences will be handled in the same manner as for transaction amounts.

This table shows an example of how force balancing happens:

Debits and Credits	Calculated Transaction Amounts	Rounded Amounts
Debits		
Cash	1525.25	1525.25
Financial Discount	228.7845	228.78
Tax Adjustment	12.141	12.14
Credits		
Accounts Receivable	1766.1755	1766.18

The Rounding method is half-adjust with a round-to position set to the second decimal place.

After rounding, total debits equal 1766.17 and total credits equal 1766.18: a difference of .01. Because this amount is within the designated tolerance level, the amount will be booked to the first journal line for the balancing point that is out of balance.

Ledgers

In EGL, users create a separate book for each currency maintained for a ledger. You can maintain multiple sets of books within the same ledger, each in different currencies. The book determines the exchange rate used when the system calculates transaction to book currency. You can use either the default rate maintained in the currency exchange rate table or the rate from the ERP subsystem transaction. If you use the transaction rate, activate the Override Exchange Rate option at the book level. EGL then records all transactions for the book at the exchange rate entered on the transaction.

Financial event classes

The rules defined within a financial event class determine the books that are updated with a subsystem transaction. Each event rule specifies a particular book to be updated. You can update books with all transactions or only transactions in which the transaction currency matches the book currency. For example, if you enter transactions in euros and US dollars for a ledger, you can maintain three books. A book for each transaction currency (US dollars and euros) and a reporting book that records both US dollars and euros in the book's currency.

Financial models

The multiple currency calculations are defined within the journal model and are based on the journal model gain loss line type.

If the model line is to record rounding differences to a rounding account for a balancing point within a journal model, select the Write zero amount check box.

Define the gain loss line type on the financial model line. The model line types are defined as follows.

Not a Gain or Loss

This line type indicates that the book amount for the journal model line is valued using the current exchange rate, such as the exchange rate in effect on the date entered on the transaction. This date is also the date noted on the journal header. The system converts all amounts not previously recorded at the current exchange rate. For example, when you enter an invoice into accounts payable, the entire journal entry will be valued at the current exchange rate because the amounts have not previously been recorded. However, when payment is made on the invoice, the current rate is only used to convert the cash amount. It is not used to convert the accounts payable liability. The original rate would be the proper rate that removes the liability because the accounts payable liability was originally recorded at a different exchange rate.

Positive gain or loss

This line type indicates that a gain or loss calculation is used to value the line. This calculation is the current exchange rate less the original exchange rate. If the calculation results in a positive amount the journal line amount is converted and a journal line is created. If the calculation results in a negative amount, the journal line amount is not converted and a journal line is not created. Journal lines created to record currency gain and loss amounts use this line type. This process occurs only in journal models used to process AM cash payments and cash receipts.

Negative gain or loss

Negative gain or loss is similar to a positive gain or loss in that it indicates that a gain or loss calculation is used to value the line. With this line type, a journal line is created only if the calculation results in a negative amount. Like positive gain or loss, use negative gain or loss to record currency gain and loss amounts.

Because currency gain and loss amounts are only applicable to book amounts, all transaction amount attributes will be blank for positive gain or loss or negative gain or loss.

Invoice

A line type of Invoice indicates that the original exchange rate is used to value the line. All amounts that were previously recorded and are now being reversed use a line type of Invoice. This process ensures that the amount recorded in the book is the same as the amount being reversed. For example, when cash payments are recorded in accounts payable, the accounts payable liability being reversed should be valued at the exchange rate at which it was originally recorded.

EGL BOD publishing

See "Install requirements" on page13 for the software requirements. Configure the ION connections if they are not configured yet. See the *Infor ION Connect Administration Guide.*

If EGL Use account security is set to Yes in the Application Settings object, then the user must add user profile MXAPLUS to a new or existing EGL financial group to publish BODs from the EGL business objects. The financial group must be setup to have All access in the EGL Book Access Rules business object or in the EGL Account Access Rules business object.

If EGL Use account security is set to No in the Application Settings object, then the user is not required to add the user profile MXAPLUS to publish EGL BODs.

Setting up EGL and ION Desk

To configure an Infor XA environment with EGL to publish required BODs, complete the instructions in *Infor XA Configuration Guide for Infor ION*. This guide explains the settings and pre-requisites to publish BODs from an XA environment.

