JD Edwards World

Language Guide

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JD Edwards World Language Guide, Release A9.3

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Preface

Welcome to the JD Edwards World Language Guide.

Audience

This document is intended for implementers and end users of JD Edwards World software and users of languages other than English.

Documentation Accessibility

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Related Documents

You can access related documents from the JD Edwards World Release Documentation Overview pages on My Oracle Support. Access the main documentation overview page by searching for the document ID, which is 1362397.1, or by using this link:

https://support.oracle.com/CSP/main/article?cmd=show&type=NOT&id=1362397.1

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Overview to the JD Edwards World Language Guide

This chapter contains the topic:

- Section 1.1, "Topics in the JD Edwards World Language Guide."

1.1 Topics in the JD Edwards World Language Guide

Figure 1–1   Languages in the Control File Repository
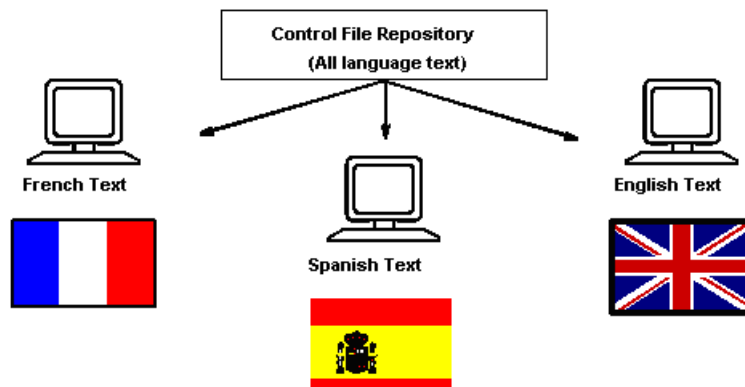
This guide explains:

- 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

2

Introduction to Languages

This chapter contains these topics:

2.1 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.

Figure 2–1   Base Language as English
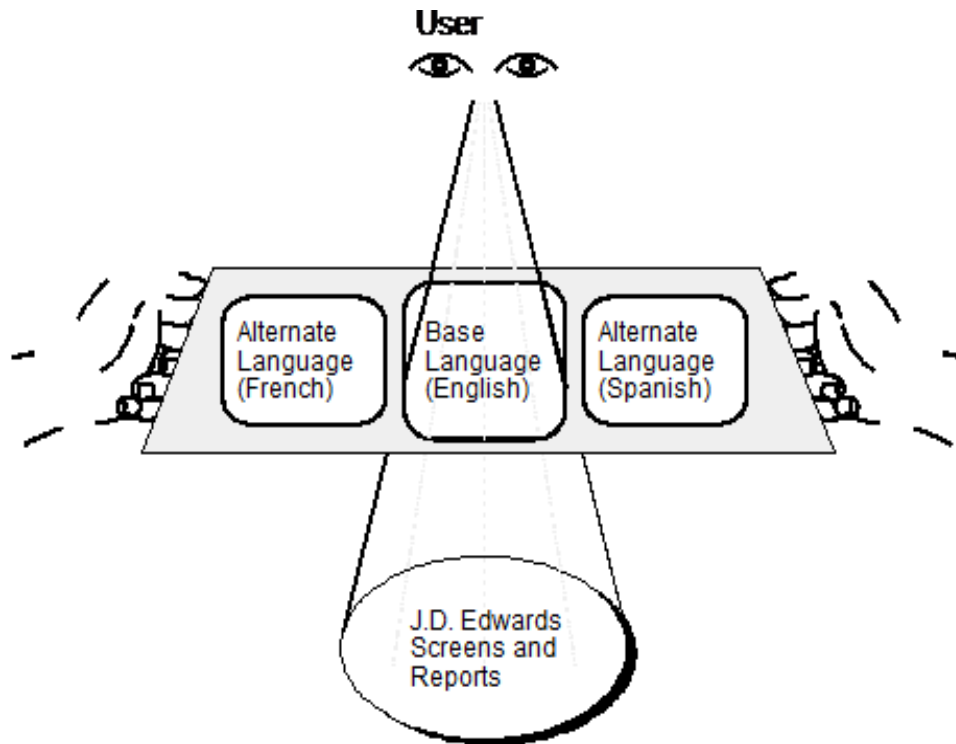
2.2 Non-English Base Language

