ORACLE®

JD EDWARDS WORLD

JD Edwards World

Language Upgrade and Reference Guide

Version A9.1

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JD Edwards World
Language Upgrade and Reference Guide

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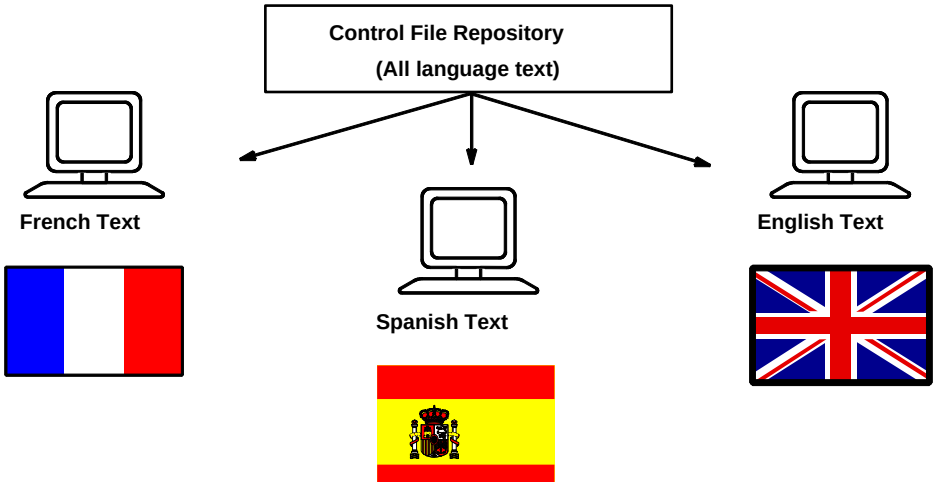
Overview



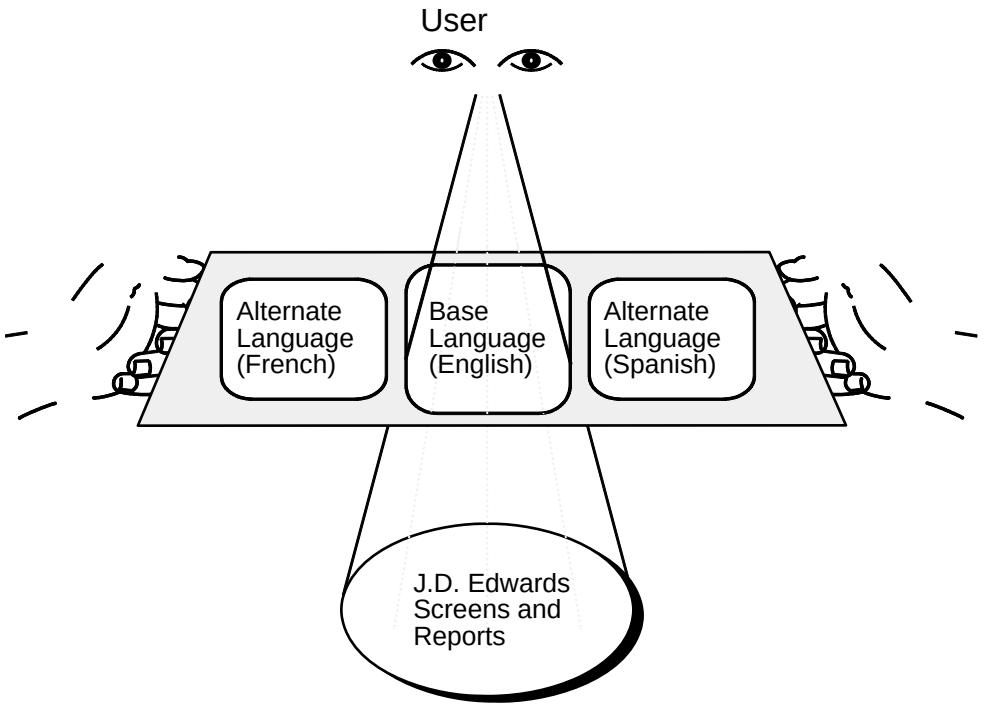
This publication explains:

- How the control file structure in the database works. The process lets you set up and maintain several languages in one database/environment.
- How to install and re-install languages whether you are English based or Non-English base.
- How to change the base (or default) language from JD Edwards World English to a different language.
- How Code Pages affect how data is stored and retrieved within your database.
- How to convert from Single Byte Environment to a Double Byte Environment.

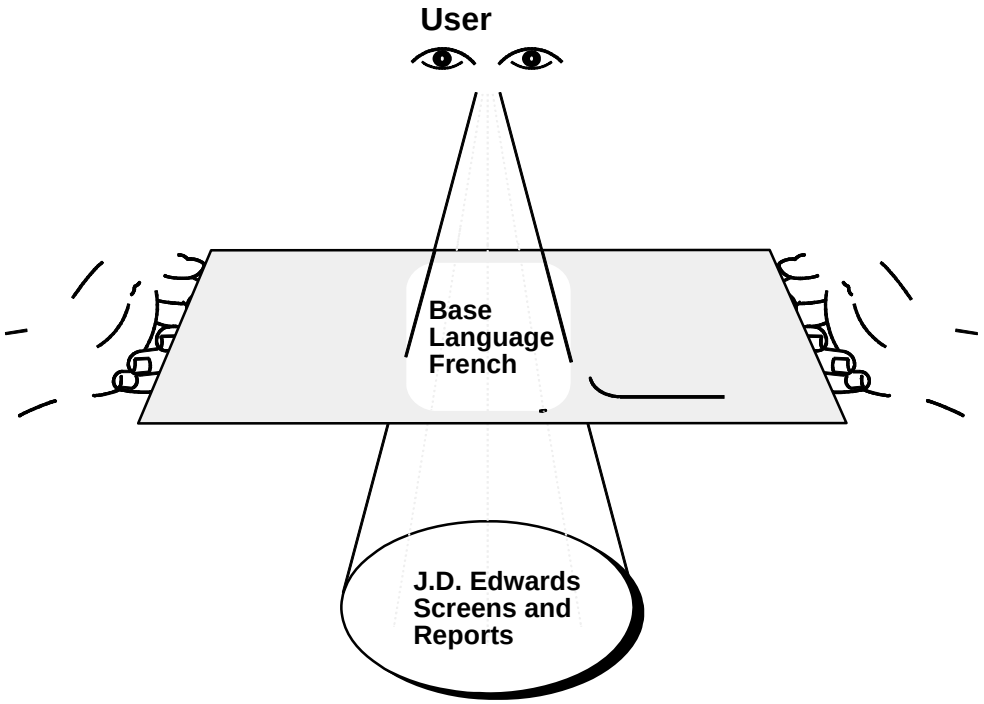
Introduction

Base and Alternate Languages

JD Edwards World software allows you select the language in which you want to view standard JD Edwards World screen and report text. If you make no selection, JD Edwards World software displays the text in the base language, which is standard JD Edwards World English if you do not change the base language.



Non-English Base Language

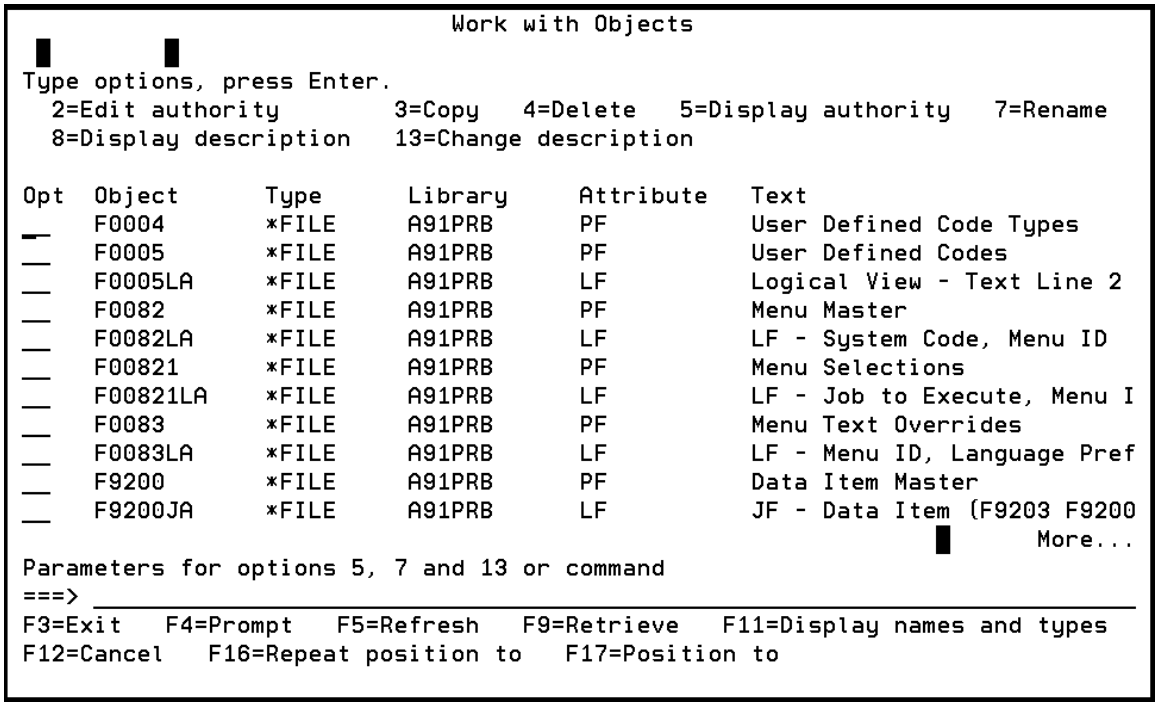


Language Methodology

When JD Edwards World released A9.1 software version, language translations were created for control files only. This consists of DREAM WRITER, Vocabulary Overrides, Menus, Data Dictionary and User Defined Codes. Language updates are downloadable from Customer Connection.

