Infor LX Multi-Language Support User Guide

Infor LX 8.3.5

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About this guide

This guide provides the information required to implement multi-language support (MLS) functionality. This guide explains the MLS functionality and includes the information required to set up and use MLS. This guide includes information about the extension files that are used to implement MLS.

Intended audience

This guide is intended for System Administrators who are responsible for setting up and maintaining Infor LX files and system parameters, professionals responsible for managing the data in the various Infor LX master files, and professionals who are responsible for managing translations of data in the master files.

Related documents

You can find the documents in the product documentation section of the Infor Xtreme Support portal, as described in:

- *IBM i Server Infor LX Installation Guide*
- *Infor ERP LX National Language Versions Installation Guide*
- *Infor ERP LX Release Notes V8.3.3*
- *Infor ERP LX Release Notes V8.3.4*
- *Infor LX Release Notes 8.3.5*
- *Infor LX Logic Guide*

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 website We recommend that you check this website periodically for updated documentation.

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Chapter 1   Introduction

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Overview

Multi-Language Support (MLS) enables global customers to consolidate databases that exist in different regions, with different language users, into a single database. You can use MLS to translate and store the names, addresses, and descriptions in your master files. Your internal users can view this data on screens in their own languages. You can also print the translated names, addresses, and descriptions on documents for internal and external use.

To implement MLS, Infor LX uses extension files for certain master files and code tables. Use the extension files to maintain translations of the master file data for the languages that are appropriate for your business. Infor LX includes a mass create option that moves data in your master files to the extension files when you implement MLS. You can set up Infor LX to automatically create records in the extension files each time a new master file record is created. These programs utilize the Auto Create Language Ext File (ZXL) to determine which languages are required for each application. The auto create option generates an audit report that lists the records in the extension file and the translation status.

Note: The MLS implementation *does not* include automatic translation of data. The MLS implementation provides the file structure and display programs that enable you to copy, store, and maintain data in multiple languages.

The Infor LX master file maintenance programs display the name and address or description in the user language as a default. The screens include a Toggle to switch between the base (master file) language and the user language. The Detail panels also include the language toggle capability when in Display mode.

Master file list programs include language options that you can use to print the translated data. The F4=Prompt window programs display the translated master file and code table data, if it is available.

Outbound Infor LX documents can include the translated information, based on the controlling language for each document.

Infor LX provides language override programs that enable you to manage the translation of master file data. You can access the language override programs from within the master file maintenance programs and from a menu.

If you use the User Defined Fields (UDF) feature, you can use MLS programs to enter and maintain translations of the user-defined field descriptions. Your internal users can see the user-defined screen literals in their own languages. See the *Infor LX Release Notes* for Infor LX 8.3.4.

Prerequisites

To use the MLS feature you must have this software installed on your System i:

- Infor LX 8.3.5 or ERP LX 8.3.4 or ERP LX 8.3.3 and MRs 73689, 73690, 73744, 73996, and 73987
- The NLV libraries that are appropriate for your business

If you use Infor WebTop, you must have patch 4.4 and the latest solution records.

Carefully read these guides, *IBM i Server Infor LX Installation Guide*, *Infor LX National Language Versions Installation Guide*, and the *Infor ERP LX Release Notes V8.3.3* before you attempt to use the MLS functionality. Read "DBUPDATE options" in Chapter 2 of the *IBM i Server Infor LX 8.3.5 Install Guide* or a discussion of changes to the priming data to support MLS functionality.

If any errors or omissions are found in this guide after the product release, the updated version will be posted on the Infor Xtreme Support portal at www.infor.com/inforxtreme. We recommend that you check this Web site for updated instructions.

MLS requirements

To take full advantage of MLS functionality, set up your system and define your business processes to meet these requirements:

- Enter master file data in the global CCSID in the invariant character set. If possible, select a single language that is common to most users. We recommend that the base language contain only characters from the IBM Invariant character set. These characters are represented the same way in every EBCDIC code page and are visible to all users, regardless of their language settings. See Appendix A for a list of invariant characters.

  If two or more languages can be represented in a single CCSID, then data from these languages can be entered from a single session. For example, French, Spanish, German, and English data can be entered in a single session because all of these characters are available in a single CCSID.

- Variant character data that is specific to a particular CCSID can always be entered into the MLS extension files. Only users set up to view that language CCSID data can properly view or alter the data even though this data is stored correctly in Unicode. This is a restriction of the 5250 job stream which supports only EBCDIC CCSIDs.

- Use designated Unicode MLS files to enter descriptions and addresses in other CCSIDs. Infor LX uses the MLS files to print descriptions and addresses in languages that are defined for Acknowledgements, Bills of Lading, Purchase Orders, Invoices, Shop Orders, etc.
- MLS file data must be entered on a User Interface or 5250 emulator that supports the user's language and the company's global language.
- The printer used to print MLS file data must support the language selected and the global language.

MLS does not support right-to-left languages.

Limitations: The 5250 Emulator and WebTop will indicate "Not Displayable" if data from an MLS file, which is being viewed by the user, cannot be transformed from Unicode into the user's job CCSID. The field, if normally input capable, will be made input inhibited to prevent data corruption. For example, a user set up for code page 37 who tries to view Russian data in the Unicode file will receive the message. Russian data requires code page 1025 to display properly.

MLS files

MLS provides extension files for the files in the table below. The table lists this information if applicable:

- Menu option to access the master file
- Infor LX application data that is available for translation
- Master file
- Extension file
- Language server
- Language override program that you use to enter and maintain the translated data

See Appendix B for information about the MLS extension files.

Menu option	Application	File	Extension file	Language server	Language override
CSH130D1	Bank Branch Address	OBR	OBX	CSH090B	CSH131D
Cartera processing in ACP140D1	Bank Collectors Address	CARBM	CARBX	ACP093B	ACP142D
ACP140D1	Bank Master Address	ABK	ABX	ACP091B	ACP141D
PUR180 PUR181B	Commodity/Special Charge Descriptions		ZLI	INV091B	INV118D QMS174D3
ACR120D1	Company Address	RCO	ROX	ACR092B	ACR121D
SYS117	Country Code Description	LCN	LNX	SYS093B	SYS119D

Menu option	Application	File	Extension file	Language server	Language override
CLD107D1	Currency Code Description	GCM	GCX	CLD090B	CLD117D
ACR100D1	Customer Address	RCM	RCE	ACR090B	ACR101D
ORD100D1	Customer Address Master	EST	ESX	ORD090B	ORD101D
ORD700D1	Customer Order Ship To Address	ECH / ECHW	ECN / ECNW	ORD091B	ORD765D
ORD150D1	Customer Item Description, Customer Item Additional Description	EIX	EXM	ORD094B	ORD151D
ACR110D1	Customer Terms	RTM	REX	ACR091B	ACR111D
OLM115D	Freight Terms Description	LFT	LFX	OLM091B	OLM116D
SYS091D	Internal Control–Auto Lang Record create	ZXL		None	
	Internal Control–QEW work file		QEW		
BIL500D	Invoice Ship To Address	BBH	ECN	ORD091B	ORD765D
	Invoice Ship To Address History	SIH	SIN	ORD092B	None
SAL100D1	Salesperson Address	SSM	SSX	SAL090B	SAL101D
INV160D1	Item Class Description	IIC	ICX	INV093B	INV161D
INV100D1 QMS165D	Item Master Description		ZLI	INV091B	INV118D QMS174D2
OLM510D	Load Shipment Ship To Address	LLX LLXW	LLN LLNW	OLM090B	OLM765D
ORD170D1	Order Class Description	EOC	EOX	ORD093B	ORD171D
PUR500C PUR600C	Purchase Order Ship To Address	HPH HPO HPW	HPN HPNW	PUR091B	PUR765D
PUR130D1	Purchase Ship To Address	EST	ESX	ORD090B	PUR131D
CEA100D1	Segment Value Description	GSV	GST	CEA090B	CEA117D CEA100D5

Menu option	Application	File	Extension file	Language server	Language override
QMS115 QMS125D1	Specification / Test Description	QTM	ZLS	QMS090B	QMS130D QMS196D2
SYS105D	Table Code Descriptions		ZCC	SYS090B	SYS106D SYS107D2 SYS107D3
ACP100D1 PUR100D1	Vendor Master Address	AVM	AVX	ACP090B	ACP110D
ACP160D1	Vendor Terms Description	AVT	AVE	ACP092B	ACP161D
INV110D1	Warehouse Description	IWM	IWX	INV090B	INV113D
SFC100D1	Routing Operation Description	FRT	FRX	SFC090B	SFC105D
SFC500D1	Shop Order Routing Operation Description	FOD	FOX	SFC490B	SFC511D

Language Master file (ZLA)

Important: Review this topic carefully. See "Set up language codes" in Chapter 2 for instructions to use Language Code Maintenance (SYS825).

The Language Master file (ZLA) includes the Coded Character Set ID (CCSID). When a user signs on, their job CCSID is changed according to the user language CCSID in ZLA. If no CCSID is set for the language, then the Infor LX system parameter CCSID is used. If the system parameter CCSID is blank, then the CCSID of the Item Master file (IIM) is used.

An Infor LX system parameter indicates whether WebTop jobs should start up using the user's language CCSID or in system parameter/IIM CCSID. When you set up languages in the ZLA, we recommend that you use the fewest possible CCSIDs to minimize the need for data translations between CCSIDs and to minimize the amount of data which cannot be displayed correctly to a user.

Multi-language options

With MLS you can provide your users with translated names, addresses, and descriptions on screens and on printed documents. Before you set up the MLS feature, decide which information you want to translate and where you want to use the translated information.