Figure 2–2   Base Language as French
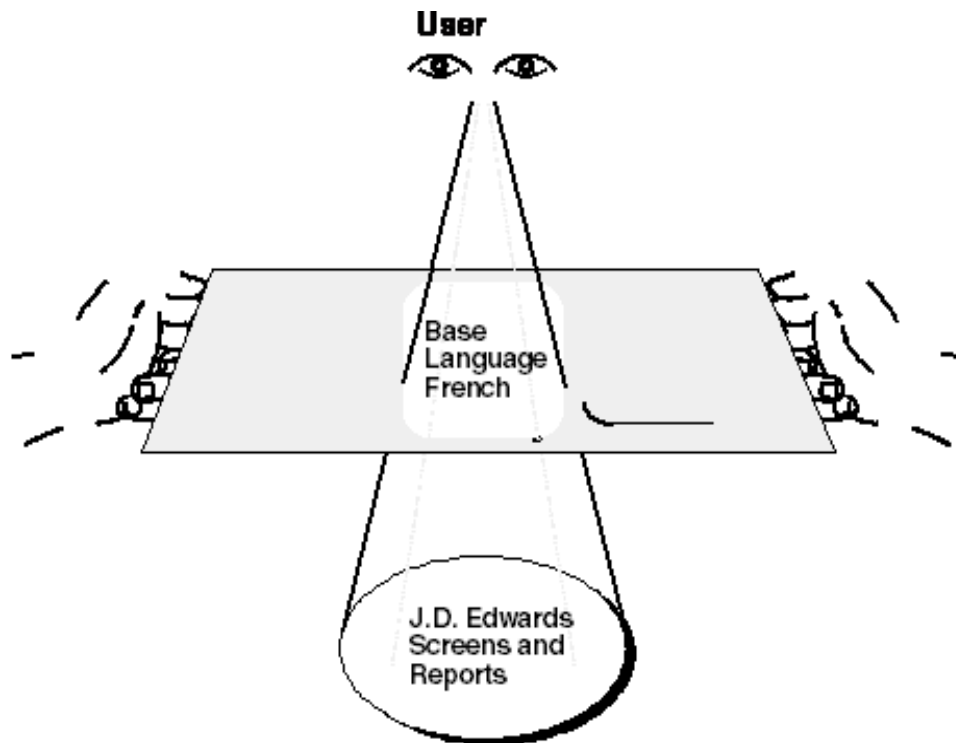
2.3 Language Methodology

When JD Edwards World released the A9.3 and A9.3 Update 1 software versions, 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 the Update Center on My Oracle Support.

Once translations are complete for a language, the control files are saved into a library named for that language. For example, A93SPA is the library identifier for the full A9.3 Spanish. A93SPA01 is the update for A9.3-A9.3 Update 1 Spanish control file changes.

Each of these libraries contains control files only. For example:

Figure 2–3   Work with Objects screen

```
                            Work with Objects
 █          █
Type options, press Enter.
  2=Edit authority         3=Copy    4=Delete    5=Display authority    7=Rename
  8=Display description   13=Change description


Opt  Object      Type       Library     Attribute    Text
__    F0004      *FILE      A91PRB      PF           User Defined Code Types
__    F0005      *FILE      A91PRB      PF           User Defined Codes
__    F0005LA    *FILE      A91PRB      LF           Logical View - Text Line 2
__    F0082      *FILE      A91PRB      PF           Menu Master
__    F0082LA    *FILE      A91PRB      LF           LF - System Code, Menu ID
__    F00821     *FILE      A91PRB      PF           Menu Selections
__    F00821LA   *FILE      A91PRB      LF           LF - Job to Execute, Menu I
__    F0083      *FILE      A91PRB      PF           Menu Text Overrides
__    F0083LA    *FILE      A91PRB      LF           LF - Menu ID, Language Pref
__    F9200      *FILE      A91PRB      PF           Data Item Master
__    F9200JA    *FILE      A91PRB      LF           JF - Data Item (F9203 F9200
                                                     █          More...
Parameters for options 5, 7 and 13 or command
===> _____
F3=Exit   F4=Prompt   F5=Refresh   F9=Retrieve   F11=Display names and types
F12=Cancel   F16=Repeat position to   F17=Position to
```

2.4 Language Types

Multinational

Multinational base tapes and cumulative libraries expired November 2001. See the *Language Support for A7.3 Cumulative Update 13 and 14* and *A8.1 Cumulative Update 4 and 5* document, DOC ID 627373.1, on My Oracle Support.

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).