Control files for a specific release are translated into Tier 1 and/or Tier 2 languages. Once translations are complete for a language, the control files are saved into a library named for that language. Example: A91SPA, this is the library identifier for A91 Spanish.

Each of these libraries contains control files only, example:



Language Types

Multinational

**** Multinational base tapes and cumulative libraries expired November 2001. See the Breaking News Bulletin, *Language Support for A7.3 Cumulative Update 13 and 14 and A8.1 Cumulative Update 4 and 5*, on Customer Connection.**

National

The last release of National Language tapes was A7.3 Cumulative Update 13 and A8.1 Cumulative Update 4.

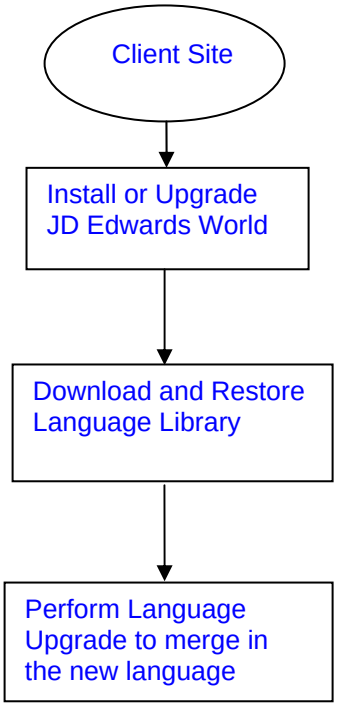
NLS (National Language Support)

037-NLS Language Support is defined as compliance for both JD Edwards and IBM's configurations for National Language Support. This is accomplished by having a database that stores all records at the code page value of 037. The user parameters for CCSID determine how the information will display to the user as well as print.

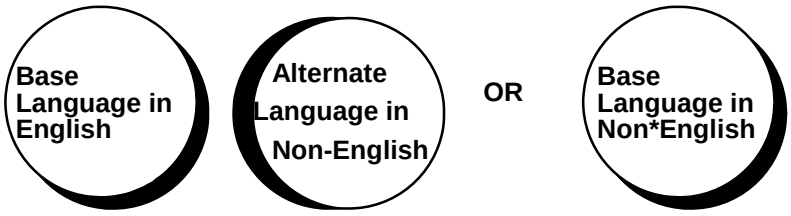
Additional information about IBM's language support can be found in IBM's AS/400 National Language Support - Version 4 (#SC41-5101-00), IBM's Internal Application Development- Version 4 (#SC41-4603-00) or IBM's National Language Support Planning Guide- Version 2(#GC41-9877-03).

Overview of the Language Upgrade Process

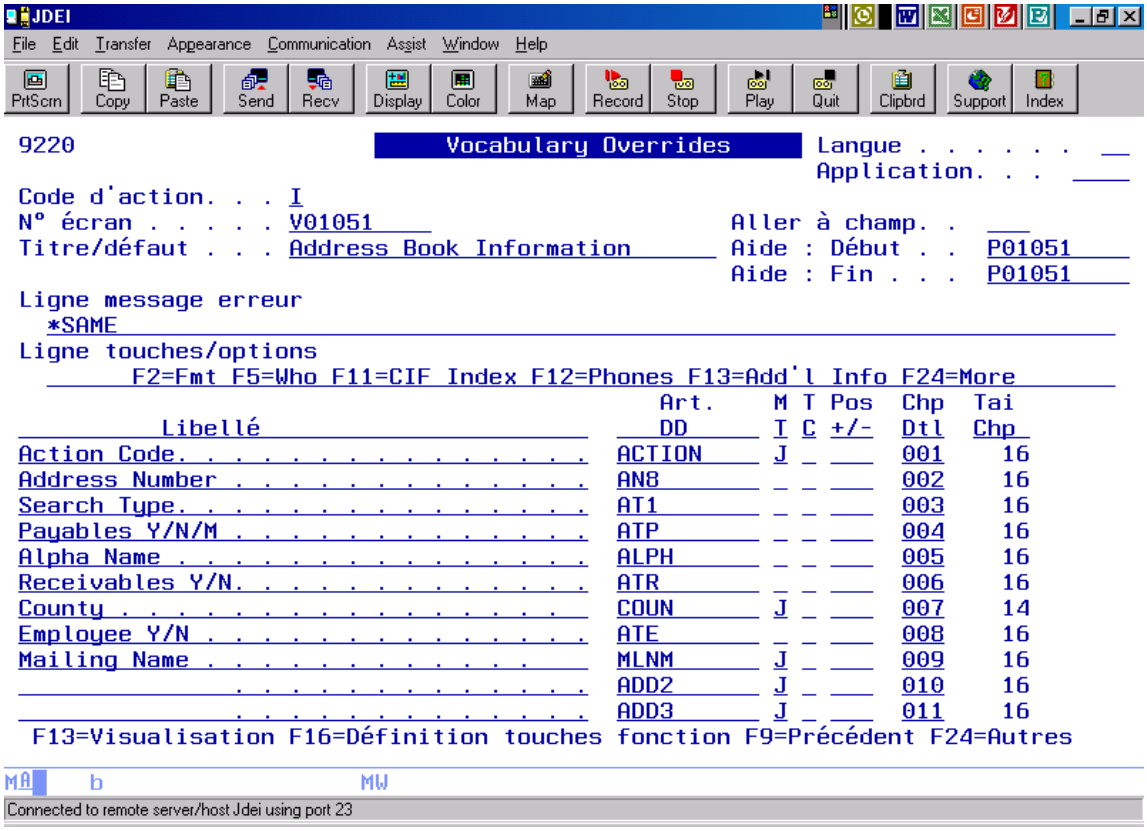
The following illustration shows the flow of the language upgrade process for a customer installing language.



After you install or reinstall JD Edwards World software to the new release level, the text in your control files is in standard JD Edwards World English. This is the base language of your environment. Before you perform the language upgrade to your control files, you must decide whether you want to change the base language to a different language or install a separate alternate language.

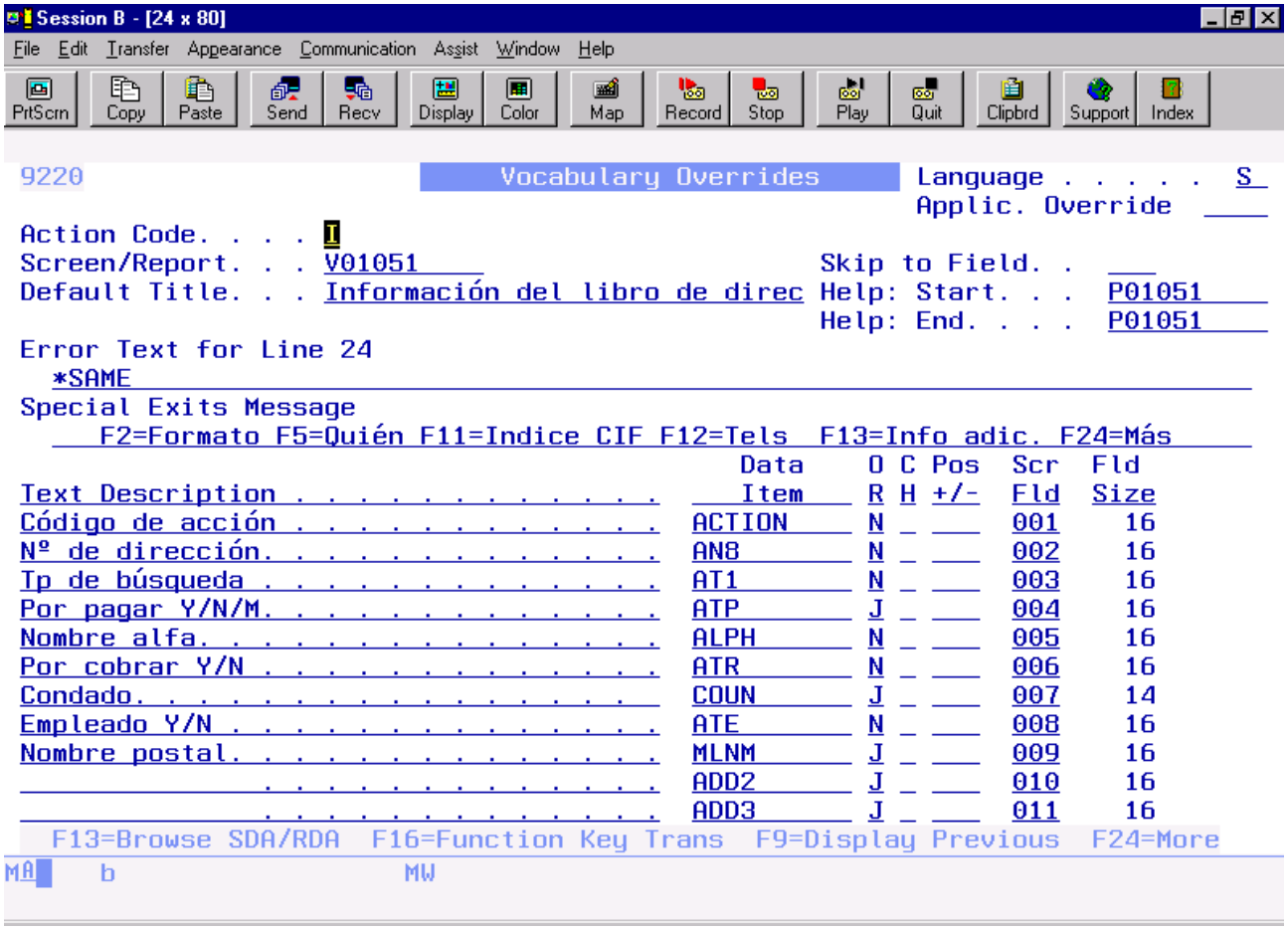


The first Vocabulary Override example is considered the Base Language record because the Language Preference is blank. This record is created during the installation of the JD Edwards World software, not by the language installation:

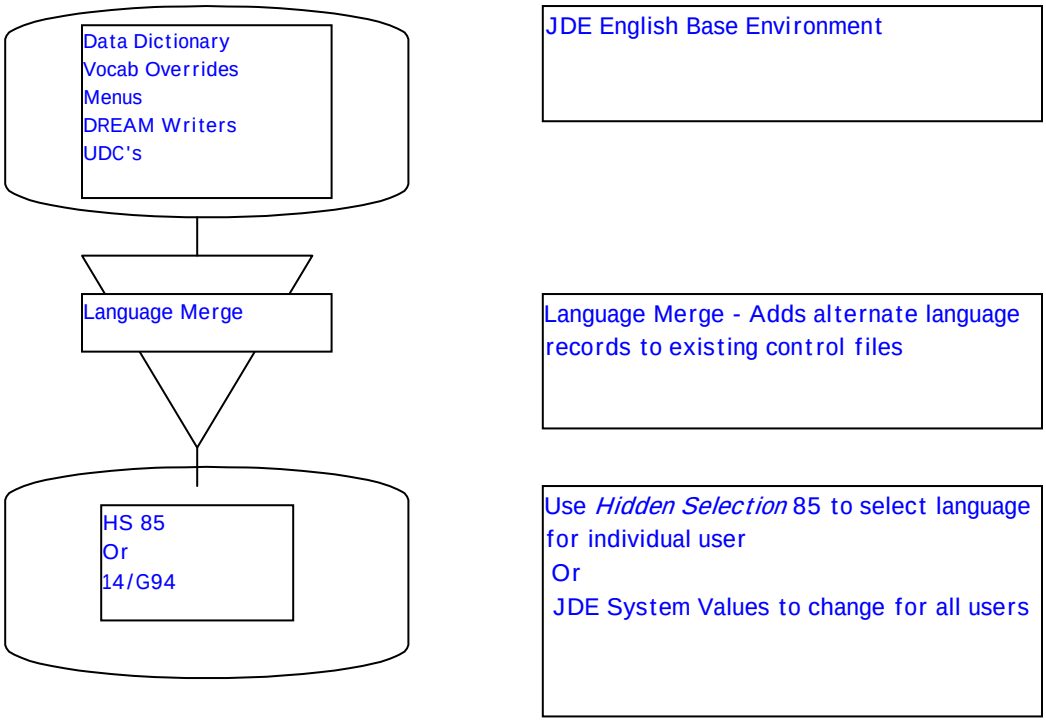


The record with the Language Preference identifier is considered an alternate language. You may have many alternate records if you apply more than one language to your system.

The following example is the Alternate Language record; this is determined by the value in the Language Preference field. This record is created during the language installation:



How the Language Merge Affects the Control Files



The language upgrade affects text fields in the following control files. Records in these files contain a language key:

- Data Dictionary (F9202, F9203, and F9816)
- DREAM Writer (F98301, F98302, F98303, and F98311)
- Menus (F0083)
- User Defined Codes (F0004, F0005, F0004D and F0005D)
- Vocabulary Overrides (F9220)
- Function Keys (F9601D and F9611)

The Automatic Accounting Instruction (AAI) control file (F0012) is not affected by the language upgrade. To translate your AAIs, select Translate AAIs from the General Accounting Setup menu (G0941).

Some control files do not have language keys in their records. They contain only the text for the base language. Alternate language is loaded into alternate language text files. The alternate language text files have records that contain language keys. These files can thus contain several records for each item, such as a UDC type. For example, whereas F0004 contains a record for Code Type CN and a blank for the Language Key (as English is the Base Language), the F0004D file may contain 2 records, one for Code Type CN and Language Key F (for French as the Alternate Language), and another for Code Type CN and Language Key S (for Spanish as the Alternate Language). Each record for an item represents a different language.

The following table shows the control files and the corresponding alternate language text files:

CONTROL FILE DESCRIPTION	CONTROL FILE (Base Language)	TEXT FILE (Alternate Language)
Function Keys	F9611	F9601D
User Defined Code Types	F0004	F0004D
User Defined Code Values	F0005	F0005D

The following sections describe more specifically how the language upgrade handles the various control files in either mode.

Data Dictionary (F9202, F9203, and F9816)

The upgrade of the data dictionary affects the following text fields:

- Column Title
- Row Description

- Alpha Description

- Generic Text Glossary

  For a base language, the upgrade changes the text in these fields to the new language text.

  For an alternate language, the upgrade creates records in the data dictionary control files that are keyed to the language you are installing. These new records contain the new language text. In future releases, these records will be upgraded.

DREAM Writer (F98301, F98302, F98303, and F98311)

The upgrade of the DREAM Writer affects the following text fields:

- Version Title/Optional Report Title

- Processing Option Text and Number

For a base language, the upgrade changes the text in these fields to the language text.

For an alternate language, the upgrade creates text–only records for XJDE and ZJDE versions.

Menus (F0083)

The upgrade of the menus affects the following text fields:

- Menu Title

- Menu Selection Description (fields 1 through 24)

For a base language, the upgrade changes the text in these fields to the new language text.

For an alternate language, the upgrade creates records in the menu control file that are keyed to the language you are installing. These new records contain the new language text. In future releases, these records will be upgraded.

User Defined Codes (F0004, F0005, F0004D and F0005D)

The upgrade of the user defined codes affects the following text fields:

- Code Type Description
- Code Description Value

For a base language, the upgrade changes the text in these fields to the new language text.

For an alternate language, the upgrade places the code type descriptions and code value descriptions for the installed language in the alternate language text file for user defined codes (F0004D and F0005D).

Vocabulary Overrides (F9220)

The upgrade of the vocabulary overrides affects the following text fields:

- Screen/Report Text Description
- Error Text for Line 24 on Videos
- Special Exits Message for Line 24

- Report or Video Default Title
- Video Screen Text Override
- Video Screen Text Column Heading

For a base language, the upgrade changes the text in these fields to the new language text.

For alternate languages, the upgrade creates records in the vocabulary override control files that are keyed to the language you are installing. These new records contain the new language text. In future releases, these records will be upgraded.

Function Keys (F9601D and F9611)

The upgrade of the function keys affects the Row Description field. For a base language, the upgrade changes the text in this field to the new language text. For an alternate language, the upgrade places the row descriptions for the installed language in the alternate language text file for function keys (F9601D). This upgrade is part of the vocabulary overrides upgrade.

SECTION 1:

Language Upgrades for Customers with English as the Base Language

OR

Language Installations for New A91 Installs

Installing/Upgrading a Base or Alternate Language

Use this method to perform the application of a new language if you are:

- A new JD Edwards World client.
- An existing client that currently has JD Edwards World English software only.
- An existing client with English as the base language, and one (or more) alternate language.

  ** For upgrades, any existing language records that you have customized will be replaced.

Language Install

Install or Upgrade (Reinstall) JD Edwards World Software

Be sure you completely install or reinstall your JD Edwards World software to the A91 release level before you follow the other procedures in this chapter.

Back Up Libraries

Back up all JD Edwards World and custom libraries that are part of the environment to which you will perform the language upgrade.

Download the Language Library from the Update Center

Click on the following link to access the document for downloading language libraries to your iSeries http://www.peoplesoft.com/media/en/pdf/soft_dev/world_language.pdf. Alternatively, from the Customer Connection site go to Support, Online Support, JDEdwards World Resource Center, Globalizations (under the Upgrades, Planning & Implementations section), World Globalizations Helpful Hints, and Translations. You will need to go to the Update Center once you obtain your appropriate update number to download. Instructions for restoring the language library to your iSeries are included with the

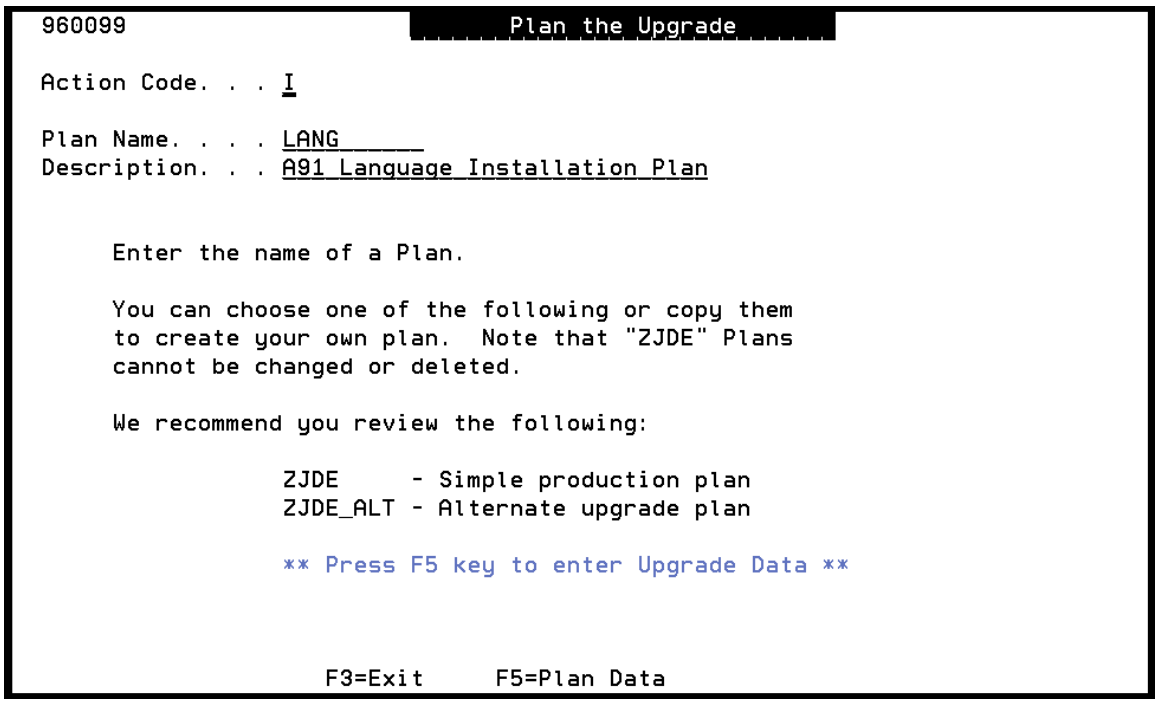
language download. After restoring the download to your iSeries, continue with the instructions below.