Descriptions

You can provide these descriptions in multiple languages:

- Item description, extra description, group tech code, reference, and pack description
- Primary code, description, short description, and notes from the Code Master Table
- Payment terms description
- Freight terms description and abbreviated description
- Country description and short description
- Chart of Account segment description
- Currency description, country, division, and subdivision
- Item class description
- Commodity and special charge description
- Customer Item Description and Customer Item Additional Description
- Vendor Item Description and Vendor Item Additional Description
- Routing Operation Description

Names and addresses

You can provide these names and addresses in multiple languages:

- Vendor name and address
- Customer name and address
- Address master name and address
- Ship-to name and address
- Warehouse name and address
- Bank name and address
- Salesperson name and address
- Company name and address

Transaction Fields

- Customer Purchase Order Number

Notes

- Note Type Description
- Customer Notes

- Ship-To Notes
- Order Notes
- Order Line Notes
- Quote Notes
- Quote Line Notes
- RMA Notes
- RMA Line Notes
- Vendor Notes
- Purchase Order Notes
- PO Line Notes
- Requisition Notes
- Requisition Line Notes
- Item Notes
- Bill of Material Notes
- Routing Notes
- Shop Order Notes
- Shop Order Material Notes
- Shop Order Operation Notes

Documents

Outbound Infor LX documents utilize MLS files for printing, based on the controlling language for each document. In all cases, if the language record does not exist in the MLS extension file, the program prints the information in the base language.

See "Reviewing master file language codes" in Chapter 2 for a list of outbound documents and the controlling language for each.

Printing documents in multiple languages

MLS functionality enables you to print addresses and item descriptions in multiple languages on internal documents, customer-facing documents, and purchase orders.

Customer orders

The customer order cycle provides several opportunities to use MLS functionality. This diagram illustrates some of the possibilities, assuming that the relevant addresses and item descriptions were translated into all of the appropriate languages:
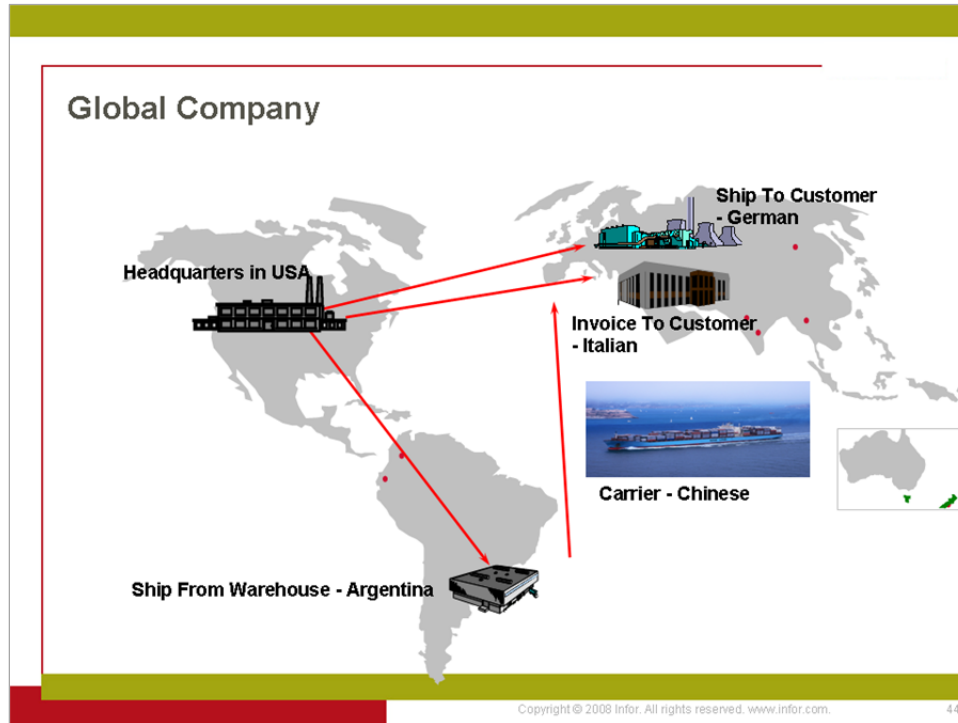
Figure 1-1: Customer order documents in multiple languages

Generating documents with translated data in the customer order cycle might include these steps:

1   A company in the US receives an order for a customer in Germany and sends the customer an order acknowledgment. The acknowledgment lists all of the items on the order in German.

2   The ship-from warehouse, located in Argentina, prints the pick slips in Spanish for the local warehouse personnel. The language code for the warehouse controls the language on the pick slips.

3   The warehouse uses OLM591B to print the packing list with item descriptions, the warehouse name, and ship-to address in German.

4   The warehouse prints the Bill of Lading, Manifest, and Delivery Note in the language on the carrier file (LCM). In this example, the shipping documents show information such as the ship-to address, freight terms description and warehouse address in Chinese.

5   The US company sends the invoice in Italian, using the language on the invoice-to customer. In addition to addresses, item descriptions, and special charge descriptions, the invoice can list the customer terms description and currency description in Italian.

Purchase orders

This diagram illustrates the use of MLS functionality for purchase orders and receipts, assuming that the relevant addresses and item descriptions have been translated into all the appropriate languages.

Figure 1-2: Purchase order documents in multiple languages

Generating purchase orders and receipts with translated data might include these steps:

1 A company in the US sends a purchase order to a vendor in Brazil. The purchase order lists all of the item descriptions in Brazilian Portuguese.

2 The ship-to warehouse, located in Germany, receives the purchase order. The receiver ticket shows the item descriptions in German.

Notes

Chapter 2   Setup

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Overview

The topics in this chapter discuss only the programs, screens, and fields that apply specifically to MLS.

The process to set up MLS includes these tasks:

- Cleaning up and converting data fields to use CCSID 65535.
- Setting up the system CCSID.
- Setting up language codes.
- Setting up users with a defined language code. For 5250 emulation users, assign a host page.
- Reviewing the language fields in your master files to ensure that the correct language code is associated with each entity. Outbound documents are printed in the languages associated with the warehouse, customer, vendor, or company.
- Setting options to auto-create language records.
- Mass creating language records for existing data.

Cleaning up and converting data fields

Follow the instructions in this topic to review and maintain data fields. The conversion of the data fields is performed by the DBUpdate program when you upgrade to Infor LX 8.3.3 or 8.3.4 or 8.3.5.

In your existing database, the ZPA.DATA and CARPM.PMDATA fields can contain data that is a mixture of character data and packed decimal data. When the records are read, the operating system attempts to convert them from the database CCSID to the job CCSID and does not recognize the data as packed decimal. For packed decimal data this conversion will often change the actual numeric value of the packed decimal data. Data decimal errors or corrupt data may be a result.

To prevent the data decimal errors and corrupt data, set up the ZPA.DATA and CARPM.PMDATA fields as follows:

- Assign CCSID 65535 to eliminate code page conversions

- Use the invariant character set for information that does not represent packed decimal data

With CCSID 65535, the system does not attempt code page conversions. The ZPA.DATA and CARPM.PMDATA data fields are optionally converted to CCSID 65535 when you run DBUPDATE after the installation of Infor LX V8.3.3 or higher.

If the DATA or PMDATA fields in either file contain characters that do not represent packed decimal data, and which are outside of the Invariant Character set, you should change the data inside your files before you perform the conversion to CCSID 65535. See Appendix A for a list of invariant characters.

Infor LX includes program SYS201B that you can use to list the ZPA file and CARPM records that contain variant characters. We recommend that you replace the variant characters with invariant characters before you run DBUPDATE. You can run SYS201B at any time to troubleshoot display errors.

Running SYS201B

Run SYS201B in the Infor LX environment. Call SYS201B from a command line.

SYS201B has one five-character parameter that contains five flags. Each flag is either 1 or 0. Enclose the flags in single quotation marks. The flags are defined as follows:

Flag	Description
1	If 1, the error messages are written to the ZPW file. The program does not clear this file; you must clear the file.
2	If 1, data is scanned for double-byte characters.
3	If 1, data is scanned for lowercase characters.
4	If 1, data is scanned for double quotes (").
5	If 1, data is scanned for asterisks (*) and percent signs (%).

The program always searches for variant characters. Therefore, you do not need a flag for these characters.

Sample commands

Review these sample commands:

- To use the default command, enter SYS201B with no parameters. The default parameter is 01111. The error records are not written to the error file and all edits occur. Enter this command to use the default parameter:

  CALL SYS201B

- Check for variant character and lowercase characters only if you use a double-byte database and a code page that does not include lowercase characters. The errors are not written to the ZPW error file. Enter this command:

  CALL SYS201B '00100'

- To write the errors to the ZPW error file and check for variant characters, lowercase, double-byte characters, enter this command:

  CALL SYS201B '11100'

Report sample

```
SYS201B                              ** V8.3.3 Development Environment **          WSID QPADEV004M   8/20/08 Page
                                        ZPA Character Analysis Report            User TESTER        14:09:18
-------------------------------------------------------------------------------------------------------------------
Record Number      Key            Field Name        Position         Data
-------------------------------------------------------------------------------------------------------------------
        1648   ALEXAND        FRREC                     1         Forecast Simulation Control for WS ALEXAND
                                                                   3333333   333333333   333333 333
        2034   APIPARMS       PINAME                    9         Serial No.
                                                                    33333  3
        1416   ATTESTR1       FRREC                     1         Forecast Simulation Control for WS ATTESTR1
                                                                   3333333   333333333   333333 333
        2015   COMPANY        CONAME                    1           ** V8.3.3 Development Environment **
                                                                   55         3333333333   3333333333 55
        1519   MORAZPNQ       FRREC                     1         TEST     TESTING #62794
                                                                                1
        2003   RCODU EC       TRDSC                     1         PO Receipt @ expected cost
                                                                    333333 1 33333333 3333
         767   REA33333       ZRDESC                    1         áÂáÃçX«Ë»á¶à*ãn(EáÔã@øì»´â1â2â3â4
                                                                   22222222211122222222222221111222222222

Error Summary
  1. Variant Characters                           128
  2. Double Byte Characters                        38
  3. Lower Case Characters                      13,938
  4. Double Quote Characters                        0
  5. Asterisk or Percent Characters                27
                                    >> End of Report <<
```

Setting up the System CCSID

The Infor LX database that you install determines your system CCSID setting. For example, if you installed the standard Infor LX database for English and western European languages, use the default CCSID 0937. Infor LX also delivers Japanese, Simplified Chinese, and Russian databases.

