ORACLE®

JD EDWARDS WORLD

JD Edwards World

Import/Export Guide

Versions A9.2 and A9.2.1

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Overview to Import/Export

Many businesses have a need to import data into their JD Edwards World system from programs such as a spreadsheet on a PC and export data from their JD Edwards World system into a spreadsheet or other programs on a PC. This includes Microsoft Excel and other Windows-based spreadsheets. You can import data into your JD Edwards World system using the CSV (Comma Separated Values) file format. You can export data from your JD Edwards World system to CSV, XML (eXtensible Markup Language), XSD (XML Schema Definition) and TXT (Text) file formats.

JD Edwards World uses the XML export format to integrate reports with Oracle Business Intelligence Publisher (BI Publisher), an advanced report formatting and distribution application available to World customers. Export is also integral to the JD Edwards World Electronic Document Delivery (EDD) module. For more information about document delivery, see the *Working with Electronic Document Delivery* guide. Files are imported and exported using the Integrated File System (IFS) on your System i server.

In this document, the name System i includes IBM servers named AS/400, eServer iSeries, System i5, System I, or Power Systems running IBM i for Business.

When you import data from the IFS into your JD Edwards World system, the data *must* undergo the same rigorous editing and security that is inherent in the JD Edwards World system prior to entering your system's database. To maintain data integrity, JD Edwards World restricts the import to batch input files. After importing, you process records in the batch input files using existing batch updates.

The JD Edwards World system imports the data from the IFS using CSV files. When importing data interactively, the system uses the features of JD Edwards World interactive software programs to control the data editing, security and update capabilities. When importing data in a batch mode, a new batch import program converts CSV file records into World Z file batch update records and thereby enters data from the CVS file into the database as a normal batch transaction. PC applications can access files in IFS folders through network drives you map on your Windows PC.

JD Edwards World can generate CSV files that you can use as spreadsheet templates when importing data into your system. The templates contain column headings and database field names for each column of data in the spreadsheet that you import. The database field name allows the import process to map data from the spreadsheet columns to the corresponding database field in the batch input file or interactive subfile. In addition to other methods of importing and exporting data, JD Edwards World provides the following two methods to import data:

- Interactive – from various application programs

- Batch – from an import program

JD Edwards World provides the following six methods to export data:

- Interactive, from various application programs

- Batch, from various DREAM Writer report programs

- World Writer, from a spooled World Writer report
- World Writer, directly from the database files
- FASTR, from FASTR spooled files
- STAR, from STAR spooled files.

This section contains the following:

- [Setting up Import/Export](#)
- [Restricting a User to an IFS Folder and Setting Default CCSID](#)
- [Exporting Data Interactively](#)
- [Importing Data Interactively](#)
- [Exporting Data by Batch](#)
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Before You Begin

- JD Edwards World recommends that you review Action Code Security and the security on the IFS before making Import/Export available to users.
- Ensure that you have proper authority before creating an IFS folder.
- You must have a User Display Preferences record before you can set up Import/Export preferences.

Setting up Import/Export

To use Import/Export features, you must have access to a shared folder in the IFS on your System i server. You can then, optionally, map a network drive to access the shared IFS folder from a Windows PC.

Additionally, there are settings for Import/Export that you access from the User Display Preferences program (P00923) which make Import/Export more convenient to use.

This section includes the following tasks:

- [To create an IFS folder](#)

- [To share an IFS folder using IBM iSeries Access for Windows](#)

- [To share an IFS folder using an IBM System i API](#)

- [To map a network drive on your Windows machine](#)

- [To use a shared folder on your own Windows machine](#)

- [To set up Import/Export preferences](#)

To create an IFS folder

JD Edwards World recommends that you create or use a user folder in the /home folder on the IFS. Each user should have a folder under the /home folder that matches their User Profile Name.

There are two methods by which you can create an IFS folder:

1. Using JD Edwards export programs

    Oracle recommends that you use this method, as you can restrict users to specified default folders and assign the Coded Character Set ID (CCSID) you want the IFS folders to have. See the section *Restricting a User to an IFS Folder and Setting Default CCSID* in this guide for more information.

    - Access the Directory Search screen from any Import or Export Preferences screen.

    - Type the name of the new folder you want to create with a leading forward slash, for example, /DIRECTORY in the Directory Path field and then press F9. The Directory Search program creates the new folder.
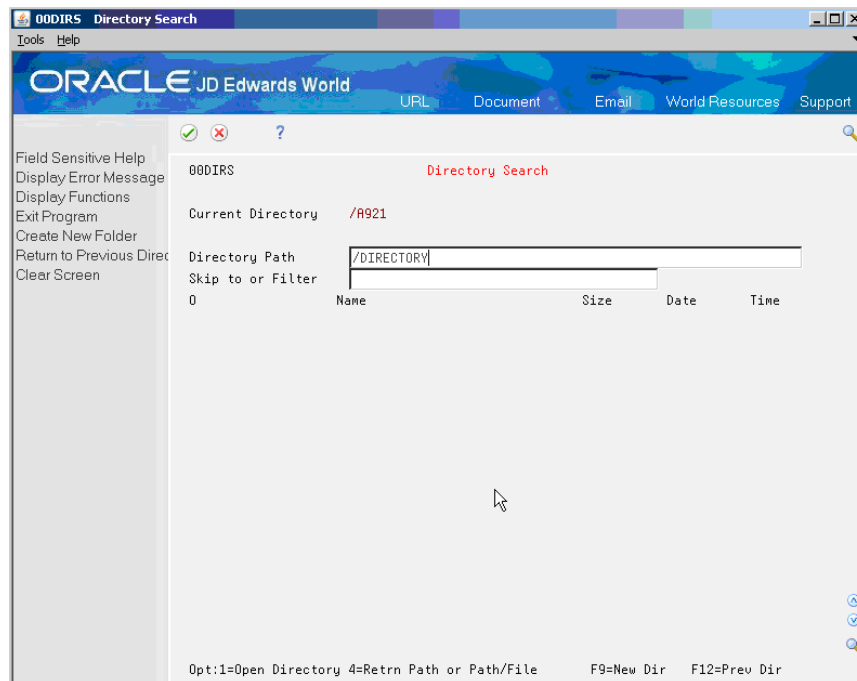
2. Using IBM

- On the System i command line, enter CRTDIR DIR (*<Directory Path>*)
  DTAAUT(*RWX) OBJAUT(*ALL).

- Replace <Directory Path> with the path and name of the IFS folder in single
  quotes. For example, you can enter CRTDIR replacing DIR (<Directory Path>)
  with DIR ('/home/UserID').

> **Note:** By default, the System i creates the IFS folder with data using the
> Coded Character Set ID (CCSID) of the System i job. Usually this is an
> Extended Binary Coded Decimal Interchange Code (EBCDIC) CCSID such
> as 37. Because most computers, other than IBM System i and mainframes,
> use American Standard Code for Information Interchange (ASCII), you
> must specify a Text Conversion from EBCDIC to ASCII. Specify Text
> Conversion on the properties of the file share for the IFS folder you set up to
> share. See *To share an IFS folder using IBM iSeries Access for Windows* in this
> guide for more information. If you specify Text Conversion for the file share
> at the /root or the /root/home level, folders under this also perform the
> text conversion.

> **Note:** Users can create their own subfolders within the part of the folder
> structure to which they have access. The System i creates new subfolders
> using the CCSID of the System i job, or you can specify the CCSID on
> DREAM Writer Version ZJDE0001 for Form ID P00923T. See the section
> *Restricting a User to an IFS Folder and Setting Default CCSID* in this guide for
> more information.

To share an IFS folder using IBM iSeries Access for Windows

You can create IFS folders with an EBCDIC or ASCII Coded Character Set ID
(CCCSID). See the section *Restricting a User to an IFS Folder and Setting Default CCSID*
in this guide for more information. If you create IFS folders with an EBCDIC CCSID,
you need to specify Text Conversion on the file share properties for the folder or a
parent folder.

1. Use iSeries Navigator to allow sharing for the new folder. Under the /home
   folder, use the following path under My Connections:

   <System i>|File Systems|Integrated File System|Root|Home|<UserID>

   Replace <System i> with the name or IP address of your System i and <UserID>
   with the name of the IFS folder.