2.5 Overview of the Language Upgrade Process

The following graphic displays the flow of the language upgrade process for a customer installing language:

Figure 2–4   Language Upgrade Process Flow
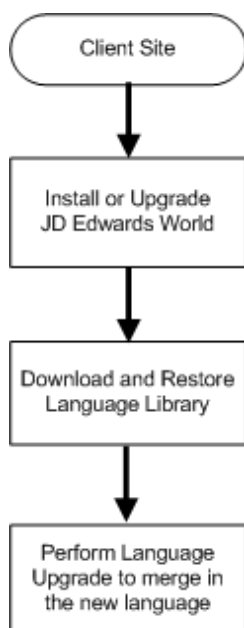
After you install or reinstall JD Edwards World software to the new release level, the text in your control files is in standard JD Edwards World English. This is the base language of your environment. Before you perform the language upgrade to your control files, you must decide whether you want to change the base language to a different language or install a separate alternate language.

Figure 2–5   Changing Base Language of Control Files
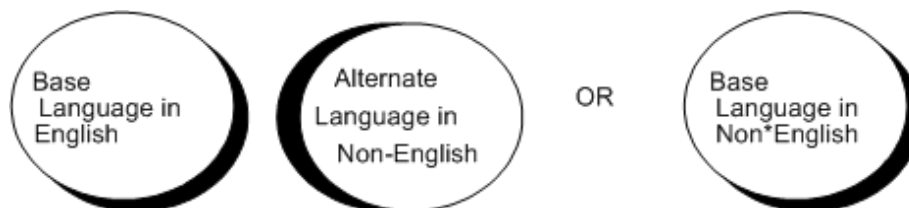
The first Vocabulary Override example is considered the Base Language record because the Language Preference is blank. This record is created during the installation of the JD Edwards World software, not by the language installation:

Figure 2–6   Vocabulary Overrides screen

```
9220                          Vocabulary Overrides   Langue . . . . . .  __
                                                     Application. . .  ____
Code d'action. . . I
N° écran . . . . . V01051____                  Aller à champ. .  ___
Titre/défaut . . . Address Book Information____ Aide : Début . .  P01051____
                                               Aide : Fin . . .  P01051____
Ligne message erreur
  *SAME_____
Ligne touches/options
       F2=Fmt F5=Who F11=CIF Index F12=Phones F13=Add'l Info F24=More____
                                          Art.    M T Pos  Chp  Tai
            Libellé                        DD     T C +/-  Dtl  Chp
Action Code. . . . . . . . . . . . . . .  ACTION____ J _ ___  001   16
Address Number . . . . . . . . . . . . .  AN8_____ _ _ ___  002   16
Search Type. . . . . . . . . . . . . . .  AT1_____ _ _ ___  003   16
Payables Y/N/M . . . . . . . . . . . . .  ATP_____ _ _ ___  004   16
Alpha Name . . . . . . . . . . . . . . .  ALPH_____ _ _ ___  005   16
Receivables Y/N. . . . . . . . . . . . .  ATR_____ _ _ ___  006   16
County . . . . . . . . . . . . . . . . .  COUN_____ J _ ___  007   14
Employee Y/N . . . . . . . . . . . . . .  ATE_____ _ _ ___  008   16
Mailing Name . . . . . . . . . . . . . .  MLNM_____ J _ ___  009   16
_____. . . . . . . .  ADD2_____ J _ ___  010   16
_____. . . . . . . .  ADD3_____ J _ ___  011   16
 F13=Visualisation F16=Définition touches fonction F9=Précédent F24=Autres
```

The record with the Language Preference identifier is considered an alternate language. You can 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:

Figure 2–7   Vocabulary Overrides (Alternate Language) screen

```
9220                          Vocabulary Overrides   Language . . . . .  S_
                                                     Applic. Override  ____
Action Code. . . . I
Screen/Report. . . V01051____                  Skip to Field. .  ___
Default Title. . . Información del libro de direc Help: Start. . .  P01051____
                                               Help: End. . . .  P01051____
Error Text for Line 24
  *SAME_____
Special Exits Message
    F2=Formato F5=Quién F11=Indice CIF F12=Tels  F13=Info adic. F24=Más____
                                          Data    O C Pos  Scr  Fld
Text Description . . . . . . . . . . . .   Item   R H +/-  Fld  Size
Código de acción . . . . . . . . . . . .  ACTION____ N _ ___  001   16
N° de dirección. . . . . . . . . . . . .  AN8_____ N _ ___  002   16
Tp de búsqueda . . . . . . . . . . . . .  AT1_____ N _ ___  003   16
Por pagar Y/N/M. . . . . . . . . . . . .  ATP_____ J _ ___  004   16
Nombre alfa. . . . . . . . . . . . . . .  ALPH_____ N _ ___  005   16
Por cobrar Y/N . . . . . . . . . . . . .  ATR_____ N _ ___  006   16
Condado. . . . . . . . . . . . . . . . .  COUN_____ J _ ___  007   14
Empleado Y/N . . . . . . . . . . . . . .  ATE_____ N _ ___  008   16
Nombre postal. . . . . . . . . . . . . .  MLNM_____ J _ ___  009   16
_____. . . . . . . .  ADD2_____ J _ ___  010   16
_____. . . . . . . .  ADD3_____ J _ ___  011   16
  F13=Browse SDA/RDA  F16=Function Key Trans  F9=Display Previous  F24=More
```