The standard Infor LX database, with CCSID 0937, is the most practical to use to implement MLS because all data can be entered in the Invariant Character set. You can then set up users with other language CCSIDs, including the double-byte and eastern European languages.

Although you can enter master file data in any language that uses CCSID 0937, for practical purposes you may decide to enter all master file data in one language. Populate all master files using the Invariant Character set, the only characters in EBCDIC that are stored in the same place in every code page. See Appendix A.

WARNING! This document does not cover the implementation of a CCSID not previously delivered with Infor LX. You may require Infor Consulting Services (ICS) for assistance in complex cases.

To set up the global CCSID:

1 Open the Company Name & Date Format screen, SYS820D-01.

2 Specify this information:

System CCSID

Accept the *AUTO default value for system CCSID unless you have received a recommendation from ICS that you should use another CCSID. When set to *AUTO, Infor LX uses the CCSID on the IIM file to determine the default CCSID value to use. The shipped default database is CCSID 00937, which is Chinese Traditional + US English. The CCSID 00037 is a subset of CCSID 00937.

Use CCSID in Users Language Code for WebTop

To start WebTop jobs with the user's language CCSID, specify **1=Yes**. If you accept the default, **No**, WebTop jobs start with the system CCSID. If you do not define a system CCSID, WebTop jobs start with the CCSID on the IIM file.

Assigning language codes

The language code setup tasks depend on the languages that you are using and whether you want to use MLS for internal users or on external documents.

- Set up language codes. If you use languages other than those whose codes are delivered as priming data, add language codes. If you use the predefined language codes, you must enable MLS for each language.
- Assign language codes to users in SYS600. Set up users to see the screen literals and messages in the appropriate NLV library and to view data that is translated into that language.
- Assign language codes to some master files, for example, the customer master, to print documents in a specific language for a specific customer.

Setting up language codes

Several language codes are pre-populated by the Infor LX priming data update program. Do not alter these language codes. If you are using a supported NLV language such as Spanish, enable MLS for the language code in Language Code Maintenance (SYS825) and then assign the Spanish language code to a user in SYS600.

Language codes are stored in the Language Master File (ZLA). ZLA includes several predefined languages.

You can set up language codes for languages other than English and for those that do not already exist as Infor LX priming data. If you are sharing many languages in an MLS environment, then strongly recommend that you assign users the non-accented language version of any NLV language. The non-accented languages are built using CCSID 37 and therefore require no code page translation. Processing is faster and fewer problems occur than if you use the accented versions.

To set up a language code:

1 On SYS825D1-01, select an existing language code or enter a new language code and press Enter. The system displays the Language Code Maintenance screen, SYS825D2-01.

2 Specify this information:

Description

Specify a description of the language.

WebTop help prefix

Specify the prefix for the language in which to display online help in WebTop.

Language Usage

To use a language code for MLS, specify 2=Multi-Language Support or 3=Both. If you assign 2=Multi-Language Support, you can print the language on reports and customer-facing documents and you can assign it to entities such as warehouses and facilities. You cannot assign the language to a user.

To support both MLS and the NLV libraries, specify 3=Both. You can use the language on printed documents and you can assign the language code to users in Infor LX User Authorization Maintenance, SYS600D1.

Language Library Suffix

Specify the language library suffix for this language code. The system uses this suffix, along with the language library mask, to form the name of the NLV language library. See the *Infor LX Logic Guide* for more information about the language mask.

Code Character Set ID (CCSID)

Leave this field blank unless the CCSID for this language does not match the CCSID of the base language database on your system. When users sign on, their job CCSIDs are changed according to the user language CCSID. If this value is blank, the system uses the System CCSID assigned in SYS820. If the System CCSID value is blank, the system uses the CCSID on the IIM file.

The CCSID codes are assigned to the languages supported by Infor LX. Use the fewest possible CCSIDs so that data can be visible to the largest number of users on your system. For example, use one CCSID for English even though CCSIDs exist for both UK English and US English.

Do not change the CCSID for a supported NLV language unless you have a good understanding of the ramifications of doing so.

Sort Sequence Code Table

The sort sequence table is not required for any language provided with Infor LX except Russian. For Russian, this value is pre-populated with the value LXRUSU1. This table is provided with the Russian database installation. If you use a language that is not provided by Infor, and it requires a sort sequence table, enter that value.

3 Use F6=Accept to save your entries.

Setting up users

To set up users, assign a language code to the user profiles. You must configure the Client/Access code page for 5205 emulator users.

Assigning a language code

Access the Infor LX User Authorization Maintenance screen, SYS600D1-01, to assign a language code to a user and to give the user authority to the appropriate programs. If you are using the standard Infor LX database for English and western European languages, you do not need to assign a language code to English users. English is the base language shipped for Infor LX.

Users with a language code that is different from the base language should enter data into the extension files in their user language and enter data into master files in the base language.

Configuring PC5250

Users who use the character based UI (green screen) must have a Host Code Page that matches the language code assigned to them in SYS600D1. You must configure each PC to use the correct host page.

1 In the IBM Client/Access, select Communications > Configure from the menu bar.
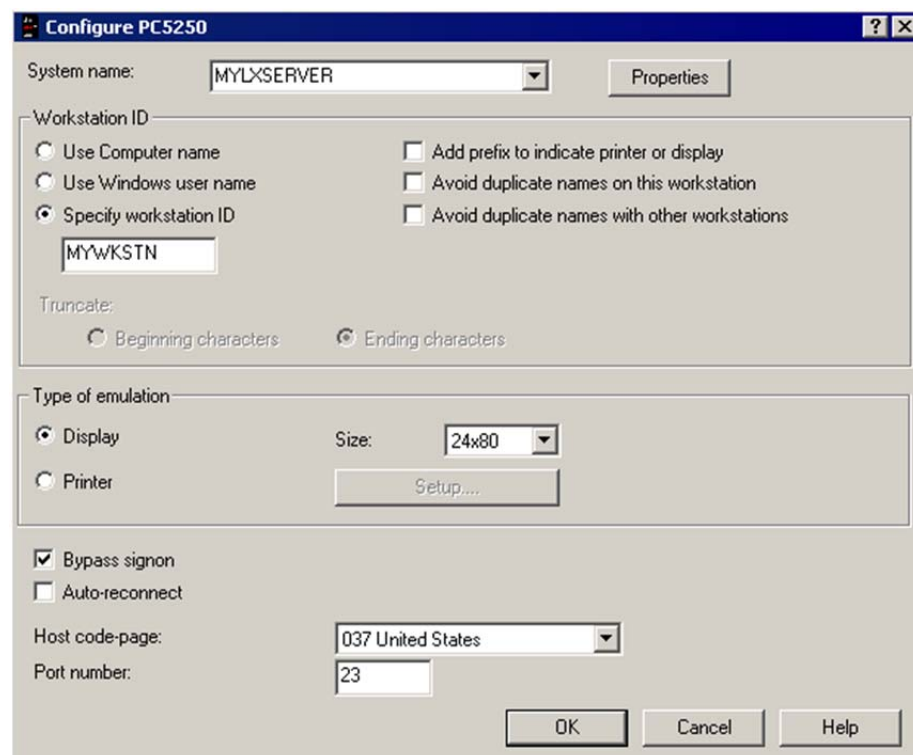
Figure 2-3: Configure PC5250

2 In the *Host code-page* field select the code-page that matches the message file CCSID that is assigned to the user.

3 Click OK.

Reviewing master file language codes

Outbound Infor LX documents utilize MLS files for printing names, addresses, and descriptions, based on the controlling language for each document. Infor LX uses the language code on the master file record to determine the language to use on the printed document. For example, to print a pick slip for Warehouse A, Infor LX uses the language code on the Warehouse Master file (IWM) record for Warehouse A. In all cases, if the language record does not exist in the MLS extension file, the program prints the information in the base language.

The outbound documents and the controlling languages are summarized below. Review the language codes assigned in your master files before you implement MLS to ensure that documents are printed in the correct language. If you do not assign a language code, Infor LX prints the document in the base language.