Create Upgrade Plan to Perform the Language Upgrade

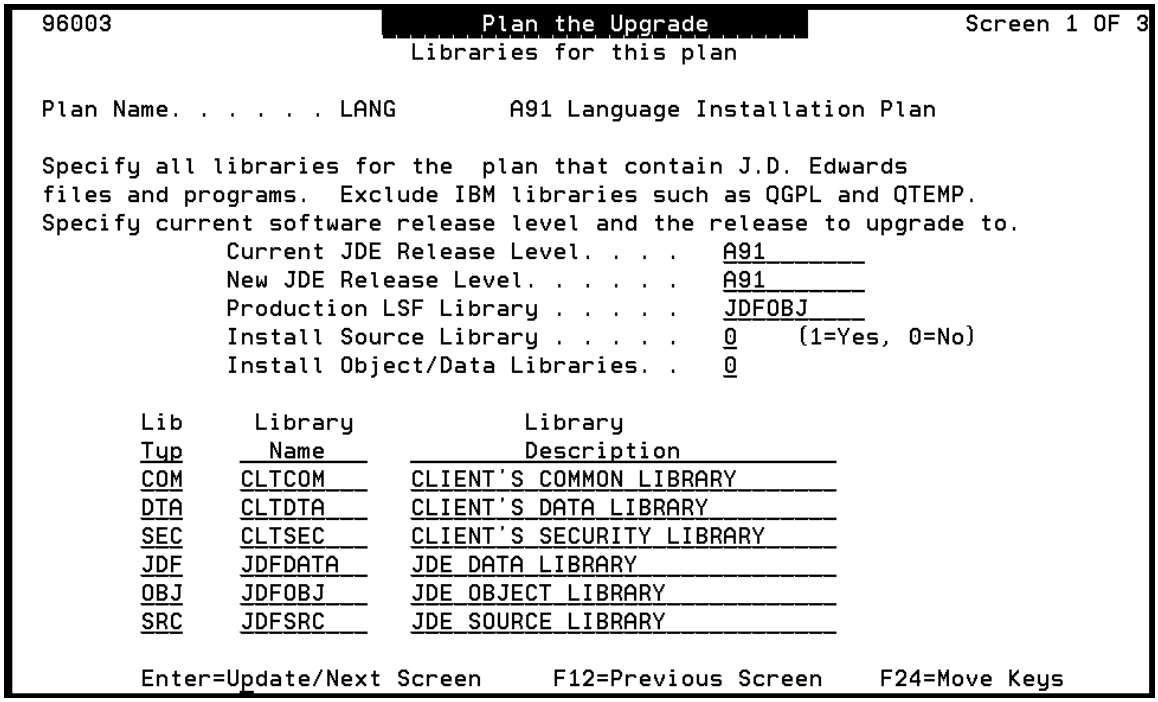
You must create an upgrade plan for merging the new language text into your environment control files. In the plan you will specify the libraries you would like the language records to be merged into.

1. Sign on as JDEINSTAL

The Software Upgrade Menu (A97JDE) appears. Take menu selection 2 for the Upgrade Planner. Inquire on plan ZJDE. Press Enter. Specify an 'A' in the Action Code, then a name for your plan, and a description. Press Enter.

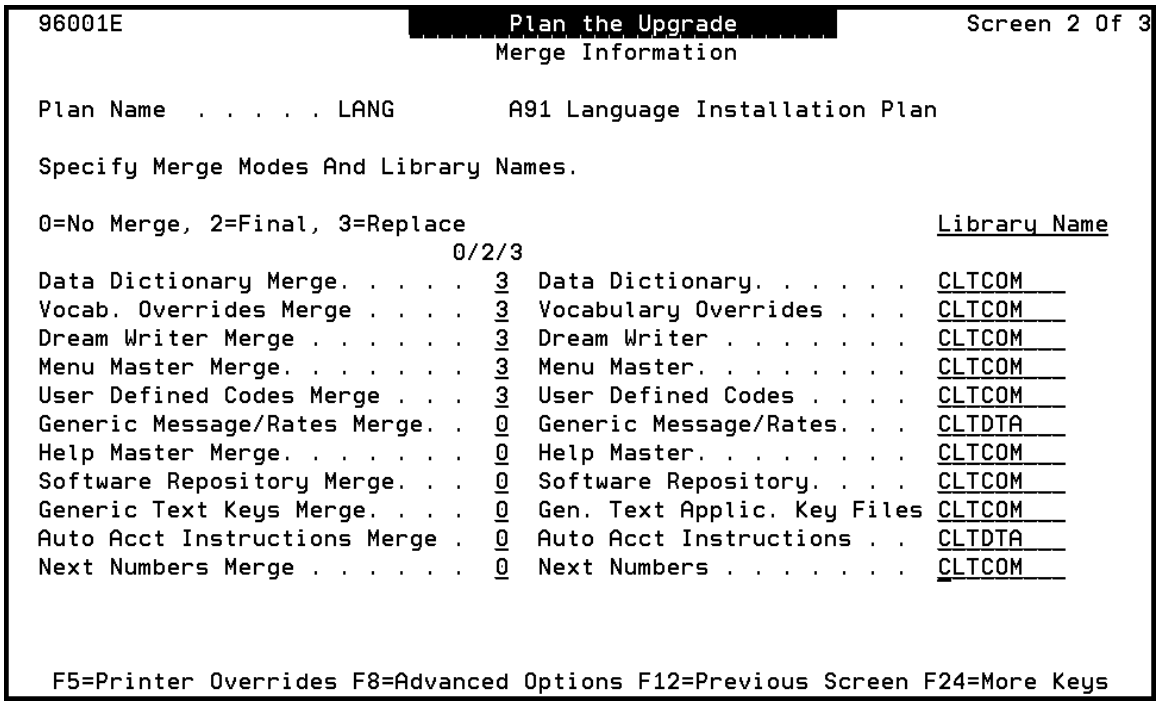


Reinquire on your new plan and press F5. The Libraries for This Plan screen appears.

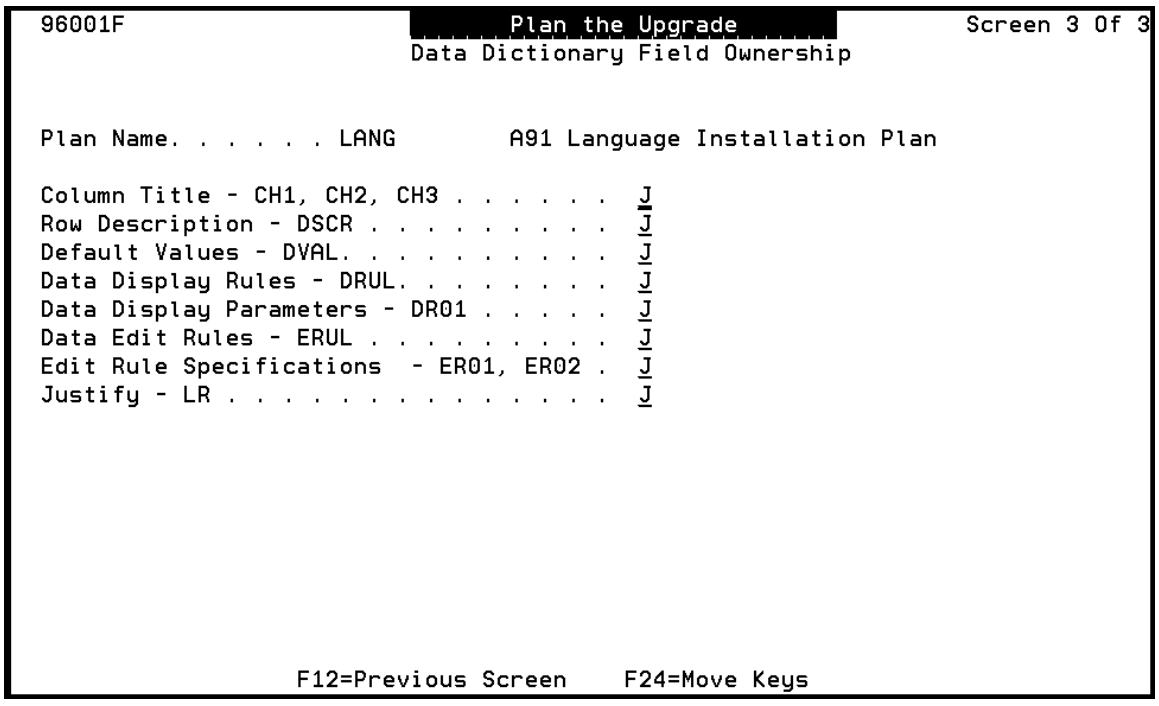


2. Specify A91 in the Current JDE Release Level and New JDE Release Level fields. Specify your object library in the Production LSF Library field. Enter 0 for the Install Source Library and the Install Object/Data Libraries fields. Also, specify your A91 libraries in the Library Name fields for the environment in which you want your language applied.