2. Right click on the <UserID>folder.

3. Choose New Share from the Sharing menu.

4. On the General tab, change the Access to Read/Write.

5. To define Text Conversion for the file share, on the Text Conversion tab, choose Allow File Conversion and Simple Conversion.
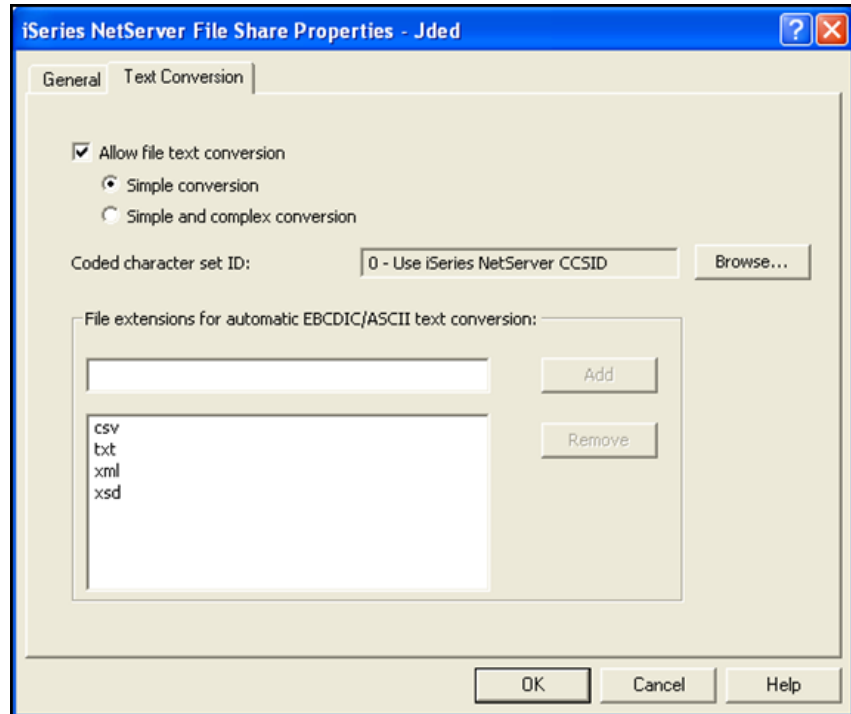
6. In the File extensions for automatic EBCDIC/ASCII text conversion area, add the file extensions csv, txt, xml, and xsd; click OK.

To share an IFS folder using an IBM System i API

If you do not have IBM iSeries Access for Windows installed on your system, you can share an IFS folder using a call to the Add File Server Share (QZLSADFS) API. See the following IBM iSeries NetServer System API reference for more details:

http://www-03.ibm.com/servers/eserver/iseries/netserver/apidoc.html#hdrzlsaddi

1. On the System i command line, enter CALL QZLSADFS and choose Command Entry Prompt (F4).

2. Enter the following parameters:

Parameter	Explanation
<UserID>	Share name. Use the name of the folder.
<Directory Path>	Path name. Specify the directory path in single quotes, such as '/home/UserID'
<Length>	Length of path name. Enter as X'99999999' replacing the number nine with the actual length of the path name in hexadecimal.

Parameter	Explanation
<CCSID>	CCSID Encoding of path name. Enter X'00000000' to use the job default. Oracle recommends that you use IFS folders with an ASCII CCSID in the folder properties to eliminate the need to specify Text Conversion on file share properties. See the section *Restricting a User to an IFS Folder and Setting Default CCSID* in this guide for more information.
<Text Description>	Text description. Enter the folder name.
<Permissions>	Permissions. Enter X'00000002' to allow read/write access.
<Maximum Users>	Maximum users. Enter X'FFFFFFFF' to specify no maximum.
<Error Code>	Error Code. Enter X'00000000'

Using the UserIDTest sample folder, the format for the call with parameters is as follows:

CALL PGM(QZLSADFS) PARM(USERIDTEST '/HOME/USERIDTEST' X'00000010' X'00000000' USERIDTEST X'00000002' X'FFFFFFFF' X'00000000')

You must have the IOSYSCFG special authority to perform this command.

To map a network drive on your Windows machine

1. In Windows Explorer, from the Tools menu, choose Map Network Drive.

2. Enter or choose a letter in Drive field.

   In the following example, the letter Q is the Drive letter.

3. Enter the directory path for the IFS folder in the Folder field and press Finish.

   Use back slashes in Windows. In the following example, you can replace System i with the network machine name or IP Address of your System i server. \home\UserID is the directory path to your shared IFS folder.

   Note: You must share any folder that you specify in the directory path. You typically do not need to specify the Root folder in the directory path when mapping to a shared folder.

4. The system might prompt you to enter your System i User ID and password. When doing so, you might need to enter the network Domain or IP address where the System i resides to qualify the User ID. Enter the password in lowercase.
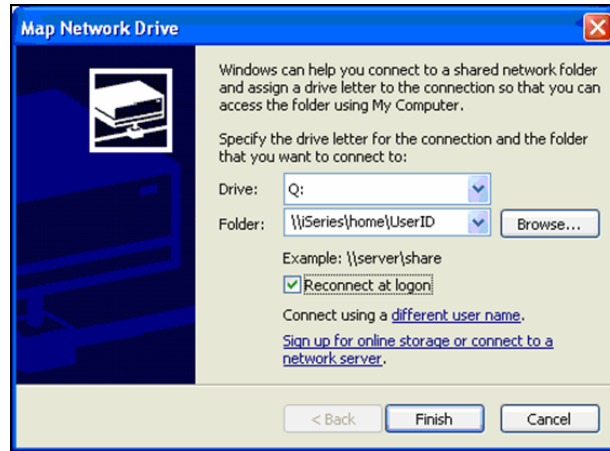
To use a shared folder on your own Windows machine

The Integrated File System (IFS) supports the iSeries NetClient file system (QNTC) which allows access to data and objects stored on remote servers running System i NetServer. The remote server can be another user's Window machine or your own Windows machine. This allows you to export data to and import data from your own hard drive. You access your hard drive through a shared folder name and your Windows machine name or IP Address. The directory path is specified as:

/QNTC/YourPCsComputerName/SharedFolderName

Or

/QNTC/YourPCsIPAddress/SharedFolderName

The path can be further qualified with subfolders below your shared folder.

1. In Windows Explorer, share a folder that you have created for containing import/export files.

2. Grant yourself Read, Write and Execute permission to this folder.

3. Grant *Public Read Only Permission.

4. In the Path Name field in Import/Export parameter screens specify the directory path as:

    /QNTC/YourPCsComputerName/SharedFolderName

    Or

    /QNTC/YourPCsIPAddress/SharedFolderName

5. Your System i User ID and password must be identical to your Windows network User ID and password in order for this functionality to work.

To set up Import/Export preferences

◆	From Master Directory (G), choose **Hidden Selection 27** From Advanced & Technical Operations (G9), choose **Security Officer** From Security Officer (G94), choose **Library List Control** From Library List Control (G944), choose **User Display Preferences**

Setting up User Display Preferences can make using Import/Export more convenient. If you do not set up preferences for Import/Export for a user, the system uses default values.

1. On User Display Preferences, enter your user ID in the following field:

   ▪ User ID

2. Choose Import/Export Preferences (F6).
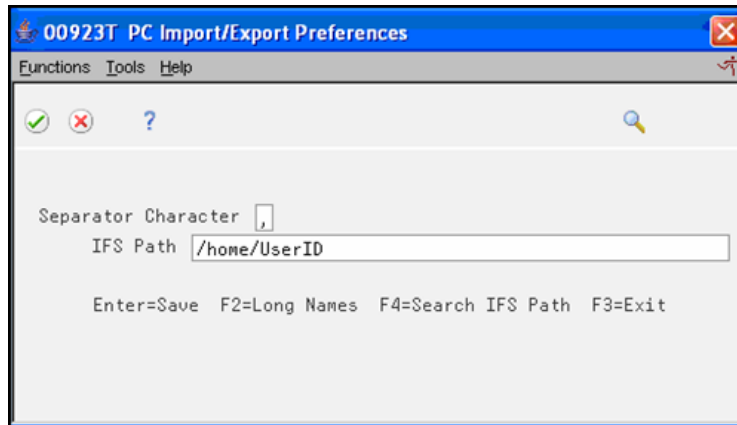
3. On Import/Export Preferences, complete the following fields:

   ▪ Separator Character

   ▪ IFS Path

   For example, you can enter an IFS path as /home/UserID.

Field	Explanation
Separator Character	The character that a spreadsheet, such as Excel will recognize as a data field separator when importing a Comma Separated Value's (CSV) file into a spreadsheet. The system imports each data field into a separate column.
	If left blank, the system enters a comma (,) as the default if the Decimal Format Character (ULDECF) Field on the User Display Preferences is a period (.). If the Decimal Format Character is comma, the system enters a semicolon (;).
	Screen-specific information
	The most common separator character in North America is comma (,). The Separator Character cannot be the same as the Decimal Format Character on User Display Preferences. For countries that use comma (,) as the Decimal Format Character, you can use a semicolon (;) for the Import/Export Separator Character.
IFS Path	The string defining the path to the import/export file on the Integrated File System. For Example: /home/UserID/
	Screen-specific information
	If you use your own IFS folder, enter the IFS Path. You do not need to specify the ROOT folder in this path string. The system enters this path as the default on all Import/Export parameter windows. You can set the IFS Directory Restriction processing option for program P00923T to restrict users to this IFS folder.

Restricting a User to an IFS Folder and Setting Default CCSID

The functionality for Import/Export uses the root (/) file system on the IFS. You might have several other products, such as Seagull Software or IBM WebSphere, on the IFS which you do not want users to access. IBM recommends general users access the default folder /home. JD Edwards World recommends that you restrict users to the /home folder or a sub-folder under /home.