2.6 How the Language Merge Affects the Control Files

Figure 2–8   Effects of the Language Merge
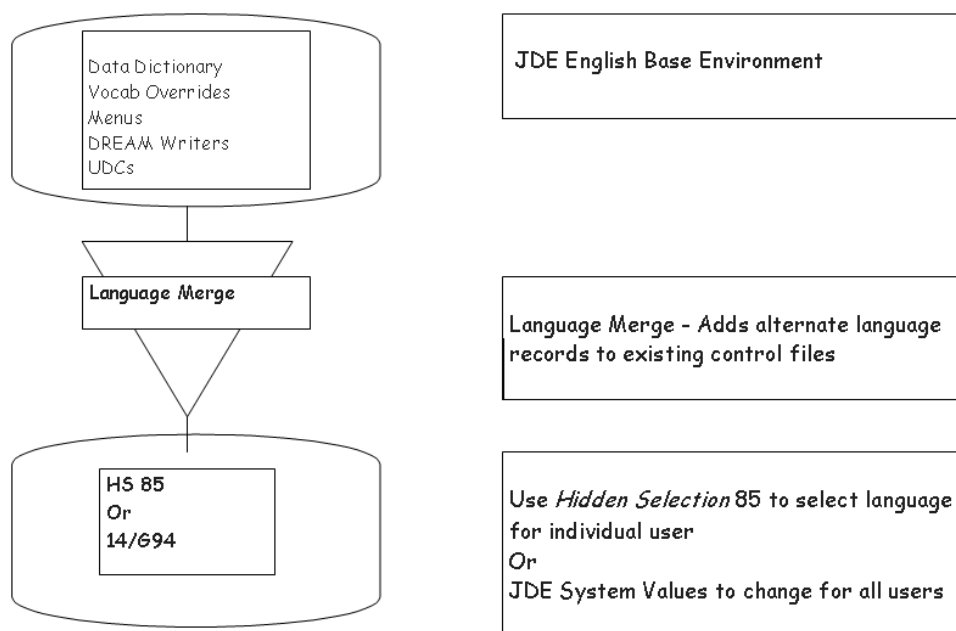
The language upgrade affects text fields in the following control files. Records in these files contain a language key:

- Data Dictionary (F9202, F9203, and F9816)

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

- Menus (F0083)

- User Defined Codes (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 but does not have a Language Key (as English is the Base Language), the F0004D file can 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 displays 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.

2.6.1 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.

2.6.2 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.

2.6.3 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.

2.6.4 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 install, the upgrade changes the text in these fields in F0004 and F0005 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).

2.6.5 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.

2.6.6 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.

3

Language Upgrades for Customers with English as the Base Language Or Language Installations for New A9.3 Installs

This chapter contains these topics:

- Section 3.1, "Install or Upgrade a Base or Alternate Language,"
- Section 3.2, "Language Install."

3.1 Install or Upgrade 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.

3.2 Language Install

3.2.1 Install or Upgrade (Reinstall) JD Edwards World Software

Be sure you completely install or reinstall your JD Edwards World software to the A9.3 release level before you follow the other procedures in this chapter.

3.2.2 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.

3.2.3 Download the Language Library from the Update Center

Refer to Doc ID 761132.1 JD Edwards World Language Libraries Available for Download. Proceed to the Update Center once you obtain the appropriate update number to download.

3.2.4 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.