3. From the Merge Information screen, set the merge modes for data dictionary, vocabulary overrides, DREAM Writer, menus, and user-defined codes to 3 (Replace). Set the other merge modes to 0 (No Merge).



4. The Data Dictionary Field Ownership screen appears. Leave the defaults as they do not affect the language merge. Press Enter.



Once your plan is complete, you may sign off of as JDEINSTAL and sign into the environment that is to have language installed. Do not validate the plan.

Identify Your Language Preference Code (Alternate Languages Only)

To run the language upgrade, you must specify a language by indicating a language preference code if you are installing an alternate language. These codes are stored in the user defined code table 01/LP.

To verify a language preference code:

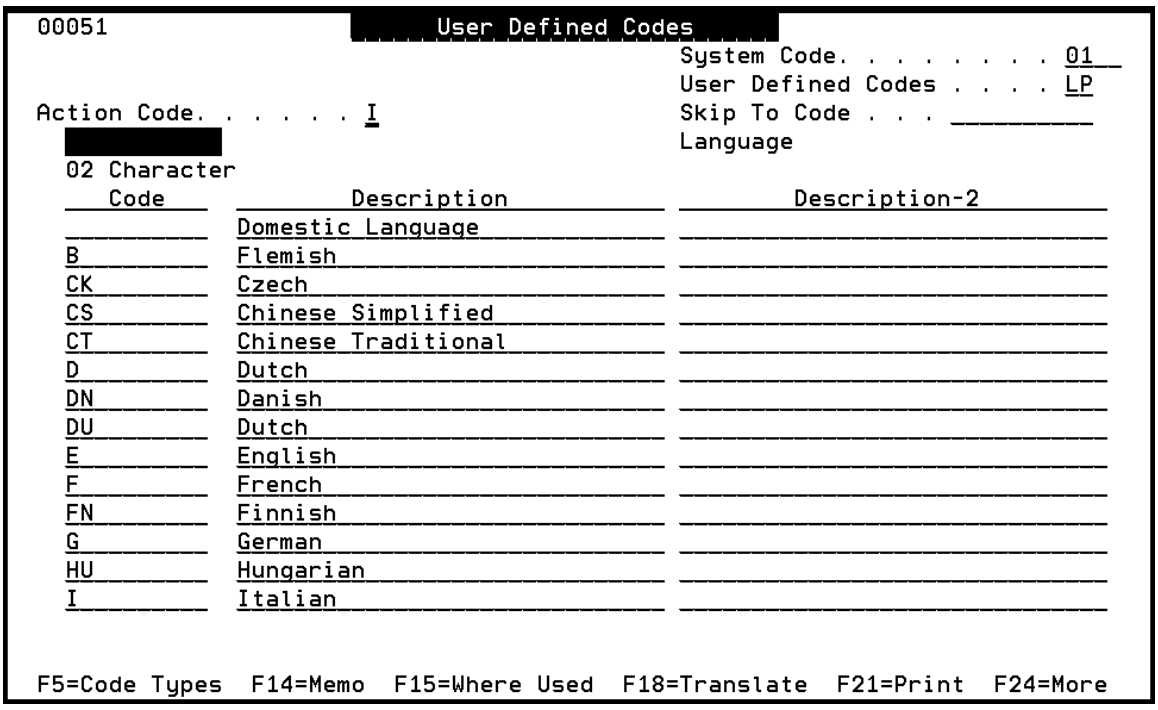
1. Sign on as a user who accesses the production library you want to update.

2. From the Run Time Setup menu (G90), select User Defined Codes.

   The User Defined Codes screen appears.

2. Inquire on Install System Code 01 and User Defined Code LP.

The user defined code table for 01/LP that appears should look similar to the one below. Look for the language you are installing.



If no code exists for the language you are installing, change this screen to include a new language preference code. There is no validation of this code during the language merge, so you may choose any alpha character.

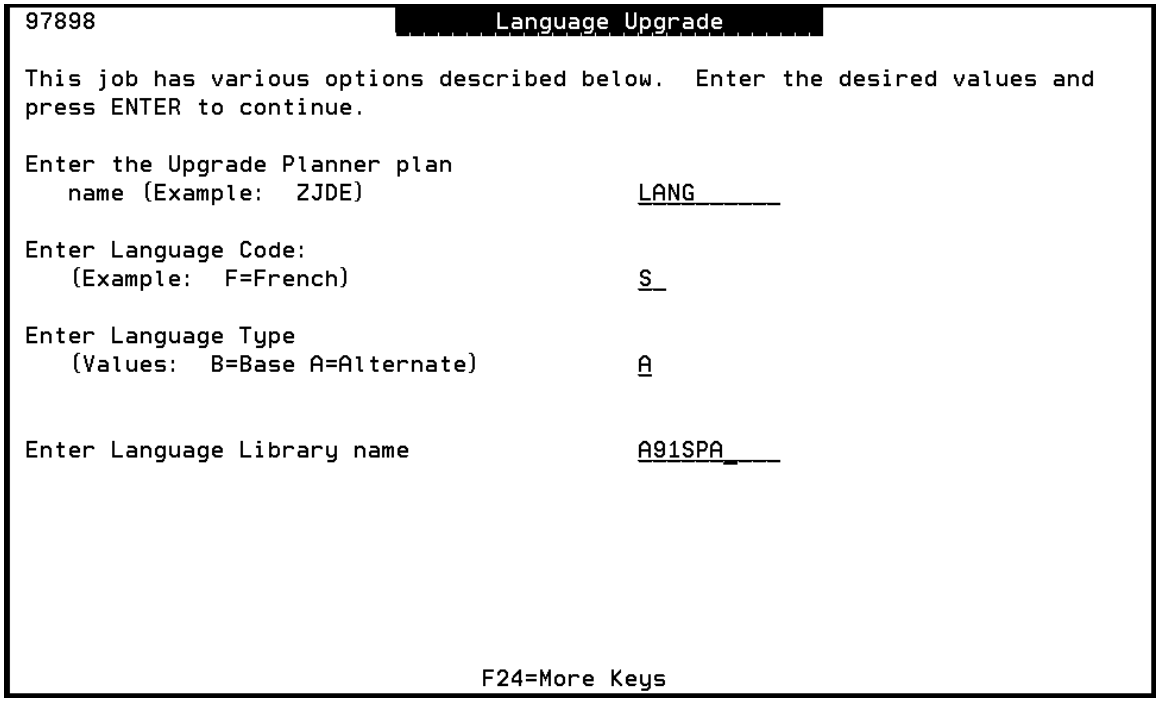
Perform the Language Upgrade

1. Sign into your JD Edwards World environment.

   NOTE: JD Edwards World recommends that you perform the language upgrade in an environment where you are the only profile signed on. Files F98163 and F96163LA are allocated during this process and the merge will fail if these files are not available.

2. From the Merges menu (G97R41), select Language Upgrade.

   The Language Upgrade screen appears.



3. In the Upgrade Planner field, type the name of the upgrade plan you created for the language upgrade.

4. In the Language Code field, type the language preference code that represents the language you are installing. You must leave this field blank if you want to install it as a base language.

5. In the Language Type field, type an A if you want to install it as an alternate language. Type B if you want to install the language as a base language.

   ******IMPORTANT*******:** If you are installing the language as B for base, the language upgrade **permanently overlays** the targeted English text in the control files with the new language text. If you are installing an alternate language, the upgrade creates additional records in your control files that are keyed to the language you installed and loads the new language text into your files as alternate language text.

6. In the Language Library field, type the name of the language library. This is the name of the language library you downloaded.

The process is finished when job J97896 completes. The language upgrade produces several Language Merge Comparison Reports (R97898), which show what has changed in the language records in your control files.

Change the Company Name on Alternate Language Menus

After the language upgrade completes, change the company name that appears at the top of the alternate language menus.

a.. From the Computer Assisted Design (CAD) menu (G92), select Data Dictionary.

The Data Dictionary screen appears.

b.. Inquire on #MENUTTL in the Data Item field.

c.. Press F10 to access the glossary.

d. In the Lang Preference field, enter the letter that represents the alternate language.

In the Description field, change the company name that appears to your company's name.

Installing Multiple Languages in Single Environment

After you have installed one alternate language you may install additional alternate languages.

a. Restore the additional language library.

There is no need to create another plan if the libraries to be updated are the same as the above environment.

b. From the Merges menu (G97R41), select Language Upgrade.

c. In the Upgrade Planner field, type the name of the upgrade plan you created for the language upgrade.

d. In the Language Code field, type the appropriate Language Preference code that represents the next language you are installing.

e. In the Language Type field, type an A for Alternate.

f. In the Language Library field, type the name of the language library. This is the name of the language library you restored.

The process is finished when job J97896 completes. The language upgrade produces several Language Merge Comparison Reports (R97898), which show what has changed in the language records in your control files.

SECTION 2:

Language Upgrades for Customers with Non-English as the Base Language

Who Should Use this Method?

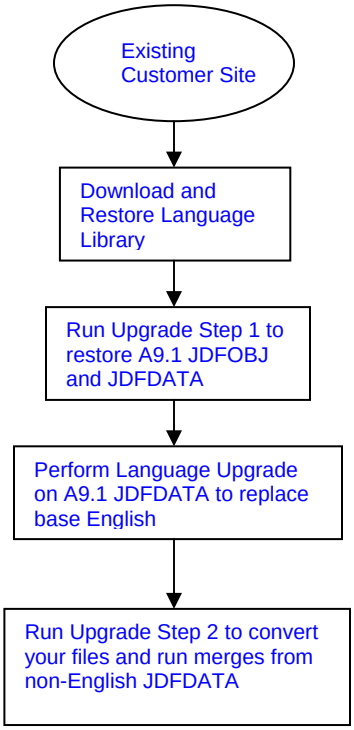
Use this method to perform the language upgrade if you are:

An existing client (A7.3 release or above) that uses a language other than English as the base language and have made changes to text that you want to preserve.