To access a folder, users must have *RX (read, execute) access to all folders in the directory path. In addition, you should set the properties to share each folder in the path. JD Edwards World recommends that you set the root (/) and /home folders for *PUBLIC to *RX access. Then, set up a sub-folder for each user under /home with full access (*RWX – read, write, execute) and exclude *PUBLIC. See the *IFS Security Example* for more information.

> **Note:** You must test your system to ensure that *RX access by *PUBLIC to the root (/) and /home folders does not affect the function of other software that exists on the IFS.

You can also set up folders that team members can share. In this case, you set up a sub-folder under /home with full access for all team members and exclude *PUBLIC

access. You then set up subfolders under the team folder for each team member with full access. See the *IFS Security Example* for more information.

IFS Security Example

In the following example, all users have personal folders under /home or a sub-folder under /home. The administrator has *RWX access to all folders. You can restrict UserA1 and UserA2 to the /departmentA folder or the /home folder, depending on whether public access files reside in the /home folder. You can restrict User3, who is not part of a department, to the /user3 folder or the /home folder, depending on whether public access files reside in the /home folder.
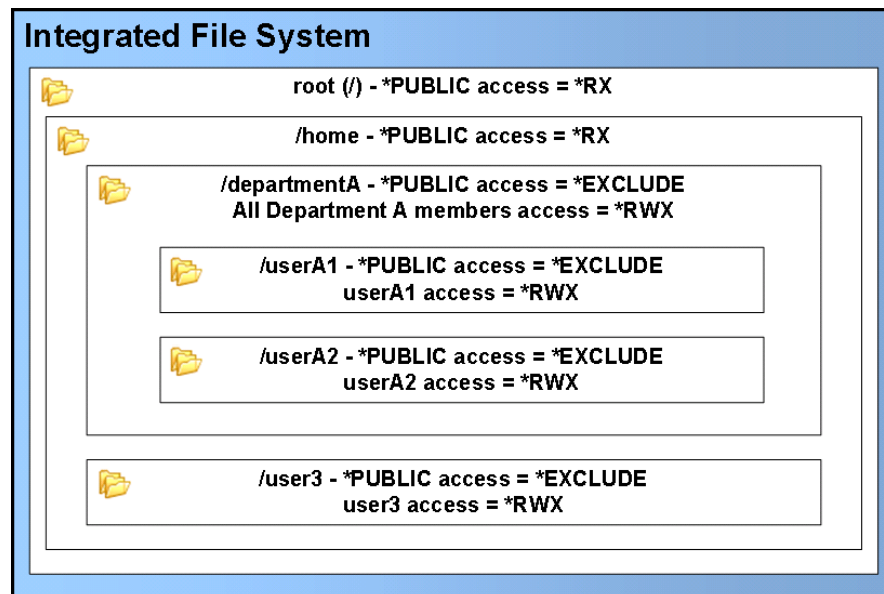
To restrict users to an IFS folder and set default CCSID

From Master Directory (G), choose **Hidden Selection 27**
From Advanced & Technical Operations (G9), choose **Run Time Setup**
From Run Time Setup (G90), choose **DREAM Writer**
From DREAM Writer (G81), choose **Versions List**

You can make the IFS folder more secure by restricting user's access to certain IFS folders. If you do not restrict users to a particular IFS folder, they have access through JD Edwards World screens to all folders under the root (/) folder for which they have authority. Setting the IFS Directory Restriction processing option for Import/Export Preferences restricts users to their default folder or subfolders under their default folder, using JD Edwards World screens.

See *Work with DREAM Writer* for more information about setting up DREAM Writers.

1. On Versions List, enter P00923T in the Form field and click Enter:

2. Enter 2 in the Option field next to the ZJDE0001 Version and click Enter.

3. On the DREAM Writer Menu window, enter 1 in the Option field next to Processing Option Value(s) and click Enter.

4. On Processing Options Revisions, enter Y in IFS Directory Restriction processing option.

5. Optionally, enter a CCSID in the IFS Folder Creation processing option.

   The system uses this CCSID when users create their own subfolders. You can enter either an EBCDIC or an ASCII CCSID. Oracle recommends that you enter an ASCII CCSID such as 437 or 1252 for this Option field.

   This step directs the World system to create folders with an ASCII CCSID folder property. The Export program uses the CCSID property on the IFS folder to determine what CCSID to use when writing files to the IFS, which eliminates the need to specify Text Conversion on the File Share Properties.

   Note: If you do not set the IFS Folder Creation processing option, the system creates the IFS folder with data using the CCSID of the System i job.

   Note: Restricting users to their default folder does not change the security settings on the IFS folders. Use this restriction in conjunction with secure IFS folders.

Exporting Data Interactively

You can use Interactive Export in many JD Edwards World programs. Interactive Export is available only in subfile programs. The program can export the entire subfile automatically and you do not need to page through the entire subfile. Interactive export is not available in programs that display one record at a time, as this can be a very time consuming method of exporting data.

You use either a value in the Action Code field or a function key to initiate the Interactive Export from interactive programs. If the program has an Action Code field, you use a T (To PC). If the program is an inquiry only program, the screen does not contain an Action Code field; you choose Export (F23) to initiate the export.

When you export from interactive programs, the system stores the parameter information in the Import/Export Parameters file (F00UDP). When you run an export again from the same interactive programs, you can edit the parameters that you save in the F00UDP. The parameters are stored by user.

The interactive subfile programs can display a maximum of 9,999 records at one time. If the system locates more records than the subfile can display, you cannot export all possible data in the database. In this case, you should consider using a batch export instead of an interactive export.

You can export to a CSV file which already includes Import template rows. The Export program recognizes and preserves the template rows. This is useful in situations when you want to create a turnaround document. A turnaround

document is a document which you can export, modify the data, and then import the data you modify. When exporting to a template, the Field IDs must be in row 1 or row 4 of the template.

Enhancements to the Interactive Export allow you to send an export document to JD Edwards World Electronic Document Delivery (EDD), where the document can be optionally transformed and delivered via JD Edwards World processes or Oracle BI Publisher processes.

To view a list of programs in which you can use Interactive Export, you can access UDC 00/IE.

To export data interactively

1. Locate the program from which you want to export data.

2. Complete the appropriate fields to display the data you want to export.

   It is not necessary to scroll or position the cursor to a particular position on the screen.

3. Access Interactive Export Parameters (choose Export (F23) or enter T in the Action Code field).

4. Complete the following fields for Export:
   - Import Export File
   - IFS Path
   - Replace Records
   - Include Fold Area
   - Include Page Headings

- Include Column Headings
- Include Header Fields

You can press F4 to browse the IFS folders and select a file and path.

5. Complete the following fields for Distribution:

- Enabled Y/N
    - To distribute the export file, set the Enabled Y/N field to Y
- Distribution Profile
- Email Template
- Transformation Template
- Find Email Address for Address Number
- Address Number
    - The Distribution Profile, Email Template, and Transformation Template fields are optional. The mail client is called when the export process is completed after pressing F6. Press F9 instead of F6 to distribute the current export file without calling the export process. For more information on document distribution see the *Working with Electronic Document Delivery* guide.
    - To search for an appropriate e-mail address to send an Interactive Export to, enter Y for Find Email Address for Address Number. The system searches the F01018-Email/URL Addresses file for the Address Number given. If more than one e-mail address is found for the Address Number, an e-mail address selection screen displays before accessing the Email Client screen.

Press F6 to complete the export process and call the mail client.

Press F9 to distribute the current export file without calling the export process.

6. Press Enter to save the parameters.

7. Choose Export (F6) or Continue.

8. Access the IFS and locate the export file.

Field	Explanation
Import Export File	The name of the import/export file located in an IFS folder. You can use the file extensions: CSV (Comma Separated Values) XML (eXtensible Markup Language) XSD (XML Schema Definition) TXT (Text) *Screen-specific information* When exporting, you can add to an existing file, replace an existing file or create a new file. If the file name is too long to display in the parameters window, the system disables this field. Press F2 to access the Long File/Path Names screen to add or edit long file names. If you are exporting to a file with Import template rows, the system preserves these rows even if you enter Y in the replace Records field. Note: If you are exporting to an existing file, the file *cannot* be open on the PC or the export fails.
IFS Path	The string defining the path to the import/export file on the Integrated File System. For Example: /home/UserID. *Screen-specific information* You do not need to specify the ROOT folder in this path string. The folder must exist in the IFS. You must also have read/write authority to the folder. If the file name is too long to display in the parameters window, the system disables this field. Press F2 to access the Long File/Path Names screen to add or edit long file names.
Replace Records	The following are valid values for this field: Y Deletes the file and recreates it with the new set of records. N Appends the new set of records to the current set in the file. 1 Deletes and recreates records for the first export, and appends records for subsequent exports, within the same transaction. Screen-specific information Returning to the menu starts a new transaction.