The *Infor XA Configuration Guide for Infor ION* also explains how to configure ION desk to create all required Connection Points and Document flows that route BOD documents from XA to Business Vault.

Setting up Business Vault and Base Data Store

To configure the Business Vault and set up the Base Data Store (BDS), see the *Infor ION Installation Guide v11.1*, the *Infor ION Business Vault Installation Guide 11.1* or higher, and *Infor Business Vault Installation Guide for the Base Data Store 10.4* or higher.

Verify System-Link destination

1 In the System-Link destination that you use for communication, the ESB Process logical ID must match the logical ID specified for the XA connection point in ION.

2 In the System-Link Destinations object, select the destination you use for communication and select **Display > System-Link Destination details**.

   a In the detailed information for the destination, verify that the ESB Process logical ID is set to **lid://default**, which is the logical ID used to set up the XA connection point in ION.

   b Select **Maintain > Test Destination** to verify the connection.

Verify active System-Link transformation

The System-Link transformation used to process the System-Link request associated with a BOD must be active in order for XA to process the BOD.

1 In the System-Link Requests object, select the System-Link request for the BOD that cannot be processed and select **Maintain > Change**.

2 In the Change System-Link Request card file, select the **Transformations** card. This card shows a list of transformations for the request and the status of each transformation.

3 Select the transformation for the System-Link destination you use to send BOD from EGL, which begin with "ICC_".

4 If the selected transformation does not have a status of **Active**, then do the following:

   a. Select the transformation and right-click the selection.

b. Select **Maintain > Activate**. When you activate the transformation, the Type value for the transformation changes from **Standard** to **Override**.

Verifying the data flow

To verify whether the initial data is flowing, check the outbox area to see if the EGL data is there.

If data is not flowing, see the troubleshooting section in the *Infor XA Configuration Guide for Infor ION*.

When publishing the initial data load of BODs from XA, you must publish master data BODs before transactional BODs. In EGL, an Accounting Entity is part of the NOUN key for all BODs and must be published first. An Accounting Entity is published when you send a BOD from the Ledger Book object, code definitions are published when Account Segment and Account Segment values are created or the host job is run. Ensure that you publish these objects before other master data. This sequence is specifically required when integrating with products which also send BODs back to EGL. This sequence is required to keep the integrity of data.

Start these products, services, and processes if they are not already running:

- XA
- IDF System-Link
- EGL
- ION Service. Use the ION Grid Management user interface to verify that the ION Service is running. See the *Infor ION Connect Administration Guide*.

This table shows a list of the Stylesheets used by EGL (all begin with ICC_).

Requests	Stylesheets
ICC_Replicate_AccountSegment	ICC_Replicate_AccountSegment_SyncCodeDefinition_BOD_2_11_0.xsl
ICC_Replicate_AccountSegmentValue	ICC_Replicate _AccountSegmentValue_SyncCodeDefinition_BOD_2_11_0.xls
ICC_Replicate_ChartOfAccounts	ICC_Replicate_ChartOfAccounts_SyncChartOfAccounts_BOD_2-11_0.xsl
ICC_Replicate_ChartOfAccounts	ICC_Replicate_ChartOfAccounts_SyncAccountingChart_BOD_2-11_0.xsl
ICC_Replicate_ChartOfAccounts History	ICC_Replicate_ChartOfAccountsHistory_SyncChartOfAccounts_BOD_2-11_0.xsl
ICC_Replicate_ChartOfAccounts History	ICC_Replicate_ChartOfAccountsHistory_SyncAccountingChart_BOD_2-11_0.xsl

Requests	Stylesheets
ICC_Replicate_ChartOfAccounts Segment	ICC_Replicate_ChartOfAccountsSegment_SyncChartOfAccounts_BOD_2-11_0.xsl
ICC_Replicate_ChartOfAccounts SegmentHistory	ICC_Replicate_ChartOfAccountsSegmentHistory_SyncChartOf Accounts_BOD_2-11_0.xsl
ICC_Replicate_FinancialCalendar	ICC_Replicate_FinancialCalendar_SyncFinancial Calendar_ BOD_2-11_0.xsl
ICC_Replicate_FinancialJournal Entry	ICC_Replicate_FinancialJournalEntry_SyncSourceSystemJournalEntry_ BOD_2-11_0.xsl
ICC_Replicate_LedgerBook	ICC_Replicate_LedgerBook_SyncAccountingEntity_ BOD_2-11_0.xsl
ICC_Replicate_LedgerBook	ICC_Replicate_LedgerBook_SyncAccountingBookDefinition_ BOD_2-11_0.xsl
ICC_Replicate_LedgerBook BalanceSummary	ICC_Replicate_LedgerBookBalanceSummary_SyncSourceSystemGLMovement _ BOD_2-11_0.xsl