IMPORTANT*** This section assumes you have not yet upgraded to the new A91 release level. The instructions in this section will walk you through upgrading to A91 while preserving your custom language records.**

Overview

The following illustration shows the flow of the language upgrade process for a customer upgrading to a new JD Edwards World release level.



The following sections outline the steps to be taken:

- Check for Adequate Disk Space
- Download the Language Library from the Update Center
- Upgrade to the new A91 Release Level

- Perform the Language Upgrade to the Setup Environment
- Upgrade your Production Environment

1. Check for Adequate Disk Space

Be sure you have enough disk space to create a setup environment. To determine the space required for a copy of the JD Edwards World data (JDFDATA) and object library (JDFOBJ), refer to *Disk Space Considerations* in Phase 1 – Upgrade Process Overview of the A91 JDEdwards World Upgrade Guide.

2. Download the Language Library from the Update Center

Click on the following link to access the document for downloading language libraries to your iSeries http://www.peoplesoft.com/media/en/pdf/soft_dev/world_language.pdf. Alternatively, from the Customer Connection site go to Support, Online Support, JDEdwards World Resource Center, Globalizations (under the Upgrades, Planning & Implementations section), World Globalizations Helpful Hints, and Translations. You will need to go to the Update Center once you obtain your appropriate update number to download. Instructions for restoring the language library to your iSeries are included with the language download. After restoring the download to your iSeries, continue with the instructions below.

3. Upgrade to the new A91 Release Level

Refer to Phases 1 and 2 of the A91 JDEdwards World Upgrade Guide. Note that when you start the installation, you will submit both steps on hold, then ONLY release UPG_STEP1. Keep UPG_STEP2 on hold. Once UPG_STEP1 has completed, proceed with step 4 below.

4. Perform the Language Upgrade to the Setup Environment

The following sections explain how to perform the language upgrade to your setup environment.

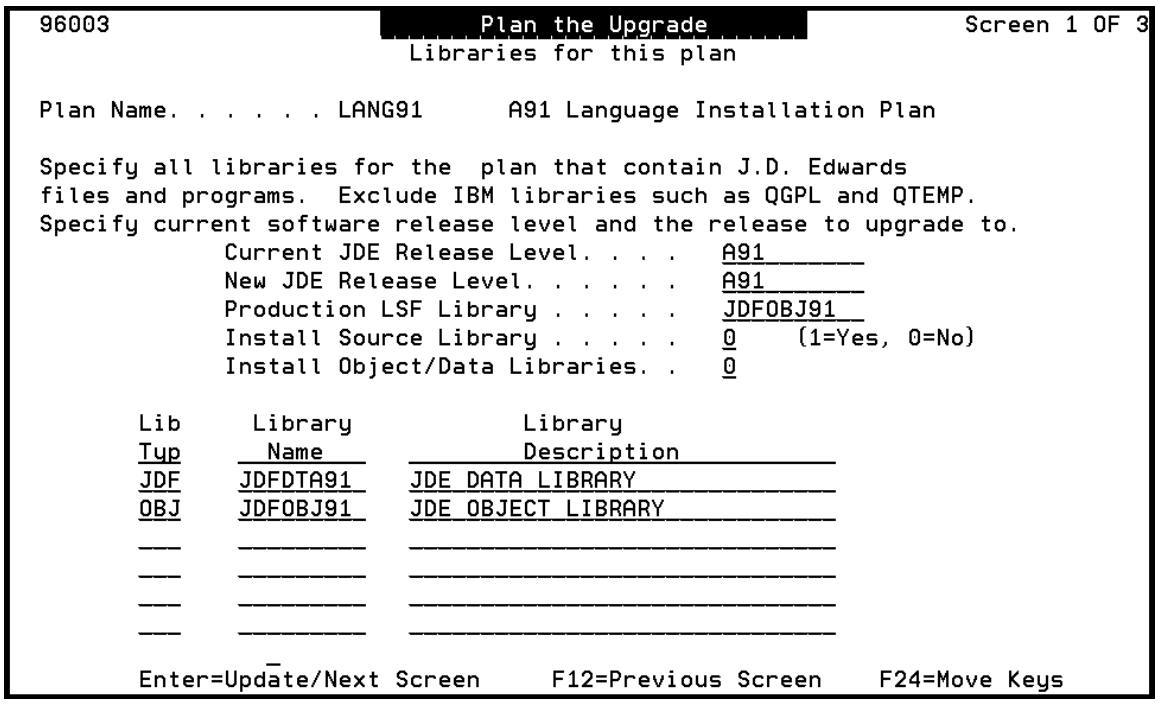
Create an Upgrade Plan to Perform the Language Upgrade

You must create an upgrade plan for merging the language text from the language library into your setup environment control files.

1. Sign on as JDEINSTAL

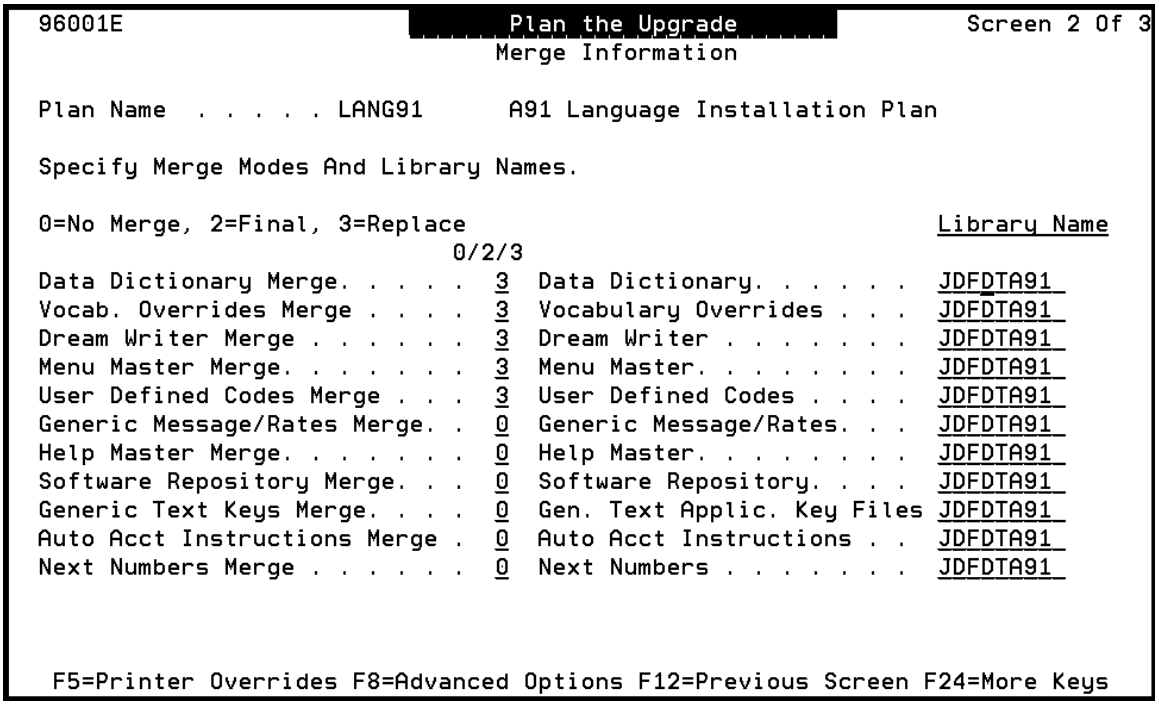
The Software Upgrade Menu (A97JDE) appears. Take menu selection 2 for the Upgrade Planner. Inquire on plan ZJDE. Press Enter. Specify an 'A' in the Action Code, then a name for your plan, and a description. Press Enter.

Reinquire on your new plan and press F5. The Libraries for This Plan screen appears.



2. Specify A91 in the Current JDE Release Level and New JDE Release Level fields. Specify your object library in the Production LSF Library field. Enter 0 for the Install Source Library and the Install Object/Data Libraries fields. Also, specify your A91 JDEOBJ and JDFDATA libraries in the Library Name field.

3. From the Merge Information screen, set the merge modes for data dictionary, vocabulary overrides, DREAM Writer, menus, and user defined codes to 3 (Replace). Set the other merge modes to 0 (No Merge). Your screen should look similar to the one below.