Field	Explanation
Include Fold Area	The following are valid values for this field:
	Y Export fields in the subfile fold area.(Default)
	N Do not export fields in the subfile fold area.
	Screen-specific information
	Determine if there is a fold area and whether fields in the fold area need to be in the export.
	Note: The system uses column headings for fields in the fold from Data Dictionary.
Include Page Headings	Determines which report headings are included in the export. Valid values are:
	Y Include all heading report lines.
	N Do not include heading report lines.
	1 Include only the heading report lines from the first page.
	Screen-specific information
	For interactive export, the system uses the fields from the header portion of the screen to generate page headings.
Include Column Headings	Determines which column headings are included in the export. Values are:
	Y Include all column heading lines.
	N Do not include all column heading lines.
	1 Include only the column heading lines from the first page.
Include Header Fields	Determines if Header fields should be included in all Detail Records.
	N Header field values will not be included in Detail Records (This is the default).
	Y Header Field values will be included in separate columns in all rows of Detail Records.
	Screen-specific information
	This field allows you to repeat values from the header portion of the screen on each detail line. This might be necessary if important identifying information displays only in the header portion of the screen.

Field	Explanation
Enabled Y/N	Y Distribution is enabled and will take place at the completion of the export process.
	N Distribution is disabled and will not occur after export completes. (This is the default.)
Distribution Profile	Optional field that specifies a profile to be used for the distribution.
Email Template	Optional field that specifies a template to be used for the email.
Transformation Template	Optional field that specifies a template to be used in transforming an XML export file.
Find Email Address for Address Number	Flag to indicate if you want the system to look for an Email Address before presenting the Email Client screen.
Address Number	If Find Email Address for Address Number is Y, this is the Address Number the system will use to look for Email Addresses. The Address Number can be populated automatically by the application program, and you can override the number on this screen. Note: If more than one Email Address is found for the Address Number, the V01018S1 - Email Selection screen appears prior to showing the Email Client screen, allowing you to select an Email Address.

Importing Data Interactively

You can use Interactive Import in many JD Edwards World programs. Interactive Import is available in subfile programs and programs that display one record at a time. The subfile programs can import the entire subfile automatically and you do not need to page through the entire subfile.

You use an F (From IFS) in the Action Code field to initiate the Interactive Import from interactive programs.

When you import to interactive programs, the system stores the parameter information in the Import/Export Parameters file (F00UDP). When you run an import again from the same interactive program, you can edit the parameters that you save in the F00UDP.

Import files must be CSV files. The files must have an Import template row containing data item names that identify the columns. The order of columns in an Import file is not important. Depending on the application program you are importing data to, not all columns require data.

The interactive subfile programs can display a maximum of 9,999 records at one time. If your import generates more than 9,999 records, the program will import to the subfile limit and then pause. You can then process the records in the subfile and run the import again, until you process all records.

If the heading information in your import CSV file changes, the import program will pause. You can then process the records in the subfile and run the import again, until you process all records.

To view a list of programs in which you can use Interactive Import, you can access UDC 00/II.

This section includes the following tasks:

- [To create an import template](#)
- [To import data interactively](#)

To create an import template

You might find it helpful to create a template to use in preparing a CSV file for Import. The template contains the field headers, field names and descriptions to identify columns that the system imports. The system uses only the field names in the import process; the other information is to aid you in identifying columns and the data that you require.

1. Locate the program from which you want to import data.

2. Access Interactive Import Parameters (enter F in the Action Code field).

3. On Interactive Import Parameters, complete the following fields

   - File Name
   - IFS Path

4. Choose Create Template (F9).

5. From your PC, access the CSV template file and add your own information to import.

To import data interactively

1. Locate the program to which you want to import data.

2. Access Interactive Import Parameters (enter F in the Action Code field).

3. Complete the following fields:
    -   File Name
    -   IFS Path
    -   Field ID Row Number
    -   Start Data Row Number
    -   End Data Row Number

    You can press F4 to browse the IFS folders and select a file and path.

4. Enter and save parameters, and continue (F6).

    The system enters the data in the appropriate fields from the spreadsheet.

    > **Note:** The import might not load all of the data from the spreadsheet. If the system detects a change in header information, you receive a message stating Group of records imported (JDE0517). Add the first group of records and then run the import again. The import begins from the point in the spreadsheet where the import ceased. A similar situation occurs if you try to import more than 9,998 records at one time.

5. Enter A in the following field:
    -   Action Code

    The system validates and adds the import records. Some programs allow change as well as add.

Field	Explanation
File Name	The name of the import/export file located in an IFS folder. The file extension must be .CSV.
	Screen-specific information
	The file must exist in the IFS. If the file name is too long to display in the parameters window, the system disables this field. Press F2 to access the Long File/Path Names screen to add or edit long file names.
IFS Path	The string defining the path to the import/export file on the Integrated File System. For Example: /home/UserID.
	Screen-specific information
	You do not need to specify the ROOT folder in this path string. The folder must exist in the IFS. You must also have read/write authority to the folder.
	If the file name is too long to display in the parameters window, the system disables this field. Press F2 to access the Long File/Path Names screen to add or edit long file names.
Field ID Row Number	Designates the row in an import file that contains field identifiers for each column of data. If field identifiers were in the first row, this value would be 1. The default value is 4.
Start Data Row Number	Designates the starting row number in an import file that contains column data to be imported. A value of 100 would indicate that data import would begin at row 100 in the import file. The default value is 5.
End Data Row Number	Designates the ending row in an import file that contains column data to be imported. A value of 200 would indicate that data import would terminate after processing row 200 in the import file.
	Screen-specific information
	The default value is 65536, the maximum number of rows in an Excel spreadsheet in Microsoft Office 2003.
	The value 99999 instructs the program to import records to the end of the CSV file.

Exporting Data by Batch

Batch Export is available for Quote Request report program P43530. Batch Export uses the report you create from a DREAM Writer to create or update an export file on the PC.

The Import/Export Parameters file (F00UDP) contains the parameters for spooled file export processing. The system stores the parameters for a particular report

version with the DREAM Writer version. You can access these from the Additional Parameters screen in the DREAM Writer Version List.

The Enabled Y/N field on the Spooled File Export Parms window allows you to export a DREAM Writer version. The system activates the Spooled File Export program (P00SPDL) at the end of the batch reporting application if the Enabled Y/N field is set to Y.

When you run a DREAM Writer version with the Enabled Y/N field set to Y for export, the system produces the report with export tags to the right of each report line. The system uses the tags to produce the Export file. The export tags identify different types of report lines, such as page headings, column headings, summary, detail and total lines. You specify whether you want each type of line to export on the Spooled File Export Parms screen.

You might want to run a DREAM Writer version to produce only the report without exporting the data. If you are running the DREAM Writer Version for the report only without exporting the data, you can hide the export tags by setting the Enabled Y/N field to N and running the DREAM Writer version.

To view a list of programs in which you can use Batch Export, you can access UDC 00/BE.

Enhancements to the Batch Export allow you to export data by batch to TXT documents for DREAM Writers not enabled for export.

Enhancements to the Batch Export allow you to send an export document to JD Edwards World Electronic Document Delivery (EDD), where the document can be optionally transformed and delivered via JD Edwards World processes or Oracle BI Publisher processes. The Export engine is enhanced to support World bursting or, BI Publisher bursting. Bursting works strictly for reports that have been enabled for this process.

> **Note:** User Defined Code 00/BE is used to designate reports enabled for Export. In addition, if the Special Handling Code has a Y in the first character if the report is also enabled for World Bursting and/or adds Level Break structure to the XML. N in the second character of the Special Handling Code disallows export to CSV format for this report. This restriction exists for reports that are not setup using a columnar format.

To export data by batch

	From DREAM Writer (G81), choose **Version List**

This procedure only applies to Quote Request report program P43530.