Document	Source for language	MLS data printed
ACR229B Customer Statement	A/R Customer	Order Notes (ZNT) Customer Notes Ship To Notes (ZNT)
BIL550B Proforma Invoice	Invoice To Customer/Number Language (EST/RCM) if blank, print base language	Invoice To Customer (ESX/RCE) A/R Customer (RCE) Ship To Address (ECN Type 0) A/R Terms description (REX) Currency Description (GCX) Item Description (ZLI) U/M Alt Code (ZCC) Special Charge Description (ICX) Item Notes (ZNT) Customer Notes (ZNT) Ship-To Notes (ZNT) Order Notes (ZNT) Order Line Notes (ZNT) Extra Item Description (ZLI) Customer Item Description (EXM) Additional Customer Item Description (EXM) Customer PO Number (ECN)

Document	Source for language	MLS data printed
BIL550B Invoice	Invoice To Customer/Number Language (EST/RCM) if blank, print base language	Invoice To Customer (ESX/RCE) A/R Customer Ship To Address (ECN Type 3) A/R Terms description (REX) Currency Description (GCX) Item Description (ZLI) U/M Alt Code (ZCC) Special Charge Description (ICX) Item Notes (ZNT) Customer Notes (ZNT) Ship-To Notes (ZNT) Order Notes (ZNT) Order Line Notes (ZNT) Extra Item Description (ZLI) Customer Item Description (EXM) Additional Customer Item Description (EXM) MLS Customer PO Number (ECN)
BIL552B Invoice 2	Invoice To Customer/Number Language (EST/RCM) if blank, print base language	Invoice To Customer (ESX/RCE) A/R Customer (RCE) Ship To Address (ECN Type 3) A/R Terms description (REX) Item Description (ZLI) Special Charge Description (ICX) Item Notes (ZNT) Customer Notes (ZNT) Order Notes (ZNT) Order Line Notes (ZNT) Extra Item Description (ZLI) Customer Item Description (EXM) Additional Customer Item Description (EXM) Customer PO Number (ECN)

Document	Source for language	MLS data printed
BIL555B Delivery Note Invoice	Invoice To Customer/Number Language (EST/RCM) if blank, print base language	Invoice To Customer (ESX/RCE) A/R Customer (RCE) Ship To Address (ECN Type 3) Warehouse address (IWX) A/R Terms description (REX) Freight Terms description (LFX) Currency Description (GCX) Item Description (ZLI) U/M Alt Code (ZCC) Item Notes (ZNT) Customer Notes (ZNT) Order Notes (ZNT) Order Line Notes (ZNT) Extra Item Description (ZLI) Customer Item Description (EXM) Additional Customer Item Description (EXM) Customer PO Number (ECN)
ORD508B Order Acknowledgment	Ship To Customer/Number Language (EST/RCM) if blank, print base language	Sold-To Customer Address (RCE) Warehouse Name (IWX) Ship To Address (ECN) Invoice To Name (ESX/RCE) Item Description (ZLI) Extra Item Description (ZLI) Customer Item Description (EXM) Additional Customer Item Description (EXM) U/M Alt Code (ZCC) Special Charge Description (ICX) Customer PO Number (ECN) Primary Salesperson Name (SSX) Secondary Salesperson Name (SSX) Line Salesperson Name (SSX) Special Line Salesperson Name (SSX) Item Notes (ZNT) Customer Notes (ZNT) Ship-To Notes (ZNT) Order Notes (ZNT) Order Line Notes (ZNT)

Document	Source for language	MLS data printed
ORD550B1 Pick Slip	Warehouse language (IWM.LANG) (From warehouse on Resupply orders) if blank, print base language	Sold Customer Address (RCE) Ship To Address (ECN) Warehouse Description (IWX) Item Description (ZLI) Extra Item Description (ZLI) U/M Alt Code (ZCC) Item Notes (ZNT) Customer Notes (ZNT) Ship-To Notes (ZNT) Order Notes (ZNT) Order Line Notes (ZNT) Customer Item Description (EXM) Additional Customer Item Description (EXM) Customer PO Number (ECN)
ORD550B2 Batch Pull Report	Warehouse language (IWM.LANG) (From warehouse on Resupply orders) if blank, print base language	Item Description (ZLI) U/M Alt Code (ZCC)
OLM591B Packing List	Ship To Customer/Number Language (EST/RCM) if blank, print base language	Sold Customer Address (RCE) Ship To Address (LLN) Warehouse name (IWX) Item description (ZLI) Item Notes (ZNT) Customer Notes (ZNT) Ship-To Notes (ZNT) Order Notes (ZNT) Order Line Notes (ZNT) Extra Item Description (ZLI) Customer Item Description (EXM) Additional Customer Item Description (EXM) Customer PO Number (ECN)
OLM592B1 Non Hazardous BOL	Carrier Language (LCM), if blank, the Ship To Customer/Number Language (RCM/EST) if blank, print base language.	Ship To Address (LLN) Warehouse Name (IWX) Freight Terms description (LFX) Customer Notes (ZNT) Ship-To Notes (ZNT) Order Notes (ZNT)

Document	Source for language	MLS data printed
OLM592B2 Hazardous BOL	Carrier Language (LCM), if blank, the Ship To Customer/Number Language (RCM/EST) if blank, print base language	Ship To Address (LLN) Warehouse name (IWX) Freight Terms description (LFX) Item description (ZLI) U/M alternate code (ZCC) Item Notes (ZNT) Customer Notes (ZNT) Ship-To Notes (ZNT) Order Notes (ZNT) Order Line Notes (ZNT) Extra Item Description (ZLI) Customer Item Description (EXM) Additional Customer Item Description (EXM) Customer PO Number (ECN)
OLM593B Manifest	Carrier Language (LCM), if blank, the Ship To Customer/Number Language (RCM/EST) if blank, print base language	Ship To Address (LLN) Warehouse Name (IWX) Freight Terms (LFX) U/M alternate Code (ZCC). Customer Notes (ZNT) Ship-To Notes (ZNT) Order Notes (ZNT)
OLM595B Delivery Note	Carrier Language (LCM), if blank, the Ship To Customer/Number Language (RCM/EST) if blank, print base language	Ship To Address (LLN) Ship From Address (IWX) Item Description (ZLI) U/M alternate Code (ZCC) Item Notes (ZNT) Customer Notes (ZNT) Ship-To Notes (ZNT) Order Notes (ZNT) Order Line Notes (ZNT) Extra Item Description (ZLI) Customer Item Description (EXM) Additional Customer Item Description (EXM) Customer PO Number (ECN)
OLM596B Delivery Note (PO)	Vendor Language (AVM) if blank, print base language	Vendor Address (ESX/AVX) Warehouse address (IWX) Item description (ZLI) U/M alternate code (ZCC)

Document	Source for language	MLS data printed
OLM596B Delivery Note (Warehouse)	Carrier Language (LCM), if blank, Ship To Warehouse Language (IWM) if blank, print base language	Ship To/From Address (IWX) Item Description (ZLI) U/M alternate code (ZCC)
PUR520B PO Print	Vendor (AVM.VMLANG), if blank print base language For Requisitions, if Vendor not assigned use the User Language (ZXU.XULANG) if blank, print base language	Vendor Address/Purchasing Address (AVX) Ship To Address (HPN) Vendor Terms description (AVE) Currency Description (GCX) Company Address (ROX) Item/Commodity/Special Charge Description (ZLI) Extra Item/Additional Commodity/Special Charge Description (ZLI) Alt U/M (ZCC) Item Notes (ZNT) Vendor Notes (ZNT) Purchase Order Notes (ZNT) Purchase Order Line Notes (ZNT)
PUR524B	Vendor (AVM.VMLANG), if blank print base language	Vendor Name, Attention To Name (AVX) Purchasing Contact Name, Address (AVX) Vendor Terms Description, Currency Description (GCX) Item Description, Commodity Description (ZLI) Extra Item Description, Additional Commodity Description (ZLI) Unit of Measure Codes (ZCC) Delivery Warehouse Description, Address (IWX) Item Notes (ZNT) Purchase Order Notes (ZNT) Vendor Notes (ZNT)

Document	Source for language	MLS data printed
PUR528W	Vendor (AVM.VMLANG), if blank print base language	Vendor Name (AVX) Purchasing Contact Name, Address (AVX) Item Description, Commodity Description (ZLI) Unit of Measure Codes (ZCC) Delivery Warehouse Description, Address (IWX) Item Notes (ZNT) Vendor Notes (ZNT)
PUR551B Receiver Ticket	Warehouse (IWM.WMLANG) if blank print base language	Vendor Name (AVX) Item/Commodity Description (ZLI) Extra Item/Commodity Description (ZLI) Alt U/M (ZCC) Item Notes (ZNT) Vendor Notes (ZNT) Purchase Order Notes (ZNT) Purchase Order Line Notes (ZNT)
WHM531B Picking List	Warehouse (IWM.WMLANG) if blank print base language	Customer Name (RCE) Item Description (ZLI) Customer Notes (ZNT) Ship To Notes (ZNT) Item Notes (ZNT) Order Notes (ZNT)
WHM533B Pallet List	Warehouse (IWM.WMLANG) if blank print base language	Item Description (ZLI)
WHM537B Dispatch Label Print	Warehouse (IWM.WMLANG) if blank print base language	Ship To Customer Address (ECN)

Selecting auto create options

Use Auto Create Language Record Maintenance (SYS091D) to automatically copy records to the corresponding extension file each time you create a master file record or reactivate an existing record. The data that is copied is in the base language and requires translation.

You can also automatically copy records in the UDF files. SYS091D copies the field descriptions and sequence descriptions that were defined in User File Literal Maintenance, SYS108D1. At this time, Infor LX does not support translation of the data that is entered in the user-defined fields.

To set up the auto creation of language records:

1 Access Auto Create Language Record Maintenance (SYS091).

2 Specify this information:

Act

To auto create language records, specify 1=Create. Use 3=Copy to copy a record from one language to another or to create additional records in the same language.

File

Specify the number of the extension file. Infor LX includes these extension files:

- 001 - Customer Master MLS File (RCE)
- 002 - Customer Address MLS File (ESX)
- 003 - Vendor Master MLS File (AVX)
- 004 - Purchase Ship From/To MLS File (ESX)
- 005 - Warehouse MLS File (IWX)
- 007 - Bank Master MLS File (ABX)
- 008 - Vendor Terms MLS File (AVE)
- 009 - Customer Terms MLS File (REX)
- 010 - Company MLS File (ROX)
- 011 - Segment Value Translated Description (GST)
- 012 - Currency MLS File (GCX)
- 013 - Item Master MLS File (ZLI)
- 014 - Item Class MLS File (ICX)
- 015 - Freight Terms MLS File (LFX)
- 016 - Country Code MLS File (LNX)
- 017 - Commodity/Special Chrg MLS File (ZLI)
- 018 - Bank Branch MLS File (OBX)
- 019 - Cartera Bank/Collectors MLS File (CARBX)
- 020 - Specification/Test Extension File (ZLS)
- 021 - Order Class MLS (EOX)
- 025 - Customer Item X-Ref MLS File (EXM)
- 027 - Routing Description MLS File (FRX)
- 028 - Shop Order Routing MLS File (FOX)
- 029 - Salesperson Master MLS File (SSX)

These files do not have separate MLS extension files. Additional language records for MLS translations are created in the master files.