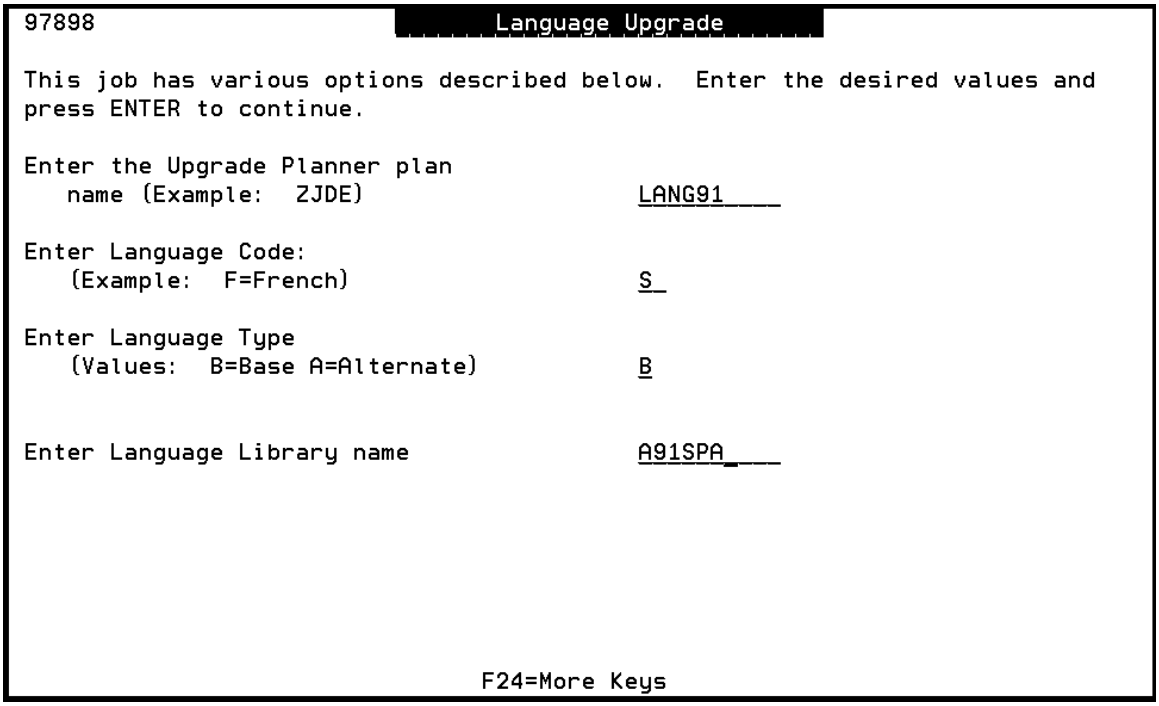


Perform the Language Upgrade

To perform the language upgrade to the setup environment, follow the steps below:

1. Sign on as JDE. Ensure that your A91 JDFOBJ and JDFDATA are the only libraries in your library list.

2. From the Merges menu (G97R41), select Language Upgrade. The Language Upgrade screen appears.



3. In the Enter the Upgrade Planner plan name field, type the name of the upgrade plan you created for the language upgrade.

4. In the Enter Language Code field, leave the field blank.

5. In the Enter Language Type field, type B (B=Base).

   IMPORTANT: Do not specify A (Alternate Language) in this field.

6. In the Enter Language Library name field, type the name of your language library. This is the name of the library to which you restored the language files.

   The language upgrade overlays the targeted English text in the control files with the new language text.

5. Upgrade your Production Environment

Sign on as JDEINSTAL. Release UPG_STEP2.

SECTION 3:

Code Page Information

Introduction

This section covers code page information for JD Edwards World Software and IBM's AS/400, iSeries, or System i 5 series National Language Support. It is intended to explain some of the details behind IBM's National Language Support, how that facility interacts with JD Edwards World Software, and what our recommendations are. For more information about IBM's National Language Support please contact IBM.

IBM's National Language Support

The AS/400 system supports either a single language (for example, German) or multiple languages (for example, German and French). The support for the system depends on the needs of the users, the configuration of the system, and the amount of storage available. For example, if your system supports a Swiss bank with users that speak French, Italian, German, English, Danish, and Norwegian, you can configure your system to support all of these languages concurrently. (To support multiple languages concurrently, you must have adequate storage to install all secondary languages. You must also install the necessary hardware to support each language. In addition, you must have an application environment that supports data in these languages.)[1]

To allow this multiple language environment, executable objects (programs) and data are separated. There is one set of programs no matter how many languages an AS/400 supports. Language specific data is stored in Message Files, Data Areas, Printer Files, Display Files and Physical Files. As more languages are supported on a system, more data is stored for language specific text, therefore requiring additional storage capacity.

Character Sets

A Character Set is a group of displayable or printable characters. The Character Set used in North and South America and much of Europe is Character Set 697. This character set contains the "Roman" alphabetic characters, accented alphabetic characters, numerals 0 – 9 and some special characters.

Code Pages

A code page is an ordered assignment of characters from a character set to specific codes that can be stored and manipulated by a computer. For example in the U.S. English code page the character 'A' is assigned to hexadecimal code 'C1', the character 'a' is assigned to hex code '81' and the character '$' is assigned to hex code '5B'. Another term for code page is Coded Character Set Identifier (CCSID). The code page used in the U.S.A., Canada, Portugal and some other countries is CCSID 37. The code page used in the U.K. is CCSID 285. The code page used in France is CCSID 297. In most respects these code pages are the same, but there are a few significant differences. In both CCSID's 37 and 297, the character '$' is assigned to hex code '5B', but in CCSID 285 the character '$' is assigned to hex code '4A' and the character '£' is assigned to hex code '5B'.

[1] AS/400 National Language Support V3R7, Topic 1.1, © Copyright IBM Corp. 1996

In most code pages based on the “Roman alphabet” the alphabetic characters a – z and A – Z, plus the numerals 0 – 9, and some special characters (+ < = > % & _ * . - / ; : ?) are always assigned to the same codes. These are referred to as the invariant character set. There is some variation in the assignment of other characters (accented alphabetic characters, other special characters like $ and £). This allows most text to be displayed without change, but means that some characters can be displayed incorrectly if there is inconsistency between data, job and device.

Character Data Representation Architecture (CDRA)

CDRA is a method of ensuring that text data appears as it was intended. To accomplish this the operating system is “aware” of language attributes in data and jobs. The operating system will convert the code for text characters from the CCSID of the data to the CCSID of the job on input operations like a database read. It will also convert the code for text characters from the CCSID of the job to the CCSID of the data on output operations like a database write. The purpose of CCSID conversion is to preserve the characters that are displayed.

Hardware Considerations

Output devices like display stations and printers typically support one character set. For example printers in North and South America and much of Europe support character set 697. In the device description for a display there are attributes related to language. The Keyboard language type identifies the keyboard layout. The Character Identifier gives the character set and code page supported by the device. In Figure 1 the device is set up for the United States and Canada.

```
                          DISPLAY DEVICE DESCRIPTION                  JDE
                                                          08/01/08  00:00:00
DEVICE DESCRIPTION . . . . . :   QPADEV
OPTION . . . . . :   *BASIC
CATEGORY OF DEVICE . . . . . :   *DSP

DEVICE CLASS . . . . . :   *VRT
DEVICE TYPE  . . . . . :   3179
DEVICE MODEL . . . . . :   2
ONLINE AT IPL  . . . . . :   *NO
ATTACHED CONTROLLER  . . . . . :   QPACTL01
KEYBOARD LANGUAGE TYPE . . . . . :   USB
CHARACTER IDENTIFIER . . . . . :   697    37
ALLOW BLINKING CURSOR  . . . . . :   *YES
PRINT DEVICE . . . . . :   *SYSVAL
OUTPUT QUEUE . . . . . :   *DEV
PRINTER FILE . . . . . :   QSYSPRT
  LIBRARY  . . . . . :     *LIBL
                                                                  MORE...
PRESS ENTER TO CONTINUE

F3=EXIT    F11=DISPLAY KEYWORDS    F12=CANCEL    F15=DISPLAY ASSOCIATED DEVICE
```

Figure 1: DSPDEVD output.

User Jobs

Each user job has attributes related to language. In Figure 2 the job is setup for the U.S.

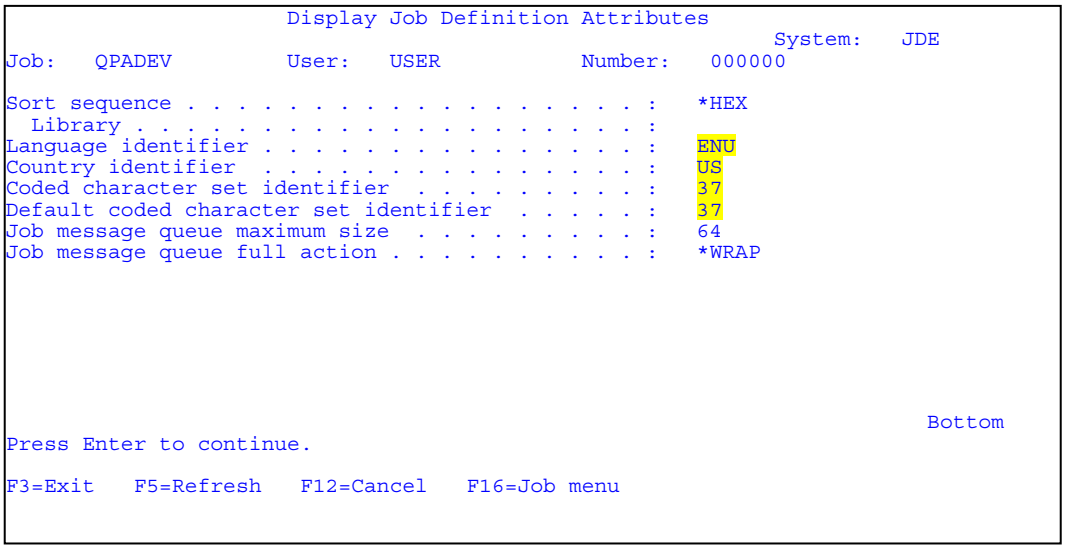


Figure 2: DSPJOB output.

JD Edwards World

JD Edwards World Software is designed to fully comply with IBM's National Language Support strategy. The biggest change from national to multinational is that data files are coded to support CCSID conversion. Some changes have also been made to programs in the Install and Update processes to support the data and CDRA.

Language data is contained within files in World. For example, file F0083 contains text for the menus. One of the keys to this file is language. Other files with language preference keys are: F0004D, F0005D, F0012D, F0901D, F1201D, F9202, F9203, F9601D, F9220, F98302 and F98303.

Interaction between OS/400 and JD Edwards World

Database files in World are tagged with CCSID's at the field level to support CCSID conversion under CRDA. Most text characters need no conversion, because they are in the invariant character set.

There are some characters that do require conversion. The operating system handles this on input and output operations. For example, in a Spanish language record there is a character 'ñ' within some text. In the database file the field containing this text is coded with CCSID 37. Therefore the character is assigned to hex code '49'. When this record is read by a program run from a Spanish job with CCSID 284 the hex code for the character is changed from '49' to '6A', because in the code page for CCSID 284 the character 'ñ' is assigned to hex code '6A'. When this character is then displayed on a Spanish display device it appears as it was intended. If the conversion did not occur and

the job sent the original hex code ‘49’ to the display it would appear as ‘¡’ on the Spanish display.