1. On Version List, locate the version you want to export.

2. Change the version and access the Additional Parameters screen.

3. On Additional Parameters, choose Batch Export Parameters (F6).
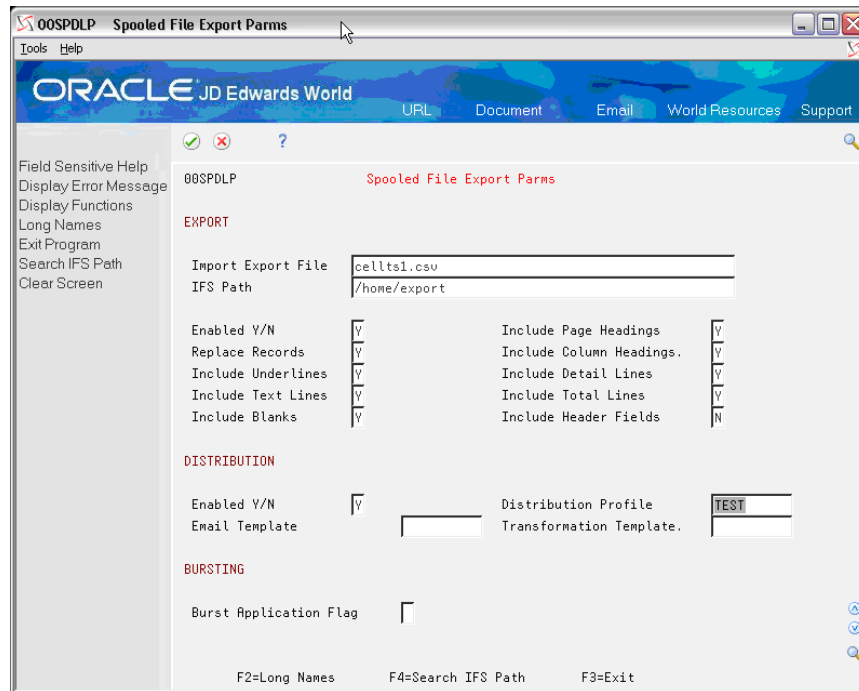
4. On Spooled File Export Parameters, complete the following fields for Export:
   - Import Export File
   - IFS Path
   - Enable Y/N
   - Replace Record
   - Include Underline
   - Include Text Lines
   - Include Blank Lines
   - Include Page Headings
   - Include Column Headings
   - Include Detail Lines
   - Include Total Lines
   - Include Header Fields

   You can press F4 to browse the IFS folders and select a file and path.

5. Complete the following fields for Distribution.
   - Enabled Y/N
   - Distribution Profile
   - Email Template
   - Transformation Template
     - To distribute the export file, set the Enabled Y/N field to Y

▪ The Distribution Profile is a required field. Email Template and Transformation Template fields are optional. The mail server is called after the export process has completed. For more information on document distribution see the *Working with Electronic Document Delivery* guide.

6. Complete the following fields for Bursting:

▪ Burst Application Flag

▪ To distribute and burst the export file, set the Burst Application Flag field to 1 or 2. A value of 1 requests the export process to perform the bursting of the report. The report is burst and exported to multiple export files that are passed to the mail server for distribution. The mail server is called after the export process has completed for each report segment. This type of bursting is supported for CSV, XML, and TXT export formats

▪ A value of 2 requests that the burst process be performed by BI Publisher. This type of bursting requires XML export format. CSV and TXT formats are not supported. Only reports with Address Number type fields are supported. For more information on document distribution and bursting see the *Working with Electronic Document Delivery* guide.

7. Enter and Save the parameters.

8. Run the version.

9. Access the IFS and locate the export file.

Field	Explanation
File Name	The name of the import/export file located in an IFS folder. You can use the file extensions:
	CSV (Comma Separated Values)
	XML (eXtensible Markup Language)
	XSD (XML Schema Definition)
	TXT (Text)
	Screen-specific information
	If the file name is too long to display in the parameters window, the system disables this field. Press F2 to access the Long File/Path Names screen to add or edit long file names.
	When exporting, you can add to an existing file, replace an existing file or create a new file.

Field	Explanation
IFS Path	The string defining the path to the import/export file on the Integrated File System. For Example: /home/UserID.
	Screen-specific information
	You do not need to specify the ROOT folder in this path string. The folder must exist in the IFS. You must also have read/write authority to the folder.
	If the file name is too long to display in the parameters window, the system disables this field. Press F2 to access the Long File/Path Names screen to add or edit long file names.
Enable Y/N	The system uses the value in this field to determine whether a process is enabled (Y) or disabled (N). Blank is also a valid value.
	Screen-specific information
	Setting this field to N disables the export process. To run the export and include a printed copy of the report without the export tags, you must submit the version twice. Submit the version once with this field set to Y and again with this field set to N. The Maximum Form Width in the Printer Overrides must be set to the correct form width in order to print the report without the export tags. If the correct form width is not known, use blanks for the form width and the export process determines the correct value.
Replace Records	The following are valid values for this field:
	Y Deletes the file and recreates it with the new set of records.
	N Appends the new set of records to the current set in the file.
	1 In batch export, the system deletes the file and recreates it with the new set of records.
Include Underline	Determines whether underlines are included in the Export. Values are:
	Y Include underlines. (Default)
	N Do not include underlines.
Include Text Lines	Determines which text lines are included in the Export. Values are:
	Y Include text report lines. (Default)
	N Do not include text report lines.

Field	Explanation
Include Blanks	Determines whether blank lines are included in the Export. Values are:
	Y Include blank report lines from reports in the Export. (Default)
	N Do not include blank report lines.
Include Page Headings	Determines whether report headings are included in the export:
	Y Include all heading report lines.
	N Do not include heading report lines.
	1 Include only the heading report lines from the first page.
Include Column Headings	Determines whether column headings are included in the export. Values are:
	Y Include all column heading lines.
	N Do not include all column heading lines.
	1 Include only the column heading lines from the first page.
Include Detail Lines	Determines whether detail lines are included in the Export. The following are valid values for this field:
	Y Export detail print lines from the report (Default)
	N Do not export detail print lines from the report
Include Total Lines	Determines whether total lines are included in the Export. The following are valid values for this field:
	Y Export total print lines from the report (Default)
	N Do not export total print lines from the report
Include Header Fields	Determines if header fields should be included in all detail rows.
	N Header field values will not be included in Detail Records. (This is the default.)
	Y Header Field values will be included in separate columns in all rows of Detail Records.
	Screen-specific information
	This field allows you to repeat values from the header portion of the screen on each detail line. This might be necessary if important identifying information displays only in the header portion of the screen.

Field	Explanation
Enabled Y/N	Y Distribution is enabled and will take place at the completion of the export process.
	N Distribution is disabled and will not occur after export completes. (This is the default.)
Distribution Profile	Required field (if Enabled Y/N = Y) that specifies a profile to be used for the distribution.
Email Template	Optional field that specifies a template to be used for the e-mail subject line and body.
Transformation Template	Optional field that specifies a template to be used in transforming an XML export file.
Burst Application Flag	Blank Bursting is disabled. (This is the default.)
	1 Bursting is performed by the export process.
	2 Bursting is performed by BI Publisher and requires XML.

Exporting data by batch for DREAM Writers not enabled for export

DREAM Writers not enabled for Batch Export, do not have a UDC 00/BE record. These reports do not contain the export tags on the end of print lines. Therefore, the export process cannot determine if a print line is a page heading, column heading, detail line, total line or underline. However, the export process can still treat each print line as line of text and export it in that manner. TXT file format is the only valid export format for this circumstance. Print line type parameter fields are not displayed since different line types cannot be identified by the export process.

Importing Data by Batch

Batch Import enables you to import data from a CSV file directly into a JD Edwards World database file. To preserve system integrity, the system controls which files it allows for Batch Import. These files are usually those which have a Z file, EDI or similar process in place to edit the information in a batch mode before updating other files in the database.

There are two settings in the JD Edwards World system, which enforce this data integrity control. The first setting, is for any file which is the target of a Batch Import (the Batch Import File), the Function Use code in Software Versions Repository (SVR) must be set to a value of 231-Batch Input Files or 232-Interactive Z Files. The second setting, the Special Handling Code on UDC 98/FU for value 231 or 232, must be set to IMPORT=Y. This allows the system administrator control over which files are allowed for Batch Import.

The Import/Export Parameters file (F00UDP) contains the parameters for Batch Import processing. There can be one Batch Import parameter record per user.

It is helpful to create a template to use in preparing a CSV file for Batch Import. The template contains the field headers, field names and descriptions to identify

columns that the system imports. The system uses only the field names in the import process; the other information is to aid you in identifying columns and the data that you require.

This section includes the following tasks:

- To create an import template
- To import data by batch

To create an import template

| From Master Directory (G), choose **Import/Export** |
| From Import/Export (G00PCIE), choose **Batch Import Templates** |

You can use the Batch Import Templates program (P00CRTCSV) to create a spreadsheet template. The system copies the data dictionary column headings, field size, field type, and field name into the template.

1. On Batch Import Templates, complete the following fields:

 - Batch Import File
 - Import Export File
 - IFS Path

 You can press F4 to browse the IFS folders and select a file and path.
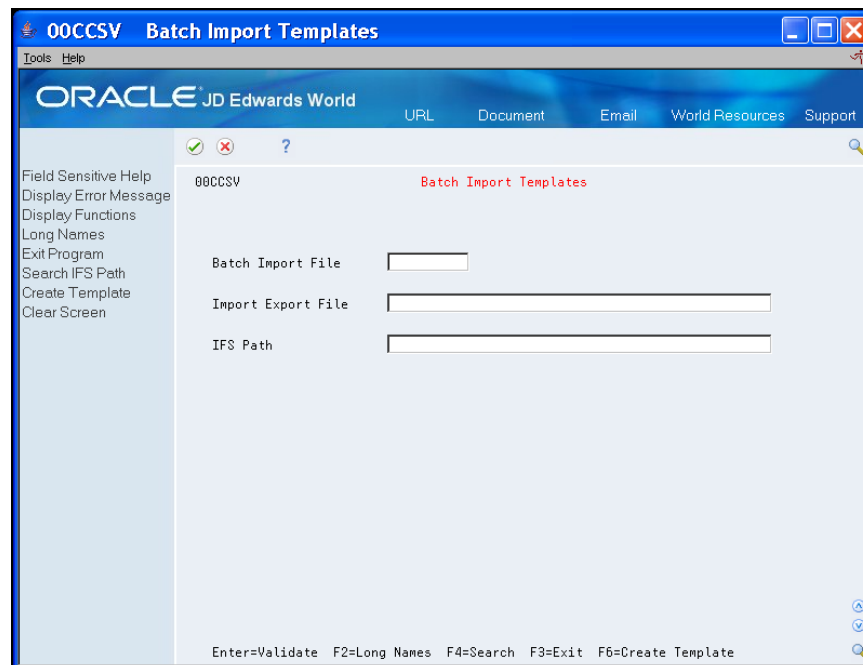
2. Choose Create Template (F6).