- 006 - ZCC Language Codes (ZCC)
- 022 - User File Literal Header MLS (ULH)

- 023 - User File Literal Detail MLS (ULD)
- 024 - User File Sequence MLS (USF)
- 026 - Notes MLS File (ZNT)

Lang

Specify the language code for translation. The language code must be defined in SYS825D1 with a Language Usage value of 2=Multi Language Support or 3=Both.

For future Infor Development Framework (IDF) multi-language applications, we recommend that you create a blank Language record. Enter Language Code '***' for the IDF Language record. This record is maintained automatically by Infor LX, and it will contain an exact copy of the base language data in the master file. No maintenance or review by the translators is required. Do not create a blank language record for extension file 006; the Base and Language records share the same file, ZCC.

Code Table ID

If the extension file (006) is for a code table, specify a code table that is valid in the ZCT file. To create copies of all the code tables for the language you chose in the Lang field, enter ********. This entry is a Create All instruction. To override the Create All instruction for a particular code table, specify a Table ID. To override the Create All instruction for a particular code table and for all languages, do not enter a language. See the examples below.

Example 1   Create a Chinese language record for all code tables.

Field	Entry
Act	1=Create
File	006
Lang	CHS
Code Table ID	********

Example 2   Create a French language record only for the UNITMEAS code table.

Field	Entry
Act	1=Create
File	006
Lang	FRE
Code Table ID	UNITMEAS

Example 3   Exclude the UNITMEAS code table from all language records that otherwise would have been created by Table ********.

Field	Entry
Act	1=Create

Field	Entry
File	006
Lang	
Code Table ID	UNITMEAS

3 Press **Enter**. When new records are created in the master file or code table, the records are copied to the corresponding file.

4 If you are implementing MLS and you have existing master file data to copy to the extension files, use F14=Mass Create to display the Mass Create Language Records, SYS092D-01 screen. See "Mass creating language records."

Mass creating language records

To implement MLS, you can mass create the language records for the existing data in your master files and code tables. The mass create program creates simple copies of the master file data in a new MLS language record which is labeled, for example, Spanish. At this point, the Spanish record does not contain any data that is in Spanish. A linguist must use the language override programs to enter the translation from the base language into the MLS language.

The mass create program copies only active master file records.

After you run the Mass Create program for a particular file and language combination, the *Processed* field, on the Auto Create Language Record Maintenance screen (SYS091D-01), has a value of **1**. If a rerun is required, you can delete the previous record, setting the *Processed* field to **0,** and then re-create it. The Mass Create batch program (SYS092B) will not create duplicates, so there is no risk to processing the same record twice.

Output records are written to the Mass Create Audit Report.

After the mass creation, the MLS language records are marked "Review Required" to indicate that they are ready for translation.

To mass create the language records:

1 Access Mass Create Language Records (SYS092D) from a menu or from SYS091D. The system displays the Mass Create Language Records screen, SYS092D-01.

2 Enter this information:

File

Specify the extension file, or a range of extension files.

Code Table ID

If you entered file 006, or a range that includes file 006, specify a code table ID, or a range of IDs.

Language

Specify the language for the extension file. Leave the field blank to mass create the extension files records in all languages defined in SYS825D1.

Run Time Parameter

Specify Interactive to process the data in real time or Batch to process the data in the job queue. If you specify interactive processing, your session is unavailable for other tasks until the job finishes.

3 Press Enter to process the job to mass create the data records.

Notes

Chapter 3   Using MLS

3

Translating master file data

To provide internal users, customers, and vendors with information in their own languages, you must translate the information in your master files. Infor LX includes language override programs that you use to maintain the translations. New records are flagged as "Review Required". Linguists who are familiar with your business should be designated to regularly review new master file records for required translation into their language.

See Chapter 1 for a list of the master file programs and the corresponding language override program.

Translating item master data

You can access language override programs from a menu and from within the master file maintenance program. The Item Master Maintenance (INV100D1) and Item Master Language Override (INV118D) screens are used in this example.

To translate master file data:

1 Access Item Master Selection, INV100D1-01.

Figure 3-4: Item Master Selection, INV100D1-01

2 Specify action 14=Language Override next to a record and press Enter.

Figure 3-5: Item Language Override screen, INV118D-01

3 The screen displays the items and their descriptions from the Item Master MLS file (ZLI). Items with status "Review Required" have not been translated. If the item that you want to translate is not in the list, use 1=Create to add a record. In this example, you would select an Item Master record (IIM) and create the corresponding MLS record (ZLI).

To translate a record, specify 2=Revise. The system displays the Item Language Master Maintenance screen.

Figure 3-6: Item Language Master Maintenance screen

4 The information in the master file (IIM) is displayed at the top of the screen. Enter your translation in the fields at the bottom of the screen. If the record that you are translating includes a short

description field, enter a short description. Translation of short descriptions is required for MLS users.

5 Press Enter to save your entries. The Review status changes to Active.

Printing master file lists in multiple languages

The master file list programs include an override option that allows you to specify the languages to appear on the report. The Company Master Listing screen is used in this example.

To print a master file list:

1 Access Company Master Listing, ACR125D-01.

Figure 3-7: Company Master Listing, ACR125D-01

2 Specify this information:

Company

Specify a range of companies to include in the report.

Override Print Options

Specify a print option:

Print Option	Description
0	Print the report in the master file (base) language.
1	Print the report in the language of the user who submits the job.
2	Print the company information in the language assigned to the company in ACR120D.
3	Print the company information in a specific language. Specify the language.
4	Print the company information in all available languages

If you select option 1 or 2, but a language record does not exist, the system prints the information from the master file.

If you select option 3 or 4, but a language record does not exist, the report does not include data for that record.

Run Time Parameter

Specify Interactive to process the data in real time or Batch to process the data in the job queue. If you specify interactive processing, your session is unavailable for other tasks until the job finishes.

3 Before you submit the job, verify that your printer supports the languages that you select for the report. Press Enter.

Translating user-defined descriptions

If you use the UDF feature to create user-defined fields, you can translate the field descriptions to provide your internal users with screens in their own languages. Use User Defined Field Language Override, SYS114D1, to enter translations of the field descriptions. Use User File Literal Maintenance, SYS108D1, to enter translations of the file and sequence descriptions.

You can use SYS091 to automatically create the language records every time that you add a file, sequence, or field description. See "Setup."

Translating field descriptions

To enter the translation of a field description:

1 Access User Defined Field Language Override, SYS114D1, either from SYS108D2-02 or from a menu.

Figure 3-8: User Defined Field Language Override, SYS114D1-01, called from a menu

2 Optionally, use F13=Filters to select filter and sort options. Specify 2=Revise next to a field description.

Figure 3-9: User Defined File Field Description Maintenance Window

3 In the Field Literal field, enter the translation of the field description.

4 Press Enter.

5 When you return to the SYS114D1-01 screen, use F5=Refresh to change the status of the record.

Translating file descriptions

To enter the translation of a file description:

1 Access User File Literal Maintenance, SYS108D1.

Figure 3-10: User File Literal Maintenance, SYS108D1

2 Optionally, use F13=Filters to select filter and sort options. Specify 2=Revise next to a record. Records with status Review Required have not been translated.

Figure 3-11: User File Description Window

3 Specify the translation of the file description.

4 Press Enter.

Translating sequence descriptions

To enter the translation of a sequence description:

1 Access User File Literal Maintenance, SYS108D1.

2 Specify 9=Select next to a record.

Figure 3-12: User Field Sequence Selection

3 Optionally, use F13=Filters to select filter and sort options. Specify 2=Revise next to a record. Records with status Review Required have not been translated.

4 Specify the translation of the sequence description and press Enter.

Printing item descriptions in multiple languages

Item descriptions can be the most useful information to translate into multiple languages. Pickers can easily verify that they are picking the correct items if they can read the description in their own language. Workers who package orders can verify that the contents are correct if they can read the

item descriptions on the packing list. Workers on the receiving dock can verify an incoming shipment against a receiving ticket that shows the item descriptions in their own language.

To translate item descriptions into multiple languages:

1 Identify the item descriptions that require translation and the languages into which they will be translated.

2 Translate the descriptions as described in "Translating master file data."

3 Identify the documents and screens that you want to show the translated descriptions. See "Assigning language codes" in chapter 2 for a list of documents and the master file that controls the language on the document. For example, the language on the vender master record (AVM) determines the language shown on purchase orders for that vendor.

4 Update the master file records to use the correct language code.

Use this same process to provide translations of other information, for example, payment terms descriptions and freight terms descriptions.

Notes

Appendix A Invariant Character Set

A

If multiple NLV languages share a database, characters in the Invariant Character set are the only characters that can be safely entered into the master files. The Invariant Characters appear the same to all users, no matter which code page is used to view them. Any other characters will appear incorrectly when a user with a different language CCSID views the characters.