This list contains the Host jobs that Publish Bods from EGL:

- PublishAccountSegment
- PublishAccountSegmentValues
- PublishChartOfAccounts
- PublishChartOfAccountSegment
- PublisChartOfAccountsHistory
- PublishLedgerBooks
- PublishLedgerBookBalanceSummary
- PublishFinancialCalendar
- PublishFinancialJournalEntry

This table shows business events that generate outbound BODs from EGL.

Verb	Noun	User action to generate the BOD
Sync	AccountingBookDefinition	Create, change, activate, suspend a Book in LedgerBook object
Sync	AccountingChart	Create or delete a chart in ChartOfAccounts object
Sync	AccountingEntity	Create or change a ledger or book LedgerBook object

Verb	Noun	User action to generate the BOD
Sync	ChartOfAccounts	Create or delete a chart in ChartOfAccounts object
Sync	CodeDefinition – EGL.SEGMENT. + an EGLsegment	Create or change a value within a segment in AccountSegment
Sync	CodeDefinition – EGL.SEGMENT. + an EGLsegment	Create or change a value within a segment in AccountSegmentValue
Sync	FinancialCalendar	Create or revise a period table/year in FinancialCalendar
Sync	SourceSystemGLMovement	Post or Void a journal in FinancialJournalEntry
Sync	SourceSystemJournalEntry	Post or Void a journal in FinancialJournalEntry

Appendix A Creating a subset

<div align="right">

A

</div>
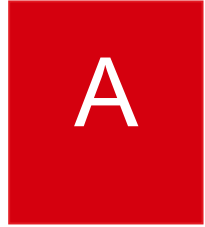
To view macros for a Subsystem origin, create a subset in the Financial Macros object.

To create a subset:

1 Select **Customize > Subset** in the Financial Macros object.

2 Select (new) from the list of subsets and click the **New** button.

3 Specify this information:

Name

Name of the subset you are creating if you want to save this subset for use again. For example, name the subset "Subsystem origin". If you are using the new subset only for this session, leave (temporary) in the Name attribute.

Domain

Choose whether the subset will be public or private.

Security

If you want to use XA security with this subset, specify a security value.

Defer calculation of column totals

Select the checkbox if you do not want the column totals to display immediately. For more information, refer to Calculating Column Statistics in the on-line help.

4 To add the Subsystem origin attribute, select the attribute in the Available attributes list and click the **Add** button.
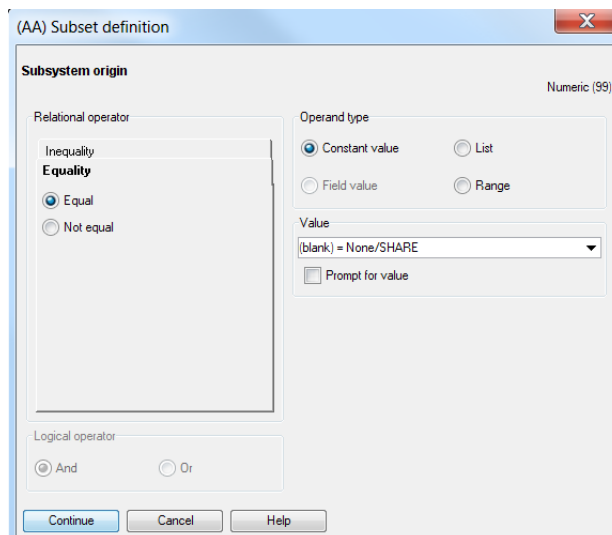
5   Click **Prompt for value**.

6   Click **Continue**.

7   Click **Save** if you want to save your changes for use again. Click **Apply** to update the object list you started from with the changed version of the subset.