3. From your PC, access the CSV template file and add your own information to import.

Field	Explanation
Batch Import File	Enter a file name, UDC 00/BI, for the file which receives the data during the import process.
Import Export File	The name of the CSV file import template to be created in an IFS folder. The file extension must be '.CSV'. The file name cannot currently exist in the IFS folder. Press F2 to access the Long File/Path Names screen to add or edit long file names.
IFS Path	The string that defines the path to the import template file on the Integrated File System. For Example: /home/UserID. *Screen-specific information* You do not need to specify the ROOT folder in this path string. The folder must exist in the IFS. You must also have read/write authority to the folder. If the file name is too long to display in the parameters window, the system disables this field. Press F2 to access the Long File/Path Names screen to add or edit long file names.

To import data by batch

From Master Directory (G), choose **Import/Export**
From Import/Export (G00PCIE), choose **Batch Import from CSV File**

1. On Batch Import from CSV File, complete the following fields:

    - Batch Import File

    - Import Export File

    - IFS Path

    - Field ID Row Number

    - Start Data Row Number

    - End Data Row Number

2. Enter and Save the parameters.

3. Choose Continue (F6) from the Functions menu.

Field	Explanation
Batch Import File	Enter a file name, UDC 00/BI, for the file which receives the data during the import process.
Import Export File	The name of the import file located in an IFS folder. The file extension must be '.CSV'. *Screen-specific information* If the file name is too long to display in the parameters window, the system disables this field. Press F2 to access the Long File/Path Names screen to add or edit long file names.
IFS Path	The string that defines the path to the import template file on the Integrated File System. For Example: /home/UserID. *Screen-specific information* You do not need to specify the ROOT folder in this path string. The folder must exist in the IFS. You must also have read/write authority to the folder. If the file name is too long to display in the parameters window, the system disables this field. Press F2 to access the Long File/Path Names screen to add or edit long file names.

Field	Explanation
Field ID Row Number	Designates the row in an import file that contains field identifiers for each column of data. If field identifiers were in the first row, this value would be 1. The default value is 4.
	Screen-specific information
	Enter the number of the CSV file row which contains the field names. These names are used by the import process to identify which columns from the CSV file are to be loaded into which fields in the JD Edwards World file.
Start Data Row Number	Designates the starting row number in an import file that contains column data to be imported. A value of 100 would indicate that data import would begin at row 100 in the import file. The default value is 5.
End Data Row Number	Designates the ending row in an import file that contains column data to be imported. A value of 200 would indicate that data import would terminate after processing row 200 in the import file.
	Screen-specific information
	The default value is 65536, the maximum number of rows in an Excel spreadsheet in Microsoft Office 2003.
	The value 99999 instructs the program to import records to the end of the CSV file.

Exporting Data Using Spooled World Writer Reports

You can export data to files on the IFS from a spooled report that you create in a World Writer version. World Writer creates a spooled file which the Export program reads to build an export file, if you enable export for the World Writer Version. World Writer does not require the export tags at the end of print lines. The query report specifications in World Writer allow the system to identify the location and attributes of fields in print lines in the spooled file. For this reason, a World Writer version can export data and produce a printable report simultaneously.

The Import/Export Parameters file (F00UDPW) contains the parameters for spooled file export processing, including World Writer reports.

The World Writer report cannot have text lines that wrap or detail report records which use more than one print line. You can use the entire World Writer report width of 378 characters.

World Writer reports have the same enhancements to the Batch Export which allow you to send an export document to JD Edwards World Electronic Document Delivery (EDD), where the document can be optionally transformed and delivered via JD Edwards World processes or Oracle BI Publisher processes. BI Publisher can be used to set up bursting for any report.

To export data using World Writer spooled reports

From the World Writer menu (G82), choose a World Writer query group from which you want to export data.

1. Choose or create a version from which you want to export.

2. Change the version and access the Additional Parameters screen.

3. On Additional Parameters, choose Batch Export Parameters (F6).

4. On Spooled File Export Parameters, complete the following fields for Export:
    - Import Export File
    - IFS Path
    - Enable Y/N
    - Replace Records
    - Include Underlines
    - Include Text Lines
    - Include Blank Lines
    - Include Page Headings
    - Include Column Headings
    - Include Detail Lines

- Include Total Lines

- Include Header Fields

You can press F4 to browse the IFS folders and select a file and path.

5. Complete the following field for Distribution.

- Enabled Y/N

- Distribution Profile

- Email Template

- Transformation Template

  - To distribute the export file, set the Enabled Y/N field to Y

  - The Distribution Profile is a required field. Email Template and Transformation Template fields are optional. The mail server is called after the export process has completed. For more information on document distribution see the *Working with Electronic Document Delivery* guide.

6. Complete the following fields for Bursting.

- Burst Application Flag

  - To distribute and burst the export file set the Burst Application Flag field to 1 or 2

  - A value of 1 requests the export process to perform the bursting of the report. The report is burst and exported to multiple export files that are passed to the mail server for distribution. The mail server is called after the export process has completed for each report segment. This type of bursting is supported for CSV, XML, and TXT export formats.

  - A value of 2 requests that the burst process be performed by BI Publisher. This type of bursting requires XML export format. CSV and TXT formats are not supported.

- Burst on Report Field

  - The system requires the Burst on Report Field and supports only Address Number type fields. For more information on document distribution and bursting see the *Working with Electronic Document Delivery* guide.

- If you want to burst a World Writer report using the World burst process, the report must meet the following conditions:

  - Address Number must be the highest order sort priority

  - Address Number must be the highest priority level break

  - You must set Page Skip = Y on the Address Number level break

  - You must set the "Total Level Hdr" field on the Address Number level break to display the Address Number

7. Enter and save the parameters.

8. Run the version.

Exporting Data from Database Files Using World Writer

You can export data from database files to files on the IFS from a World Writer version without creating a spooled report. The system uses World Writer join files, data and column selection, and sequencing when building the export file.

The Import/Export Parameters file (F00UDPW) contains the parameters for database file export processing.

When exporting directly to an IFS export file, you can exceed the World Writer report width of 378 characters, because the system does not produce a spooled report.

> **Note**: The system does not provide for Calculation fields in World Writer when exporting data from database files using World Writer.

To export data from database files using World Writer

From the World Writer menu (G82), choose a World Writer query group from which you want to export data.

1. Choose or create the version from which you want to export data to a spreadsheet.

2. Enter 8 in the Option field.

3. On Database Export Parameters, complete the following fields for Export:

   ▪ Import Export File

   ▪ IFS Path

- Replace Records
- Include Column Headings

To locate IFS folders, you can choose Search IFS Path (F4) to access the Directory Search screen and select an IFS folder.

4. Complete the following fields for Transformation and/or Distribution:

- Enabled Y/N
- Distribution Profile
- Email Template
- Transformation Template
  - To transform and/or distribute the export file, set the Enabled Y/N field to Y
  - The Distribution Profile is a required field. Email Template and Transformation Template fields are optional. The mail server is called after the export process has completed. For more information on document distribution see the *Working with Electronic Document Delivery* guide.

5. Enter and save the parameters.

6. Choose Continue (F6) to run the export.

Exporting Data Using Spooled FASTR and STAR Reports

You can export data to files on the IFS from a spooled report that you create in a FASTR or STAR version. FASTR and STAR create a spooled file which the Export program reads to build an export file, if you enable export for the FASTR or STAR Version. They do not require the export tags at the end of print lines. The report specifications in FASTR and STAR allow the system to identify the location and attributes of fields in print lines in the spooled file. For this reason, a version can export data and produce a printable report simultaneously.

The Import/Export Parameters file (F00UDP) contains the parameters for spooled file export processing these reports.

FASTR and STAR export can process normal width (132) and wide width (198) reports.

FASTR and STAR reports have the same enhancements to the Batch Export which allow you to send an export document to JD Edwards World Electronic Document Delivery (EDD), where the document can be optionally transformed and delivered via JD Edwards World processes.

To export data using FASTR or STAR spooled reports

From the FASTR menu (G83), choose a FASTR Form ID or from menu G1213 (option 22), choose a FASTR or STAR Form ID from which you want to export data.