Figure 3–1 Plan the Upgrade screen

```
  960099                            Plan the Upgrade

 Action Code. . . I

 Plan Name. . . . LANG
 Description. . . A93 Language Installation Plan


       Enter the name of a Plan.

       You can choose one of the following or copy them
       to create your own plan.  Note that "ZJDE" Plans
       cannot be changed or deleted.

       We recommend you review the following:

                ZJDE    - Simple production plan
                ZJDE_ALT - Alternate upgrade plan

                ** Press F5 key to enter Upgrade Data **



                    F3=Exit     F5=Plan Data
```

Re-inquire on your new plan and press F5. The Libraries for This Plan screen appears.

Figure 3–2 Plan the Upgrade (Libraries for this Plan) screen

```
  96003                        Plan the Upgrade           Screen 1 OF 3
                            Libraries for this plan

 Plan Name. . . . . . LANG       A93 Language Installation Plan

 Specify all libraries for the  plan that contain J.D. Edwards
 files and programs.  Exclude IBM libraries such as QGPL and QTEMP.
 Specify current software release level and the release to upgrade to.
              Current JDE Release Level. . . .   A93
              New JDE Release Level. . . . . .   A93
              Production LSF Library . . . . .
              Install Source Library . . . . .   0   (1=Yes, 0=No)
              Install Object/Data Libraries. .   0

       Lib     Library          Library
       Typ      Name           Description
       COM     CLTCOM     CLIENT'S COMMON LIBRARY
       DTA     CLTDTA     CLIENT'S DATA LIBRARY
       SEC     CLTSEC     CLIENT'S SECURITY LIBRARY
       JDF     JDFDATA    JDE DATA LIBRARY
       OBJ     JDFOBJ     JDE OBJECT LIBRARY
       SRC     JDFSRC     JDE SOURCE LIBRARY

       Enter=Update/Next Screen     F12=Previous Screen     F24=Move Keys
```

2. Specify A93 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 A9.3 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).

Figure 3–3   Plan the Upgrade (Merge Information) screen

```
96001E                          Plan the Upgrade              Screen 2 Of 3
                                Merge Information

Plan Name  . . . . . LANG        A92 Language Installation Plan

Specify Merge Modes And Library Names.

0=No Merge, 2=Final, 3=Replace                              Library Name
                        0/2/3
Data Dictionary Merge. . . . .  3  Data Dictionary. . . . . .  CLTCOM
Vocab. Overrides Merge . . . .  3  Vocabulary Overrides . . .  CLTCOM
Dream Writer Merge . . . . . .  3  Dream Writer . . . . . . .  CLTCOM
Menu Master Merge. . . . . . .  3  Menu Master. . . . . . . .  CLTCOM
User Defined Codes Merge . . .  3  User Defined Codes . . . .  CLTCOM
Generic Message/Rates Merge. .  0  Generic Message/Rates. . .  CLTDTA
Help Master Merge. . . . . . .  0  Help Master. . . . . . . .  CLTCOM
Software Repository Merge. . .  0  Software Repository. . . .  CLTCOM
Generic Text Keys Merge. . . .  0  Gen. Text Applic. Key Files CLTCOM
Auto Acct Instructions Merge .  0  Auto Acct Instructions . .  CLTDTA
Next Numbers Merge . . . . . .  0  Next Numbers . . . . . . .  CLTCOM



  F5=Printer Overrides F8=Advanced Options F12=Previous Screen F24=More Keys
```