The Invariant Character set is fully documented in Appendix B of the IBM Redbook sg242154 found at this link: http://www.redbooks.ibm.com/redbooks/pdfs/sg242154.pdf

Description	Graphic character	Description	Graphic character
Latin small letter a	a	Arabic number zero	0
Latin capital letter A	A	Arabic number one	1
Latin small letter b	b	Arabic number two	2
Latin capital letter B	B	Arabic number three	3
Latin small letter c	c	Arabic number four	4
Latin capital letter C	C	Arabic number five	5
Latin small letter d	d	Arabic number six	6
Latin capital letter D	D	Arabic number seven	7
Latin small letter e	e	Arabic number eight	8
Latin capital letter E	E	Arabic number nine	9
Latin small letter f	f		
Latin capital letter F	F		
Latin small letter g	g	Plus sign	+
Latin capital letter G	G	Less than sign	<
Latin small letter h	h	Equal sign	=
Latin capital letter H	H	Greater than sign	>
Latin small letter i	i	Percent sign	%

Description	Graphic character	Description	Graphic character
Latin capital letter I	I	Ampersand	&
Latin small letter j	j	Asterisk	*
Latin capital letter J	J	Straight double quote	"
Latin small letter k	k	Straight single quote	'
Latin capital letter K	K	Left parenthesis	(
Latin small letter l	l	Right parenthesis	)
Latin capital letter L	L	Comma	,
Latin small letter m	m	Underscore	_
Latin capital letter M	M	Hyphen	-
Latin small letter n	n	Period	.
Latin capital letter N	N	Forward Slash	/
Latin small letter o	o	Colon	:
Latin capital letter O	O	Semicolon	;
Latin small letter p	p	Question mark	?
Latin capital letter P	P		
Latin small letter q	q		
Latin capital letter Q	Q		
Latin small letter r	r		
Latin capital letter R	R		
Latin small letter s	s		
Latin capital letter S	S		
Latin small letter t	t		
Latin capital letter T	T		
Latin small letter u	u		
Latin capital letter U	U		
Latin small letter v	v		
Latin capital letter V	V		
Latin small letter w	w		
Latin capital letter W	W		

Description	Graphic character	Description	Graphic character
Latin small letter x	x		
Latin capital letter X	X		
Latin small letter y	y		
Latin capital letter Y	Y		
Latin small letter z	z		
Latin capital letter Z	Z		

Notes

Appendix B MLS Files

ABX: Bank Master MLS Address

Base File: ABK Bank Account Master

Language Server: ACP091B

Language Override: ACP141D/B/B1

Field	Description	Unicode (Y/blank)
BXID	Record ID (BX/BZ)	
BXCMPY	Company Number	
BXBANK	Bank Code	
BXCURR	Currency Code	
BXLANG	Language	
BXNAME	Bank Name	Y
BXCONN	Contact Name	Y
BXADR1 to R6	Address Line 1 to 6	Y
BXNAMR	Bank Name Review Flag	
BXCONR	Contact Name Review Flag	
BXADRR	Address Review Flag	
BXREVR	ABX Record Review Flag	
	Create / Maintain Audit fields	

AVE: Vendor Terms MLS Description

Base File: AVT Vendor Terms Master

Where Used: Purchase Order Print (PUR520B) based on Vendor Language Code. For Requisitions, if Vendor not assigned, use User language code.

Language Server: ACP092B

Language Override: ACP161D/B/B1

Field	Description	Unicode (Y/blank)
VEID	Record ID (VE/VZ)	
VETERM	Terms Code	
VELANG	Language	
VETDSC	Description	Y
VEREVR	AVE Record Review Flag	
	Create / Maintain Audit fields	

AVX: Vendor MLS Address File

Base File: AVM Vendor Master

Where Used:

- Purchase Order Print (PUR520B) and Delivery Note (OLM596B) based on Vendor Language Code.
- Receiver Ticket (PUR551B) based on Warehouse Language Code.
- Purchase Order Entry as default for HPNW for Ship To Type 2.

Language Server: ACP090B

Language Override: ACP110D/B/B1

Field	Description	Unicode (Y/blank)
VXID	Record ID (VX/VZ)	
VXVEND	Vendor Number	
VXLANG	Vendor Language	
VXVNAM	Vendor Name	Y
VXVCON	Vendor Contact Name	Y

Field	Description	Unicode (Y/blank)
VXVAD1 to D6	Vendor Address Line 1 to 6	Y
VXVNMR	Vendor Name Review Flag	
VXVCNR	Vendor Contact Review Flag	
VXVADR	Vendor Address Review Flag	
VXPCON	Purchasing Contact Name	Y
VXPAD1 to D6	Purchasing Address Line 1 to 6	Y
VXPCNR	Purchasing Contact Review Flag	
VXPADR	Purchasing Address Review Flag	
VXREVR	AVX Record Review Flag	
	Create / Maintain Audit fields	

CARBX: Bank/Collectors MLS Address

Base File: CARBM Bank/Collectors Master File

Language Server: ACP093B

Language Override: ACP142D/B/B1

Field	Description	Unicode (Y/blank)
BXID	Record Id (BX/BZ)	
BXCOMP	Company Number	
BXCODI	Bank Code	
BXCURR	Currency Code	
BXLANG	Language Code	
BXNAME	Bank Name	Y
BXAD1	Address Line 1	Y
BXAD2	Address Line 2	Y
BXNAMR	Bank Name Review Flag	
BXADRR	Address Review Flag	
BXREVR	CARBX Record Review Flag	
	Create / Maintain Audit fields	

ECN/ECNW: Customer Order MLS Address

Base Files: ECH Customer Order Header, EQH Order Quote Header, ERH RMA Header, and BBH Billing Release Header

Where Used:

- Ship To Address in Acknowledge Print (ORD508B) using Ship To Customer / Number Language code.
- Customer Purchase Order Number in Packing List Print (OLM591B), using Ship To Customer/Number Language code.
- Pick Slip Print (ORD550B1) and Dispatch Label Print (WHM537B) using the Warehouse Language code.
- Invoice (BIL550B/BIL552B/BIL555B) using Invoice To Customer/Number Language code.
- Ship To Address in HPNW for Drop Ship Purchase Orders, Ship To type '5'.

Language Server: ORD091B

Language Override: ORD765D/B/B1

Field	Description	Unicode (Y/blank)
CNTYOR	'0' Order, '1'Quote, '2'RMA	
CNORDN	Order Number	
CNLANG	Language	
CNSNAM	Ship To Name	Y
CNSATN	Ship To Attention Of	Y
CNSAD1 to 6	Ship To Address Line 1 to 6	Y
CNNAMR	Ship To Name Review Flag	
CNATNR	Ship To Attention Review Flag	
CNADRR	Ship To Address Review Flag	
CNHCPO	Customer PO Number	Y
CNCPOR	Customer PO Number Review Flag	
CNREVR	ECN Record Review Flag	
	Create / Maintain Audit fields	

EOX: Order Class MLS File

Base File: EOC Order Class Master File

Where Used: Programs in which the order class description is displayed.

Language Server: ORD093B

Language Override: ORD170D/B/B1

Field	Description	Unicode (Y/blank)
OXID	Record ID (OZ/OZ)	
OXOCLS	Order Class	
OXLANG	Language	
OXOCDS	Description	Y
OXREVR	EOX Record Review Flag	

ESX: EST MLS Override Address File

Base File: EST Customer/Vendor Ship To

Where Used:

- Customer Order Entry as default for ECNW when Ship To not 0 and in Purchase Order Entry as default for HPNW for Ship To type 0.
- Bill To Name in Order Acknowledgement (ORD508B) using Ship To Customer/Number Language code.
- Invoice To Customer/Number Address in Invoice Print (BIL550B/BIL552B/BIL555B) using Invoice To Customer / Number Language code.
- Ship From address in Delivery Note (OLM596B) based on Vendor Language Code.

Language Server: ORD090B

Language Override: ORD101D/B/B1 and PUR131D

Field	Description	Unicode (Y/blank)
SXID	Record ID (SX/SZ)	
SXCUST	Customer Number	
SXSHIP	Ship To Number	
SXADTP	Address Type	
SXLANG	Language	
SXSNAM	Ship To Name	Y
SXATNM	Attention To Name	Y
SXSAD1 to D6	Address Line 1 to 6	Y

Field	Description	Unicode (Y/blank)
SXSNMR	Ship To Name Review Flag	
SXATNR	Attention To Review Flag	
SXSADR	Address Review Flag	
SXREVR	ESX Record Review Flag	
	Create / Maintain Audit fields	

EXM: Customer Item X-Reference

Base File: EXM

Where Used: Packing List Print (OLM591B)

Language Server: ORD094B

Language Override: ORD151D

Field	Description	Unicode (Y/blank)
XMID	Record ID	
XMITEM	Customer Item Number	
XMPROD	Internal Item Number	
XMCUST	Customer Number	
XMSHIP	Ship to Number	
XMCVFL	Type-Customer/Vendor/Synonym	
XMLANG	Language	
XMDESC	Item X-Ref Description	
XMDESR	X-Ref Description Review Required	
XMDES2	Additional X-Ref Description	
XMDS2R	Additional Desc Review Required	
	Create / Maintain Audit fields	

FOX: Shop Order Routing MLS Description

Base File: FOD

Where Used:

- Shop Packet Print (JIT522B)
- Shop Labor Tickets Print (SFC510B)
- Shop Order Print (SFC560B)
- Dispatch List (SF230B)
- JIT Production Reporting (JIT621B)
- Shop Order Production Reporting (SFC652B/SFC654B)
- Production Posting and Update (SFC620B)

Language Server: SFC490B

Language Override: SFC511D

Field	Description	Unicode (Y/blank)
OXID	Record ID	
OXORD	Shop Order Number	
OXOPNO	Operation	
OXLANG	Language	
OXOPDS	Operation Description	Y
OXOPD2	Operation Description 2	Y
OXOPDR	Operation Description Review Flag	
OXREVR	FOX Record Review Flag	
	Create / Maintain Audit fields	

FRT: Routing Master MLS Description

Base File: FRT

Where Used: Shop Order Entry/Maintenance (SFC500) and other production order creation programs

Language Server: SFC090B

Language Override: SFC105D

Field	Description	Unicode (Y/blank)
RXID	Record ID	
RXPROD	Product Number	
RXWHS	Warehouse (holds Facility)	
RXRTEM	Routing Method Code	
RXOPNO	Operation	
RXLANG	Language	
RXOPDS	Operation Description	Y
RXOPD2	Operation Description 2	Y
RXOPDR	Operation Description Review Flag	
RXREVR	FOX Record Review Flag	
	Create / Maintain Audit fields	

GCX: Currency Code MLS Address

Base File: GCM Currency Code Master File

Where Used: Currency description in Invoice Print (BIL550B/BIL555B) using Invoice To Customer / Number language code.