Since the operating system performs this CCSID conversion all text characters can be displayed correctly by any job that displays the data.

Exceptions

- Some data fields are not considered to be text fields. An example of this is the Data Dictionary Item Name. This field is considered to be a control field and is encoded with CCSID 65535, which represents hex data. When a data field coded with CCSID 65535 is read by a job there is no CCSID conversion.

- There are some terminals that do not support the full character set for which World data is designed. These are typically used in Japan and support Double Byte Character Set data instead. JD Edwards World offers a double byte version of World for those who need it.

Recommendations

Interactive jobs should use the same CCSID as that of the display device used. This allows the job to pass codes to the device in the code page for which the device was designed. These parameters can be set in the IBM user profile, which is the preferred method. This leaves the AS/400s System Values available to be set to other configurations that may be needed for non-JDE software requirements.

Printers and display devices should handle the same code page.

Emulation software, such as Client Access, Rumba etc… should also match the code page for which the device was designed.

CCSID values for JDE jobs should never be 65535 for **Single Byte** users.

NLS System Values are:

QCCSID
QCHRID
QDECFMT
QCURSYM
QDATSEP
QIGC
QLEAPADJ
QKBDTYPE
QCNTRYID
QLANGID
QTIMSEP
QSRTSEQ

SECTION 4 :

DOUBLE BYTE ENVIRONMENTS

Double Byte Overview

This section applies to the following Asian Langauges :

- Simplified Chinese
- Traditional Chinese
- Japanese
- Korean

The following information gives you an overview of the double-byte system and its requirements.

Concepts

A double-byte string begins with a shift-out character (Oe), and ends with a shift-in character (Of). A double-byte character requires two bytes, and it cannot be displayed if one of the shift characters is missing. Therefore, you must use a truncation routine (C9822 and E9822) when a description requires it to make sure the shift characters are properly placed.

Double-byte characters are not sequenced in any order. Therefore, you cannot use them to sort or search. Each double-byte character has a single-byte representation for sorting or searching purposes. They are phonetic versions of the double-byte characters, and can be alpha characters or any special characters used for Asian languages (for example, Chinese or Japanese).

A re-engineering module will automatically modify all display files to handle double-byte entry fields. It converts the data type of descriptive fields from A (Alpha) to ‘0’ (Open) based on the definition in the data dictionary. Report files do not need to be modified to print double-byte characters.

If any programs use special characters, such as , ~, , and so on, be aware that these characters could have the same code point as any of the double-byte characters. For example, program help, uses ~ for underlines and for highlights.

Lowercase alpha characters do not display on Japanese double-byte terminal. In addition, Japanese Kana characters, which are single byte, do not display on a single-byte terminal because they have the same code point.

Four bytes are needed to represent one double-byte character. Two bytes are used for shift-out and shift-in characters, and two more are used for the double-byte character itself. Two double-byte characters usually are needed to have a meaningful string. Therefore, for headings and column titles in videos and reports, six bytes at a minimum should be used. No abbreviation exists for double-byte characters.

To handle double byte, all programs that check alphanumeric characters for data type A are modified to check also for data type ‘0’. Many technical programs and report writer programs (DREAM Writer, FASTR, and World Writer) are also modified.

The following items must have both single-byte and double-byte versions with the same name so that the searching routine will function correctly.

- AlphaName
- AddressLines
- Menu Descriptions
- Item Descriptions
- Account Descriptions
- Data Item Descriptions
- Business Unit Descriptions

For Alpha Name, you can display either the single-byte or double-byte alpha name.

JD Edwards World has special tools to convert software from single byte to double byte. However, this process cannot be reversed. The process is described later on this chapter. Contact Global Customer Support for assistance.

X0028 contains date routines for all single & double byte.

Different Versions for the Same Release

This section provides information about the various single-byte and double-byte versions JD Edwards World makes available for a single release.

How many versions of the same release do we have?

- Single byte - uppercase/lowercase English
- Double byte - uppercase/lowercase English
- Double byte - uppercase English

What are the naming conventions for release A91?

- For single byte
- For double byte (uppercase/lowercase English)
- For double byte (uppercase English)

Who gets what version?

- For single byte, customers that use the 697 Character Set.
- For double byte (uppercase/lowercase English), clients that have locations in Taiwan, Hong Kong, Singapore, Korea and China and need these respective languages installed.
- For double byte (uppercase English), only clients located in Japan with Japanese language installed.

What about upgrade procedures?

Upgrade guides are the same for both single byte and double byte

What are the major differences between single-byte and double-byte versions?

- File level IDs
- Open data type in database files
- Open data type in display files (videos)
- Keyword IGCDTA(*YES) for printer files (reports)
- Conversion programs
- Upgrade libraries - JDFINS, JDEINSTAL
- An extra field for search function

NOTE: Software functions for all double byte versions should be the same. Also, the installation and reinstallation procedures for all double byte versions are exactly the same.

Can I run Single Byte software on a Double Byte machine?

Yes. You can run a single byte environment on a double byte machine without any special processes.

What is the difference between Double-Byte Upper and Double-Byte Upper/Lower?

Double-Byte Upper - Used for Japanese language only. All English records in JDFDATA are uppercase so they display properly on Japanese workstations.

Double-Byte Upper/Lower - Used for all other Double-byte Languages such as Korean, Traditional Chinese and Simplified Chinese. They are capable of displaying both upper case and lower case characters. JDFDATA contains both upper and lower case English characters.

***The programs/objects are the same for both versions; only JDFDATA differs.

What is needed to run Double Byte?

- DB Operating System
- DB Client Access
- DB printers
- DB windows settings

Converting Single Byte Environment to Double Byte Environment

NOTE: This section is a process flow document only, please refer to installation workbooks where required.

NOTE: If you are planning to upgrade to A91 Double Byte from A73 or A81 Single Byte. Upgrade the A73 or A81 Single Byte environment to A91 Single Byte first. Please refer to the A91 Quick Installation Guide and Upgrade Guide to A91 for this process.

NOTE: For the Address Book application, please duplicate the ABALPH to ABALP1 field and WWMLNM to WWMLN1 field using World Writer. This is to make sure that the name search and other application inquiries and reports show the alpha name and the mailing name.
ALPH is used to store true DB data where the ALP1 field is used to store single byte data then used in the C0040 compression subroutine to populate the ADBC (Description-Compressed) field. Name Search uses the Compressed Description field. This has to be completed before migrating to Double Byte.

Step 1 – Installing the A91 Double Byte Base release

Install A91 (Upper Case-Japanese only), or A9L1 (Upper/Lower) on the iSeries machine as an *INSTALL, make sure that system 75 is included as one of your systems. The libraries in your plan will include only: JDFOBJ, JDFDATA and JDFSRC (optional). Remember that on the Merge information screen in the planner the libraries for the control files will all point to JDFDATA. **Also be aware to set the DB flag in the advanced options(F8) off the Merge information screen in the planner for any upgrades from this point on.**

Step 2 – Creating User Data Libraries

You must now run the utility off of menu G9645, Create User data libraries. This facility will separate out common DB (double byte) files into a common library and also DB data files into a proddta library.

**If you use a SECURITY library this would be a manual step to copy the security files from JDFDATA in to a SECLIB.

You can now restore your production libraries from your Single Byte AS/400 to the DB machine. You will be copying the data from the Single Byte libraries into the Double Byte libraries created earlier in this step.

Example:

Single Byte AS/400 Library Names	Double Byte Library Names

PRDDTA91	**PRDD91DB**
PRDCOM91	**PRD91DB**
SEC91	**SEC91DB**

Once libraries are restored to the DB machine, you must do CPYFs *MAP *DROP *REPLACE from your single byte libraries into these DB libraries. It's best of course, that you write a CL that will do this for you since JDE does not have a utility for this.

Step 3 – Run Base Language merge(s)

You can now set up a plan for the language merges. Run the A91 base language merge as directed in Section of this document.

Step 4 – Uppercasing your files- For Japanese Installs Only

Run the program P89101 that will Upper Case your control files. Go to the Versions List – G81, option 2. Make a copy of the ZJDE0001 version and run your new version.

Step 5 – Double Byte Printing Considerations

- Printer capable of printing Double Byte characters

- Use the IBM command DSPFD QSYSPRT and check the IGCDTA field is being set to *YES. If it is set to *NO, use command CHGPRTF FILE(QSYSPRT) IGCDTA(*YES) to set it to *YES

- Specify the type of data stream that will be used for you printer device file. Use the command CHGPRTF for a specific print file. For possible values settings press F1 on the Printer device type field. Contact IBM and your printer manufacturer for required values.

Step 6 – PC Settings

To display double byte characters on Windows 2000 and Windows XP, you need to install the language and set it as your default. Windows XP has an Advanced tab where you will also select the language for non-unicode programs. Refer to the guide for your PC operating system for specific instructions on Regional Settings. To return to English-only, just change your default to English.

IBM iSeries Access automatically installs some languages. You can identify the languages that are installed, and install others through IBM iSeries Access for Windows. Click "Selective Setup," then "5250 Display and Printer Emulator". Log onto

your system and on the Communication menu, select Configure, and select your language from the Host code page pull-down menu.

If you have questions, please call Oracle Technical Support.

Appendix A – Disk Space Considerations (Languages)

In addition to the amount of disk space required for the new release software, which is shown in *Disk Space Considerations* in Phase 1 – Upgrade Process Overview of the A91 JDEdwards World Upgrade Guide, you must allow for additional disk space requirements for each new language you want to install.

For each language allow for a range of approximately 100mb to 180mb.