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

Figure 3–4   Plan the Upgrade (Data Dictionary Field Ownership) screen

```
96001F                          Plan the Upgrade              Screen 3 Of 3
                             Data Dictionary Field Ownership


       Plan Name. . . . . . LANG       A92 Language Installation Plan

       Column Title - CH1, CH2, CH3 . . . . . .   J
       Row Description - DSCR . . . . . . . . .   J
       Default Values - DVAL. . . . . . . . . .   J
       Data Display Rules - DRUL. . . . . . . .   J
       Data Display Parameters - DR01 . . . . .   J
       Data Edit Rules - ERUL . . . . . . . . .   J
       Edit Rule Specifications  - ER01, ER02 .   J
       Justify - LR . . . . . . . . . . . . . .   J









                   F12=Previous Screen    F24=Move Keys
```
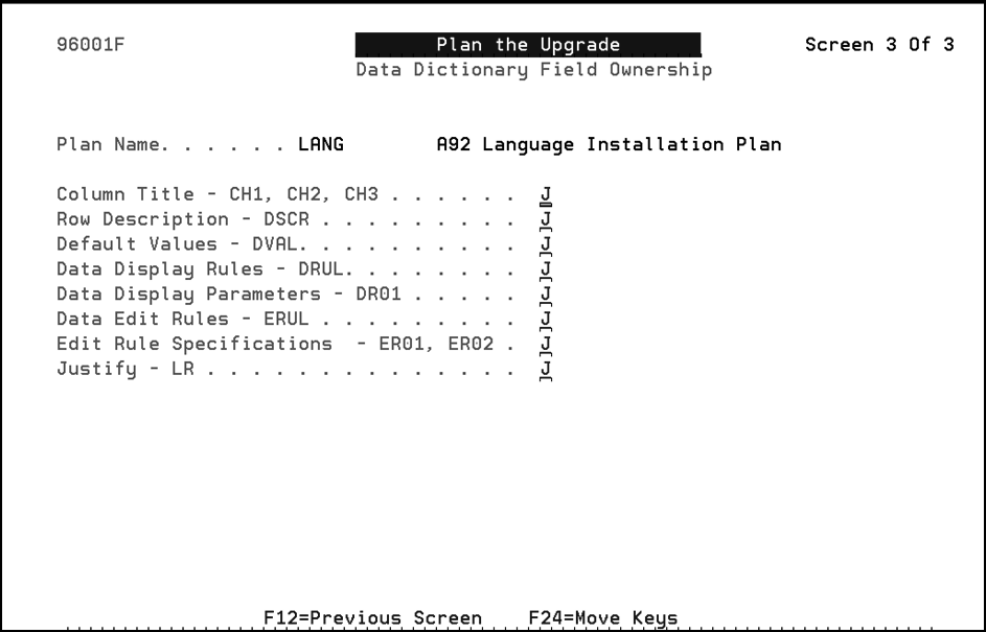
Once your plan is complete, you can sign off of as JDEINSTAL and sign into the environment that is to have language installed. Do not validate the plan.

3.2.5 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.

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

   The user-defined code table for 01/LP that appears looks similar to the graphic below. Look for the language you are installing.

Figure 3–5   User Defined Codes screen

```
 00051                          User Defined Codes
                                            System Code. . . . . . . . 01
                                            User Defined Codes . . . . LP
 Action Code. . . . . . I                   Skip To Code . . . _____
                                            Language
   02 Character
     Code               Description                    Description-2
   _____  Domestic Language_____  _____
   B_____  Flemish_____  _____
   CK_____  Czech_____  _____
   CS_____  Chinese Simplified_____  _____
   CT_____  Chinese Traditional_____  _____
   D_____  Dutch_____  _____
   DN_____  Danish_____  _____
   DU_____  Dutch_____  _____
   E_____  English_____  _____
   F_____  French_____  _____
   FN_____  Finnish_____  _____
   G_____  German_____  _____
   HU_____  Hungarian_____  _____
   I_____  Italian_____  _____


 F5=Code Types  F14=Memo  F15=Where Used  F18=Translate  F21=Print  F24=More
```

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 can choose any alpha character.

3.2.6 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.

Figure 3–6   Language Upgrade screen

```
97898                        Language Upgrade

This job has various options described below.  Enter the desired values and
press ENTER to continue.

Enter the Upgrade Planner plan
   name (Example:  ZJDE)                      LANG

Enter Language Code:
   (Example:  F=French)                       S

Enter Language Type
   (Values:  B=Base A=Alternate)              A


Enter Language Library name                   A93SPA




                           F24=More Keys
```

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.

Caution: 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.

3.2.7 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.

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

   The Data Dictionary screen appears.

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

3. Press F10 to access the glossary.

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

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

3.2.8 Install Multiple Languages in Single Environment

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

1. 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.

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

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 appropriate Language Preference code that represents the next language you are installing.

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

6. 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.

4

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

This chapter contains these topics:

- Section 4.1, "Who Should Use this Method?"
- Section 4.2, "Overview,"
- Section 4.3, "Perform the Language Upgrade to the Setup Environment."

4.1 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. This method preserves any changes to text that you made in the lower release.

Caution: This section assumes you have not yet upgraded to the new A9.3 release level. The instructions in this section will walk you through upgrading to A9.3 while preserving your custom language records.