Language Server: CLD090B

Language Override: CLD117D/B/B1

Field	Description	Unicode (Y/blank)
CXID	Record ID (CX/CZ)	
CXCURC	Currency Code	
CXLANG	Language	
CXCNTY	Country	Y
CXDESC	Currency Description	Y
CXCNAM	Currency Name	Y
CXCSUB	Currency Subdivision	Y
CXCNTR	Country Review Flag	

Field	Description	Unicode (Y/blank)
CXDESR	Description Review Flag	
CXNAMR	Name Review Flag	
CXSUBR	Subdivision Review Flag	
CXREVR	GCX Record Review Flag	
	Create / Maintain Audit fields	

GST: Segment Value Translated Description

Language Server: CEA090B

Language Override: CEA117D/B/B1

Field	Description	Unicode (Y/blank)
STDESC	Description	Y
STREVR	GST Record Review Flag	
STENUS	Created by User	
STENDT	Created on Date	
STENTM	Created at Time	
STENPG	Created by Program	
STMNUS	Last Maintenance User	
STMNDT	Last Maintenance Date	
STMNTM	Last Maintenance Time	
STMNPG	Last Maintenance Program	

HPN/HPNW: Purchase Order MLS Address

Base File: HPH/HPO Purchase Order Header and HPO Purchase Order Detail

Where Used: Ship To Address in Purchase Order and Requisition Print (PUR520) using Vendor Language code or for Requisitions if no Vendor, User language code.

Language Server: PUR091B

Language Override: PUR765D/B/B1

Field	Description	Unicode (Y/blank)
PNID	Record ID (PN/PZ)	
PNTYOR	'0' Order '1'Requisition	
PNORDN	Order Number	
PNLINE	Line Number	
PNLANG	Language	
PNSNAM	Ship To Name	Y
PNSATN	Ship To Attention To	Y
PNSAD1 to D6	Ship To Address Line 1 to 6	Y
PNNAMR	Ship To Name Review Flag	
PNATNR	Ship To Attention Review Flag	
PNADRR	Ship To Address Review Flag	
PNREVR	HPN Record Review Flag	
	Create / Maintain Audit fields	

ICX: Item Class MLS Description

Base File: IIC Item Class Master

Where Used:

- Special Charge Description in Order Acknowledgement (ORD508B) based on Ship To Customer/Number Language code.
- Special Charge Description in Invoice Print (BIL550B/BIL552B/BIL555B) based on Invoice To Customer/Number Language code.

Language Server: INV093B

Language Override: INV161D/B/B1

Field	Description	Unicode (Y/blank)
CXID	Record ID (CX/CZ)	
CXICLS	Item Class	
CXLANG	Language	
CXCDES	Item Class Description	Y
CXREVR	ICX Record Review Flag	
	Create / Maintain Audit fields	

IWX: IWM MLS Override Address File

Base File: IWM Warehouse Master

Where used:

- Warehouse Name in Order Acknowledgement (ORD508B), Packing List (OLM591B) based on Ship To Customer / Number Language code.
- Ship To/From address in Delivery Note (OLM596B) based on Warehouse Language code.
- Warehouse description in BOL (OLM592B1/B2), Manifest (OLM593B), Delivery Note (OLM595B) using the Carrier Language or if blank the Ship To Customer/Number Language code or Customer Language code.
- Delivery Note (OLM595B) based on the Warehouse Language or, if blank, the Ship To Customer/Number Language code or Customer Language code.
- Default for HPNW in Purchase Order Entry if Ship To type is '3' and for HPN in OLM Service PO create (OLM575B3).

Language Server: INV090B

Language Override: INV113D/B/B1

Field	Description	Unicode (Y/blank)
WXID	Record ID (WX/WZ)	
WXWHSE	Warehouse	
WXLANG	Language	
WXDESC	Description	Y
WXCONN	Contact Name	Y
WXAD1 to D6	Address Line 1 to 6	Y

Field	Description	Unicode (Y/blank)
WXDESR	Description Review Flag	
WXCONR	Contact Name Review Flag	
WXADRR	Address Review Flag	
WXREVR	IWX Record Review Flag	
	Create / Maintain Audit fields	

LFX: Freight Terms MLS Description

Base File: LFT Freight Terms Master

Where used:

- Delivery Note Invoice Print (BIL555B) based on Invoice To Customer/Number Language code.
- BOL Print (OLM592B1/B2) and Manifest Print (OLM593B) based on the Carrier Language and if blank, the Ship To Customer / Number Language code.

Language Server: OLM091B

Language Override: OLM116D/B/B1

Field	Description	Unicode (Y/blank)
FXID	Record ID (FX/FZ)	
FXTRMC	Freight Terms Code	
FXLANG	Language	
FXDESC	Description	Y
FXSDSC	Terms Short Description	Y
FXDSCR	Description Review Flag	
FXSDSR	Short Description Review Flag	
FXREVR	LFX Record Review Flag	
	Create / Maintain Audit fields	

LLN/LLNW: Load Shipments MLS Address

Base File: LLX/LLXW Load Shipments

Where used:

- Ship To Address on BOL (OLM592B1/B2), Manifest OLM593B, Delivery Note (OLM595B) using the Carrier Language or if blank Ship To Customer/Number Language.
- Ship To Address on Packing List (OLM591B) using the Ship To Customer/Number Language.

Language Server: OLM090B

Language Override: OLM765D/B/B1

Field	Description	Unicode (Y/blank)
LNSHPM	Shipment Number	
LNORDN	Order Number	
LNIMTR	Intermodal Transfer Number	
LNLANG	Language	
LNCNAM	Ship To Name	Y
LNCONT	Attention To Name	Y
LNADR1 to R6	Ship To Address Line 1 to 6	Y
LNNAMR	Ship To Name Review Flag	
LNATNR	Ship To Attention Review Flag	
LNADRR	Ship To Address Review Flag	
LNREVR	LLN Record Review Flag	
	Create / Maintain Audit fields	

LNX: Country Code MLS Description

Base File: LCN Country Master

Language Server: SYS093B

Language Override: SYS119D/B/B1

Field	Description	Unicode (Y/blank)
NXID	Record ID (NX/NZ)	

Field	Description	Unicode (Y/blank)
NXCNTY	Country Code	
NXLANG	Language	
NXDESC	Description	Y
NXSDSC	Short Description	Y
NXDSCR	Description Review Flag	
NXSDSR	Short Description Review Flag	
NXREVR	LNX Record Review Flag	
	Create / Maintain Audit fields	

OBX: Bank Branch MLS Address

Base File: OBR Bank Branch

Language Server: CSH090B

Language Override: CSH131D/B/B1

Field	Description	Unicode (Y/blank)
BXID	Record ID (BX/BZ)	
BXBNKC	Bank Code	
BXBRNO	Branch	
BXLANG	Language	
BXBKNM	Bank Name	Y
BXADRN	Branch Name	Y
BXATTN	Attention To Name	Y
BXADR1 to R6	Address Line 1 to 6	Y
BXBKNR	Bank Name Review Flag	
BXBRNR	Branch Name Review Flag	
BXATNR	Attention To Review Flag	
BXADRR	Address Review Flag	
BXREVR	OBX Record Review Flag	

Field	Description	Unicode (Y/blank)
	Create / Maintain Audit fields	

RCE: Customer MLS Address

Base File: RCM Customer Master

Where used:

▪ Sold To Address in Order Acknowledgement (ORD508B) and Packing List (OLM591B) using Ship To Customer / Number Language code.

▪ Sold To Address in Pick Slip (ORD550B1) and WHM531B using the Warehouse Language code.

▪ Invoice To and A/R Customer Address in Invoice Print (BIL550B/BIL552B/BIL555B) using Invoice to Customer / Number language code.

▪ Default for HPNW in Purchase Order Entry when Ship To type is '1'.

Language Server: ACR090B

Language Override: ACR101D/B/B1

Field	Description	Unicode (Y/blank)
CEID	Record ID (CE/CZ)	
CECUST	Customer Number	
CELANG	Customer Language	
CECNAM	Customer Name	Y
CECCON	Customer Contact Name	Y
CECAD1	Customer Address Line 1	Y
CENAMR	Customer Name Review Flag	
CECONR	Contact Name Review Flag	
CEADRR	Address Review Flag	
CEREVR	RCE Record Review Flag	
	Create / Maintain Audit fields	

REX: Customer Terms MLS Description

Base File: RTM A/R Terms Master File

Where used: Terms description in Invoice Print (BIL550B/BIL552B/BIL555B) using Invoice To Customer/Number language code.

Language Server: ACR091B

Language Override: ACR111D/B/B1

Field	Description	Unicode (Y/blank)
EXID	Record ID (EX/EZ)	
EXCMPN	Company Number	
EXTERM	Terms Code	
EXLANG	Language	
EXDESC	Terms Description	Y
EXREVR	REX Record Review Flag	
	Create / Maintain Audit fields	

ROX: Company MLS Address

Base File: RCO Company Master File

Where used: Company Address in PO Print (PUR520B) using Vendor Language code or for Requisitions where Vendor is blank, User Language code.