1. Choose or create a version from which you want to export.

2. Change the version and access the Additional Parameters screen.

3. On Additional Parameters, choose Batch Export Parameters (F6).

4. On Spooled File Export Parameters, complete the following fields for Export:
   - Import Export File
   - IFS Path
   - Enable Y/N
   - Replace Records
   - Include Underlines
   - Include Text Lines
   - Include Blank Lines
   - Include Page Headings
   - Include Column Headings

- ▪ Include Detail Lines

- ▪ Include Total Lines

- ▪ Include Header Fields

You can press F4 to browse the IFS folders and select a file and path.

5. Complete the following fields for Distribution.

- ▪ Enabled Y/N

- ▪ Distribution Profile

- ▪ Email Template

- ▪ Transformation Template

To distribute the export file, set the Enabled Y/N field to Y.

The Distribution Profile is a required field. Email Template and Transformation Template fields are optional. The mail server is called after the export process has completed. For more information on document distribution see the *Working with Electronic Document Delivery* guide.

6. Complete the following field for Bursting.

- ▪ Burst Application Flag

To distribute the burst export file, set the Burst Application Flag field to 1 or 2. A value of 1 requests the export process to perform the bursting of the report. The report is burst and exported to multiple export files that are passed to the mail server for distribution. The mail server is called after the export process has completed for each report segment. This type of bursting is supported for CSV, XML, and TXT export formats. A value of 2, requests that the burst process be performed by BI Publisher. This type of bursting requires XML export format. CSV and TXT formats are not supported. For more information on document distribution and bursting see the *Working with Electronic Document Delivery* guide*.

7. Enter and save the parameters.

8. Run the version.

Exporting Data from a Locked World Writer or DREAM Writer

You might have permission to run DREAM Writer or World Writer versions, but not have permission to change the version if the User Exclusive field in the version is set to restrict access. You can run an Export for these locked (restricted) versions by adding the Spooled File Export Parameters with these programs, instead of using the DREAM Writer Version List screen to add the parameters.

You can run a batch export from a locked World or DREAM Writer version using the World Writer Export Parameters program (P00MPEP) or Spooled File Export Parameters program (P00MPEP). You cannot make changes to the version you are exporting.

This section includes the following tasks:

- [To export data from locked World Writer versions](#)

- [To export data from locked DREAM Writer versions](#)

To export data from locked World Writer versions

◈	From Master Directory (G), choose **Import/Export** From Import/Export (G00PCIE), choose **World Writer Export Parameters**

1. On World Writer Export Parameters, complete the following fields and press Enter:

   - Group

   - Version

   - User ID
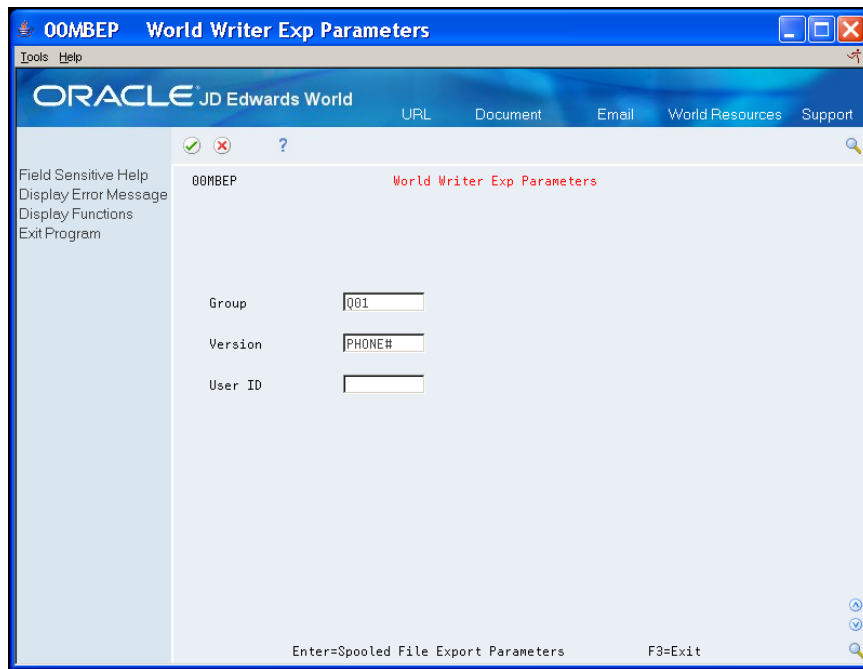
2. On Spooled File Export Parameters, enter the export parameters.

3. Ensure that you set the Enabled Y/N field to Y.
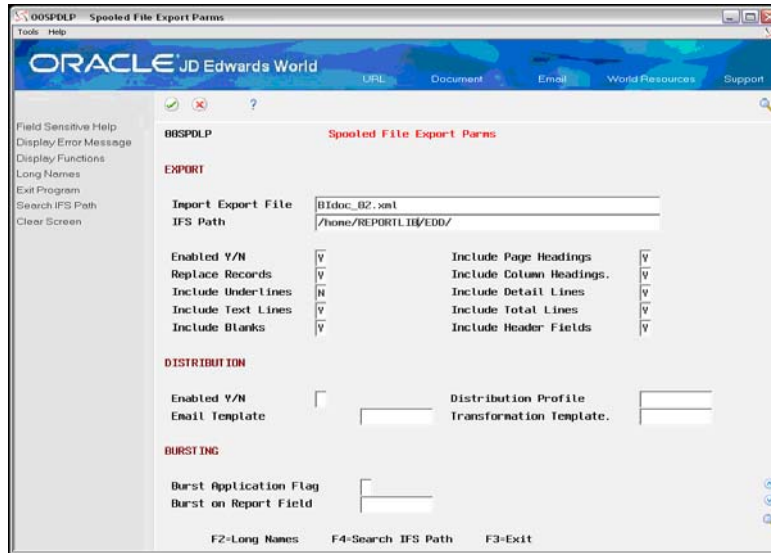
4. Enter and save the parameters.

5. Run the World Writer version.

The system exports the data and produces a report.

Field	Explanation
Group	Enter the name of the World Writer query group (UDC 82/GR).
Version	Enter the World Writer version from which you are exporting data.
User ID	Enter the IBM-defined user profile to which you associate the Export parameters.

To export data from locked DREAM Writer versions

> From Master Directory (G), choose **Import/Export**
> From Import/Export (G00PCIE), choose **Spooled File Export Parameters**

1. On Spooled File Export Parameters, complete the following fields and press Enter:

- Form Name
- Version Path
- User ID
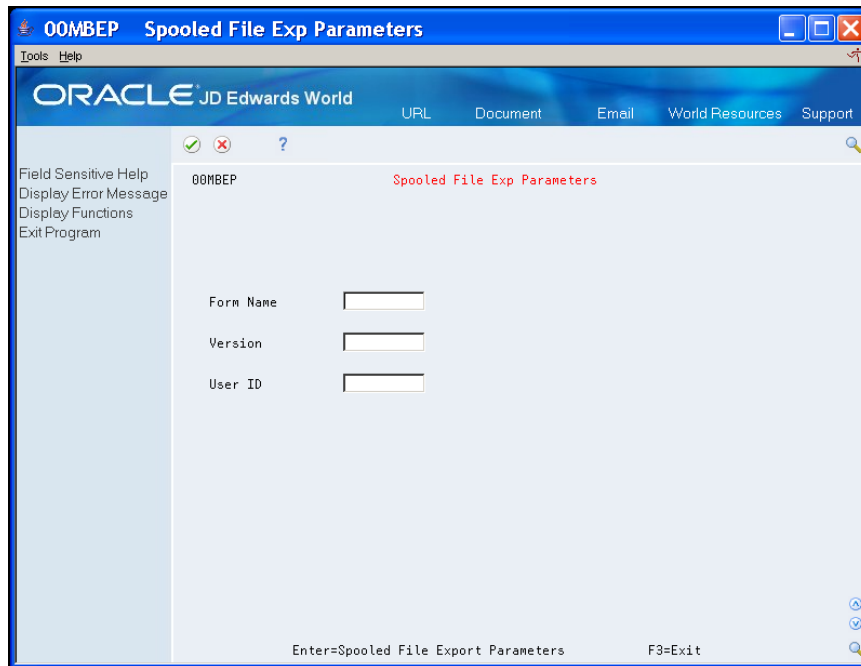
2. On Spooled File Export Parameters, enter the export parameters.