4.2 Overview

Flow of the language upgrade process for a customer upgrading to a new JD Edwards World release level:

- Existing Customer Site
- Download and Restore Language Library
- Run Upgrade Step 1 to restore A9.2 JDFOBJ and JDFDATA
- Perform Language Upgrade on A92 JDFDATA to replace base English
- Run Upgrade Step 2 to convert your files and run merges from non-English JDFDATA

The following sections outline the steps to be taken, including:

- Check for Adequate Disk Space
- Download the Language Library from the Update Center
- Upgrade to the new A9.3 Release Level

- Perform the Language Upgrade to the Setup Environment

- Upgrade your Production Environment

4.2.1 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 *JD Edwards World Upgrade Guide*.

4.2.2 Download the Language Library from the Update Center

Refer to Doc ID 761132.1 JD Edwards World Language Libraries Available for Download. Proceed to the Update Center once you obtain the appropriate update number to download.

4.2.3 Upgrade to the New A9.3 Release Level

Refer to Phases 1 and 2 of the A9.3 *JD Edwards World Upgrade Guide*. Note that when you start the installation, you will submit both steps on hold, and then only release UPG_STEP1. Keep UPG_STEP2 on hold. Once UPG_STEP1 has completed, proceed with step 4 below.

4.3 Perform the Language Upgrade to the Setup Environment

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

4.3.1 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.

   Re-inquire on your new plan and press F5. The Libraries for This Plan screen appears.

Figure 4–1   Plan the Upgrade (Libraries for this Plan) screen

```
 96003                        Plan the Upgrade            Screen 1 OF 3
                            Libraries for this plan

Plan Name. . . . . . LANG        A93 Language Installation Plan

Specify all libraries for the  plan that contain J.D. Edwards
files and programs.  Exclude IBM libraries such as QGPL and QTEMP.
Specify current software release level and the release to upgrade to.
              Current JDE Release Level. . . .   A93
              New JDE Release Level. . . . . .   A93
              Production LSF Library . . . . .
              Install Source Library . . . . .   0    (1=Yes, 0=No)
              Install Object/Data Libraries. .   0

      Lib      Library            Library
      Typ      Name              Description
      JDF      JDFDTA93      JDE Data Library
      OBJ      JDFOBJ93      JDE Object Library




        Enter=Update/Next Screen     F12=Previous Screen     F24=Move Keys
```

2. Specify A93 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 A9.3 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 looks similar to the following graphic.

Figure 4–2   Plan the Upgrade (Merge Information) screen

```
 96001E                       Plan the Upgrade            Screen 2 0f 3
                            Merge Information

Plan Name   . . . . . LANG        A93 Language Installation Plan

Specify Merge Modes And Library Names.

0=No Merge, 2=Final, 3=Replace                        Library Name
                    0/2/3
Data Dictionary Merge. . . . .   3   Data Dictionary. . . . . .   JDFDTA93
Vocab. Overrides Merge . . . .   3   Vocabulary Overrides . . .   JDFDTA93
Dream Writer Merge . . . . . .   3   Dream Writer . . . . . . .   JDFDTA93
Menu Master Merge. . . . . . .   3   Menu Master. . . . . . . .   JDFDTA93
User Defined Codes Merge . . .   3   User Defined Codes . . . .   JDFDTA93
Generic Message/Rates Merge. .   0   Generic Message/Rates. . .   JDFDTA93
Help Master Merge. . . . . . .   0   Help Master. . . . . . . .   JDFDTA93
Software Repository Merge. . .   0   Software Repository. . . .   JDFDTA93
Generic Text Keys Merge. . . .   0   Gen. Text Applic. Key Files  JDFDTA93
Auto Acct Instructions Merge .   0   Auto Acct Instructions . .   JDFDTA93
Next Numbers Merge . . . . . .   0   Next Numbers . . . . . . .   JDFDTA93



  F5=Printer Overrides F8=Advanced Options F12=Previous Screen F24=More Keys
```

4.3.2 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 A9.3 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.

Figure 4–3 Language Upgrade screen

```
97898                          Language Upgrade

This job has various options described below.  Enter the desired values and
press ENTER to continue.

Enter the Upgrade Planner plan
   name (Example:  ZJDE)                   LANG

Enter Language Code:
   (Example:  F=French)                    S

Enter Language Type
   (Values:  B=Base A=Alternate)           B


Enter Language Library name                A93SPA




                          F24=More Keys
```

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).

> **Caution:**   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.

7. Upgrade your Production Environment

    Sign on as JDEINSTAL. Release UPG_STEP2.

5

Code Page Information

This chapter contains these topics:

5.1 Introduction

This chapter covers code page information for JD Edwards World Software and IBM's AS/400, iSeries, System i 5, System I, or IBM i 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 contact IBM.