Appendix B EGL Gain/Loss Models

B

EGL Models to Calculate Gain/Loss for Foreign Currency Invoice Payments

To calculate gain/loss for foreign currency invoice payments, these three separate EGL models can be used:

- the invoice model
- the cash payment model
- the allocations model from the cash payment to the invoice

These models are used in the examples described in this appendix:

- APINV for the invoice
- CASHPAY for the cash payment
- CASHALLOC for the allocations from the cash payment to the invoice

Subsystem Event Rules

In the Finance Subsystem, create these subsystem event rules:

Reason	Financial division	Event
C01 = Entered cash	01	CASHPAY
P01 = Entered payable	01	APINV
P40 = Allocated payable	01	CASHALLOC

When created, cash transactions (C01) will use the CASHPAY model and payable transactions (P01) will use the APINV model. Allocations to payable transactions (P40) will use the CASHALLOC model.

Model APINV

Create this model with subsystem origin = XA Finance with these model lines:

Model line	Account string	Debit macro	Credit macro
10	=XSARI2CD-=XSARI2CD-3000	XSA6AD1NDR	XSA6AD1NCR
20	=XSARI2CD-=XSARI2CD-2008	XSA6AD1NCR	XSA6AD1NDR

The macro XSARI2CD returns the financial division identifier for these accounts:

- 3000 is the expense account
- 2008 is the accounts payable account

If the value is positive, the macro XSA6AD1NDR returns the charge line value in invoice currency. If the value is negative, the macro XSA6AD1NDR returns the charge line value in invoice currency.

When this model runs, it will debit the expense account with the charge line value and will credit the accounts payable account with the charge line value.

The account string can use macros to set the expense account and the accounts payable account, instead of using fixed account numbers. You can also add model lines to retrieve the values from the tax lines.

Model CASHPAY

Create this model with subsystem origin = XA Finance with these model lines:

Model line	Account string	Debit macro	Credit macro
10	=XSARI2CD-=XSARI2CD-1000	XSB7AD1KDR	XSB7AD1KCR
20	=XSARI2CD-=XSARI2CD-1010	XSB7AD1KCR	XSB7AD1KDR

The macro XSARI2CD returns the financial division identifier for these accounts:

- 1000 is the cash account
- 1010 is the unallocated cash account

If the value is positive, the macro XSB7AD1KDR returns the cash line value in payment currency. If the value is negative, the macro XSB7AD1KCR returns the cash line value in payment currency.

When this model runs, it will debit the cash account with the cash line value and will credit the unallocated cash account with the cash line value.

The account string can use macros to set the cash account and the unallocated cash account, instead of using fixed account numbers.

Model CASHALLOC

Create this model with subsystem origin = XA Finance with these model lines:

Model line	Account string	Debit macro	Credit macro	Gain loss line type
10	=XSARI2CD-=XSARI2CD-1010	XSB5ADZV1D	XSB5ADZV1C	
20	=XSARI2CD-=XSARI2CD-2008	XSB5ADZV1C	XSB5ADZV1D	
30	=XSARI2CD-=XSARI2CD-9700	XSB5ADZV1D	XSB5ADZV1C	Positive gain or loss
40	=XSARI2CD-=XSARI2CD-9701	XSB5ADZV1C	XSB5ADZV1D	Negative gain or loss

The macro XSARI2CD returns the financial division identifier for these accounts:

- 1010 is the unallocated cash account
- 2008 is the accounts payable account
- 9700 is the currency exchange rate loss account
- 9701 is the currency exchange rate gain account

If the value is positive, the macro XSB5ADZV1D returns the cash allocation line value in invoice or payment currency. If the value is negative, the macro XSB5ADZV1C returns the cash allocation line value in invoice or payment currency.

- Model line 30 has Gain loss line type = Positive gain or loss
- Model line 40 has Gain loss line type = Negative gain or loss

When this model runs, it will debit the accounts payable account with the cash allocation value in invoice currency and will credit the unallocated cash account with the cash allocation line value in invoice currency. The model will debit or credit the currency exchange rate gain or loss account with the calculated gain or loss value in company or book currency.

You can set the account string to use macros to set the account numbers instead of using fixed account numbers. You can add model lines for discount allocations, write off allocations, etc.