Language Server: ACR092B

Language Override: ACR121D/B/B1

Field	Description	Unicode (Y/blank)
OXID	Record ID (OX/OZ)	
OXCMPN	Company Number	
OXLANG	Language	
OXCNAM	Company Name	Y
OXATTN	Attention To Name	Y
OXADR1 to R6	Ship To Address Line 1 to 6	Y

Field	Description	Unicode (Y/blank)
OXNAMR	Company Name Review Flag	
OXATNR	Attention To Name Review Flag	
OXADRR	Address Review Flag	
OXREVR	ROX Record Review Flag	
	Create / Maintain Audit fields	

SIN: Invoice History MLS Address

Base File: SIH Invoice History

Where used:

- Copy MLS Ship To Address into ECNW when Copying an Invoice to an RMA (ORD706B).
- Ship To address on Invoice Re-print (BIL550B) using Invoice To Customer / Number code.
- Invoice Customer PO Number (BIL501D2)

Language Server: ORD092B

Language Override: None

Field	Description	Unicode (Y/blank)
INID	Record ID (IN/IZ)	
INCOMP	Company	
INDPFX	Customer Number	
INDOCN	Document Number	
INDTYP	Document Type	
INDYR	Document Year	
INLANG	Language	
INSNAM	Ship To Name	Y
INSATN	Ship To Attention Of	Y
INSAD1 to D6	Ship To Address Line 1 to 6	Y
INNAMR	Ship To Name Review Flag	
INATNR	Ship To Attention Review Flag	
INADRR	Ship To Address Review Flag	

Field	Description	Unicode (Y/blank)
INHCPO	Invoice Customer PO Number	Y
INHCPOR	Invoice Customer PO Number Review Flag	
INREVR	SIN Record Review Flag	
	Create / Maintain Audit fields	

SSX: Salesperson Master MLS Address

Base File: SSM Salesperson Master

Where used:

- Primary Salesperson Name on Order Acknowledgment (ORD508B)
- Secondary Salesperson Name on Order Acknowledgment (ORD508B)
- Line level Salesperson Name on Order Acknowledgment (ORD508B)

Language Server: SAL090B

Language Override: SAL101D

Field	Description	Unicode (Y/blank)
SXID	Record ID (SX/SZ)	
SXSAL	Salesperson Number	
SXLANG	Language	
XSNAME	Salesperson Name	Y
SXAD1 to SXAD6	Salesperson Address Line 1 to 6	Y
SXNAMR	Salesperson Name Review Flag	
SXADRR	Address Review Flag	
SXREVR	SSX Record Review Flag	
	Create / Maintain Audit fields	

ZCC: Table Code Master File

Language Server: SYS090B

Language Override: SYS106D/SYS107B

Field	Description	Unicode (Y/blank)
CCALTC	Alternate Code	Y
CCDESC	Description	Y
CCSDSC	Short Description	Y
CCNOT1	Note 1	Y
CCNOT2	Note 2	Y
CCALCR	Review Alternate Code	
CCDESR	Review Description	
CCSDSR	Review Short Description	
CCNOTR	Review Note	
CCREVR	Review Required	

ZLI: Item Language Extension

Language Server: INV091B

Language Override: INV118D/B/B1

Field	Description	Unicode (Y/blank)
LIDSC1	Item Description 1	Y
LIDSC2	Item Description 2	Y
LIFORM	Engineering/Formula Number	Y
LIGTEC	Group Technology Code	Y
LIREF	Reference	Y
LIPKD1	Pack Description 1	Y
LIPKD2	Pack Description 2	Y
LIPKD3	Pack Description 3	Y

Field	Description	Unicode (Y/blank)
LIPKD4	Pack Description 4	Y
LINOT1	Note 1	Y
LINOT2	Note 2	Y
LITYPE	'0'=Item '1'=Cmmdty '2'=SpcChg	
LISDEC	Summary Declaration	Y
LIDSCR	Description Review Flag	
LIGTCR	Group Tech Review Flag	
LIREFR	Reference Review Flag	
LIPKDR	Pack Desc Review Flag	
LINOTR	Note Review Flag	
LISDER	Summary Declaration Review Flg	
	Create / Maintain Audit fields	

ZLS: Specification / Test Extension

Language Server: QMS090B

Language Override: QMS130D/B/B1

Field	Description	Unicode (Y/blank)
LSTDS1	Test Description 1	Y
LSTDS2	Test Description 2	Y
LSTDS3	Test Description 3	Y
LSTDS4	Test Description 4	Y
LSSDS1	Specification Description 1	Y
LSSDS2	Specification Description 2	Y
LSSDS3	Specification Description 3	Y
LSSDS4	Specification Description 4	Y

Field	Description	Unicode (Y/blank)
LSNOT1	Note 1	Y
LSNOT2	Note 2	Y
LSSDS5	Specification Description 5	Y
LSTDSR	Test Description Review Flag	
LSSDSR	Spec Description Review Flag	
LSNOTR	Note Review Flag	
LSREVR	ZLS Record Review Flag	
	Create / Maintain Audit fields	

ZNT: Note Text

The ZNT LX Notes file supports base and multi-language notes.

ZYX: Note Types

The ZYX LX files are created for designated note type languages.

Language Server: SYS094B

Language Override: SYS554D

Field	Description	Unicode (Y/blank)
YXID	Record ID	
YXTYPE	Note Type	
YXLANG	Language	
YXDESC	Note Type Description	Y
YXDSCR	Description Review Required	
YXREVR	ZYX Review Required	
YXENUS	Created By User	
YXENDT	Created On Date	

Field	Description	Unicode (Y/blank)
YXENTM	Created on Date	
YXMNUS	Last Maintained User	
YXMNDT	Last Maintained Date	
YXMNTM	Last Maintained Time	

Internal control files

QEW: Edit Certificate Of Analysis (work file)

QMS programs that move Unicode fields from ZCC/ZLS into and out of QEW handle Unicode.

Field	Description	Unicode (Y/blank)
EWTEXT	Text	Y

ZXL: Auto Create Language Ext File

The ZXL file controls the automatic creation of language records when a new base or primary record is created. For future Infor Development Framework (IDF) multi-language applications, it is recommended that a blank Language record be created by setting the Language code to '***' in this file.

Program SYS091D maintains this file. A mass create display and batch program, SYS092D/B, creates language records for existing master files.

Field	Description	Unicode (Y/blank)
XLFILE	Record File Code	
XLTABL	Code Table Id	
XLLANG	Language	
XLAPRS	Auto Processed	
XLENUS	Created by User	

Field	Description	Unicode (Y/blank)
XLENDT	Created on Date	
XLENTM	Created at Time	

Appendix C Glossary

C

Coded character set identifier (CCSID)

An IBM term that defines, for a given graphical character seen on the user's screen, how this character is stored in the database in hexadecimal format. For example, the hexadecimal value '5B' in UK English CCSID 285 is the character '£' and this same value, '5B,' in US English CCSID 0037 is the character '$'.

On the System i most CCSIDs are EBCDIC CCSIDs and a few CCSIDs are Unicode CCSIDs although the system natively runs in EBCDIC. The size of any given CCSID in EBCDIC is limited to a small number of single-byte positions. To represent Chinese, Japanese, and Korean the double-byte CCSID was created, where bytes are combined in sets of two to allow a way to store and represent more graphical characters.

A written language does not necessarily correspond directly to a CCSID in a one-to-one relationship. For example, most Western European languages (English, Spanish, German, Portuguese, French, and Italian) can be stored in a single CCSID such as 0037 or 937. Languages that contain many hundreds or thousands of graphical characters such as Traditional Chinese, Simplified Chinese, Japanese, and Korean are usually represented in only one EBCDIC CCSID. The CCSIDs for the Asian languages are designed specifically for that language; and these languages cannot share a database with other languages.

Thai, Polish, Norwegian, Swedish, and Russian contain unique letters; the single-byte CCSID has a size limit that prevents these languages from sharing a CCSID.

A single EBCDIC CCSID cannot represent, for example, both Japanese and Chinese, or Korean and Polish, or Norwegian and German. Users who want to share databases between countries where the graphical characters for all the languages do not exist in the same EBCDIC code page must make compromises to accommodate this problem.

EBCDIC code page

The representation schema used on the System i for storing hexadecimal characters in the database.

Invariant character

Graphic characters for which the hexadecimal value representing that character is exactly the same in all IBM EBCDIC code pages. These characters are the only characters recommended for use in populating your master file data so that all users will be able to read the data no matter which job CCSID is used to view the data. See the following IBM website:
http://publib.boulder.ibm.com/infocenter/iseries/v5r3/index.jsp?topic=/nls/rbagsinvariantcharset.htm

Language

The characters that are entered into data fields and that appear on printed documentation or the National Language Versions (NLVs). For each NLV, the Infor LX menus, program screen, and

messages are translated into this language. These translations are contained in separate physical files and message files that reside in the NLV library. Both types of uses of languages in Infor LX are supported and considered in MLS.

Language, base

The language used to enter data in the master file. To use MLS to full advantage, use only invariant characters to enter data in master files.

Language, user

The language defined by the language code assigned to the user profile in Infor LX User Authorization Maintenance (SYS600D1).

Unicode

A representation schema for storing graphical characters in hexadecimal format. The representation is not native EBCDIC, which contains a limited set of single or double bytes of hexadecimal. Instead, Unicode can contain varied and multiple bytes of hexadecimal (4, 8 or 16 bytes to represent a single graphic). There are several types of Unicode.

Unicode is a large enough set of unique hexadecimal code points to represent every written language used in business. Because each graphic is not necessarily one or two bytes long, special coding techniques must be used when dealing with data stored in Unicode. For MLS, Infor LX extension files store data in Unicode, to allow all languages to uniquely store their characters in the same file.

The System i 5250 terminal screens do not support Unicode. To represent characters from a Unicode file on a 5250 session, the characters are converted from Unicode into an EBCDIC CCSID for presentation to the user. A user can only view the Unicode data that can be represented on the 5250 terminal job that was started or created with a specific CCSID.

Variant character

Graphic characters for which the same hexadecimal keystroke value in one code page represents a different graphic character in another code page. This is a restriction of the IBM EBCDIC code page definitions, and not of Infor LX.

Notes