5.2 IBM's National Language Support

The IBM i 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).

To allow this multiple language environment, executable objects (programs) and data are separated. There is one set of programs no matter how many languages a System i

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.

5.3 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.

5.4 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 '$' is assigned to hex code '5B'. Another term for code page is Coded Character Set Identifier (CCSID). The code page used in the U.S.A., Canada, Portugal and some other countries is CCSID 37. The code page used in the U.K. is CCSID 285. The code page used in France is CCSID 297. In most respects these code pages are the same, but there are a few significant differences. In both CCSIDs 37 and 297, the character '$' 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'.

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.

5.5 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.

5.6 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 the following figure, the device is set up for the United States and Canada.

Figure 5–1   Display Device Description (DSPDEVD) output

```
                    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
```

5.7 User Jobs

Each user job has attributes related to language. In the following figure, the job is setup for the U.S.

Figure 5–2   Display Job Definition Attributes (DSPJOB) output

```
                  Display Job Definition Attributes
                                               System:    JDE
Job:    QPADEV          User:    USER          Number:    000000

Sort sequence . . . . . . . . . . . . . . . . . . . :    *HEX
  Library . . . . . . . . . . . . . . . . . . . . . :
Language identifier . . . . . . . . . . . . . . . . :    ENU
Country identifier  . . . . . . . . . . . . . . . . :    US
Coded character set identifier  . . . . . . . . . . :    37
Default coded character set identifier  . . . . . . :    37
Job message queue maximum size  . . . . . . . . . . :    64
Job message queue full action . . . . . . . . . . . :    *WRAP




                                                            Bottom
Press Enter to continue.

F3=Exit    F5=Refresh    F12=Cancel    F16=Job menu
```

5.8 JD Edwards World Software

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 JD Edwards 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.

5.9 Interaction between IBM i and JD Edwards World

Database files in JD Edwards World are tagged with CCSIDs 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.

5.10 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 JD Edwards 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 JD Edwards World for those who need it

5.11 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 System i available to be set to other configurations that might be needed for non-JDE software requirements

- Printers and display devices should handle the same code page

- Emulation software, such as Client Access, Rumba and so on; 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

6

Double Byte Environments

This chapter contains these topics:

6.1 Double Byte Overview

This section applies to the following Asian Languages:

- Simplified Chinese

- Traditional Chinese

- Japanese

- Korean

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

6.2 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.

- Alpha Name
- Address Lines
- 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.

6.3 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.

6.3.1 How many versions of the same release do we have?

- Single byte - uppercase/lowercase English
- Double byte - uppercase/lowercase. Only one version of Double Byte software is delivered. Customers control the Upper Casing using F8 off the Merge Information screen.

6.3.2 Who uses which version?

- For single byte, customers that use the 697 Character Set
- For double byte (uppercase/lowercase), clients that have locations in Taiwan, Hong Kong, Singapore, Korea, and China and need these respective languages installed
- For double byte (uppercase/lowercase), customers located in Japan with Japanese language installed will upper case data via F8 off the Merge Information screen.

6.3.3 What about upgrade procedures?

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

6.3.4 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.

6.3.5 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

6.3.6 What is needed to run Double Byte?

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

6.4 Converting Single Byte Environment to Double Byte Environment

> **Note:** This section is a process flow document only. Refer to installation workbooks where required.

> **Note:** If you are planning to upgrade to A9.3 Double Byte from A7.3, A8.1, A9.1, or A9.2 Single Byte, Upgrade to A9.3 Single Byte first. Upgrade the A73 or A81 Single Byte environment to A9.3 Single Byte first. Refer to the A9.3 *Quick Installation Guide* and *JD Edwards World Upgrade Guide* for A9.3 for this process.

> **Note:** For the Address Book application, 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.

6.4.1 Before Migrating to Double Byte

1. Install the A9.3 Double Byte Base release.

   Install A9.3 as a *INSTALL. 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.

2. Create 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 System i 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 System i Library Names	Double Byte Library Names
PRDDTA93	PRDD93DB
PRDCOM93	PRD93DB
SEC93	SEC93DB

   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.

3. Run Base Language merge(s).

   You can now set up a plan for the language merges. Run the A9.3 base language merge as directed in the Language Upgrades for Customers with Non-English as the Base Language section of this document.

4. Uppercasing your files - For Japanese Installs Only.

   Refer to Doc ID 1455379.1 on My Oracle Support.

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 your 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

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, call Oracle Global Customer Services Technical Support.

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