3. Ensure that you set the Enabled Y/N field to Y.
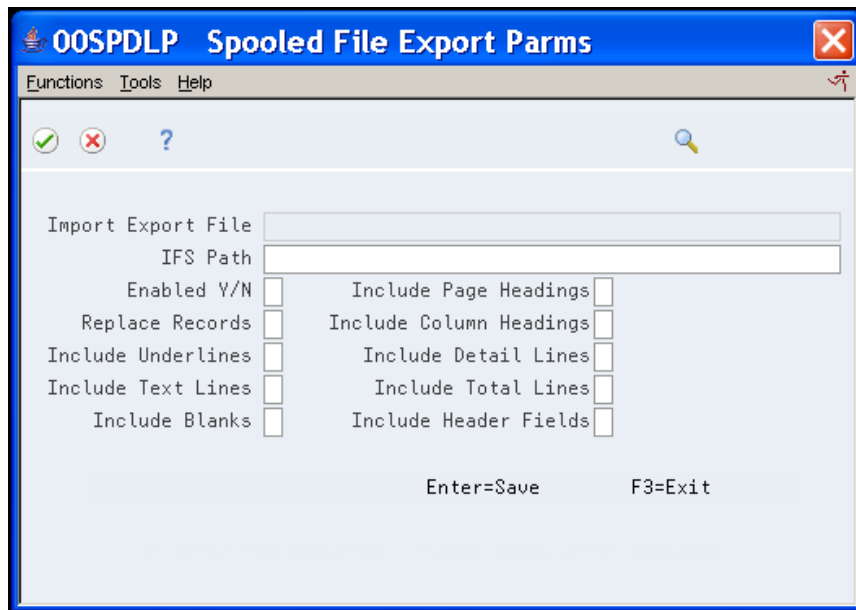
4. Enter and save the parameters.

5. Run the DREAM Writer version.

   The system exports the data and produces a report.

Field	Explanation
Form Name	Enter the DREAM Writer form name.
	Screen-specific information
	You can locate the DREAM Writer form name in the Form field on the Versions List screen.
Version	Enter the DREAM Writer version from which you are exporting data.
User ID	Enter the IBM-defined user profile to which you associate the export parameters.

Troubleshooting File Character Translation

The System i works with IFS folders in either of the two following data formats:

- Extended Binary Coded Decimal Interchange Code (EBCDIC)
- American Standard Code for Information Interchange (ASCII)

Most non-IBM systems, including Windows workstations, use ASCII format. There are two main methods to accomplish the file character translation between the System i and non-IBM systems. The first method is to write data to the IFS in EBCDIC and instruct the System i to translate whenever a request is made from a non-IBM system. The second method is to specify an ASCII character set on the IFS folder properties, so that the translation occurs automatically when the file is initially written to the IFS. If you do not perform either of these, the non-IBM system is unable to translate the data correctly and your data does not display accurately. For example:
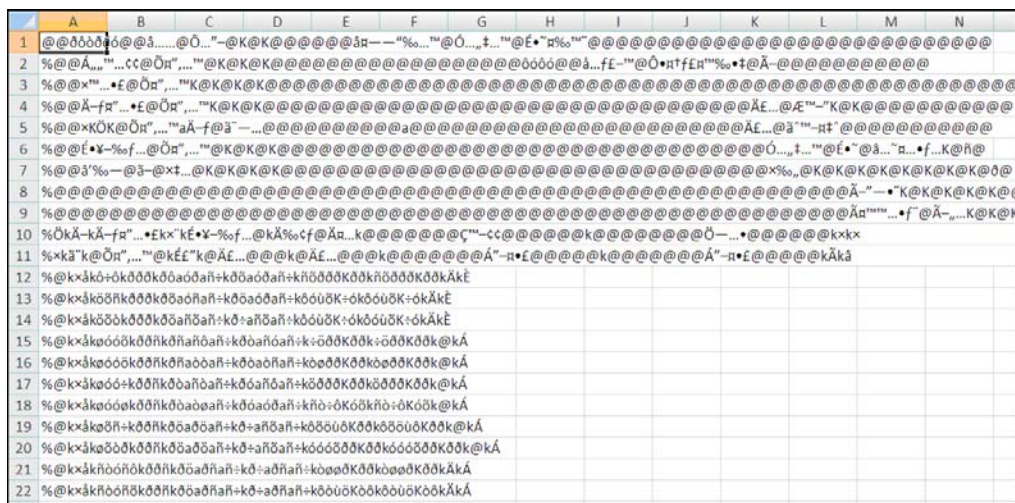
When you follow the procedure in this guide to create IFS folders with an ASCII character set, you do not need to specify Text Conversion on your IFS folder file shares. A simple way to accomplish this is to use Import/Export to create your IFS folders. See *Restricting a User to an IFS Folder and Setting Default CCSID* in this guide

to specify an ASCII default CCSID. Then use the F9 Function Key on the P00DIRS-Directory Search program to create IFS folders.
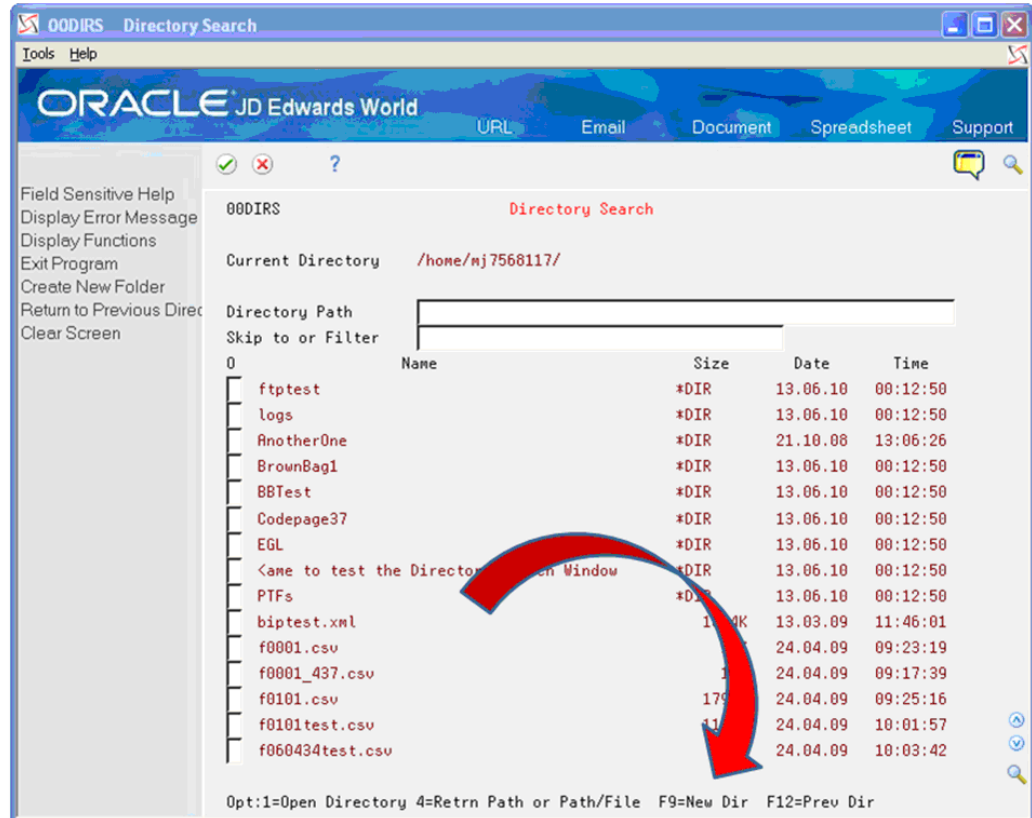
Otherwise, the system creates the IFS folder with data using the Coded Character Set ID (CCSID) of the System i job. Normally this is an EBCDIC CCSID such as 37. Because most computers, other than IBM System i and mainframes, use ASCII, you must specify a Text Conversion from EBCDIC to ASCII for each file type you are going to use. You can accomplish this by specifying Text Conversion on the properties of the file share for the IFS folder you set up to share. See *To Share an IFS Folder Using IBM iSeries Access for Windows* in this guide for more information. If you specify Text Conversion for the file share at the /root or the /root/home level, folders under this also perform the text conversion.

Troubleshooting Spreadsheet Formatting

CSV files contain only data and no formatting information. When you open a CSV file with a spreadsheet program, such as Microsoft Excel, the spreadsheet program might use an undesirable format to interpret the data. If the data contains account and business unit numbers, the spreadsheet program might format these with a numeric format rather than in a text format.

If the spreadsheet program does not interpret the data in a satisfactory manner, we recommend that you import the CSV file rather than opening the file by double clicking the file or using the spreadsheet program's file menu to open the file.

Instead, open the spreadsheet program and use the Data Import function to specify the format of the data for the spreadsheet. An example follows.

Example

Following is an example of an account number formatting issue and the steps you can take to avoid this issue when importing a CSV file into a spreadsheet program, such as Microsoft Excel.

Alternatively, you can export data as an XML file and import data from the XML file into the spreadsheet.

A CSV file contains the information you export from the following screen:

You open the CSV file containing the account information using a spreadsheet. The spreadsheet program processes the account number 10.5000 on the second detail line (line 10) in a numeric format as 10.5 and the account number 10.5050.40 (line 14) in a text format.

To specify correct spreadsheet formatting

1. Open Excel and do not specify a file to open.

2. From the Data menu, choose Import External Data and then Import Data.

    The Select Data Source window displays.
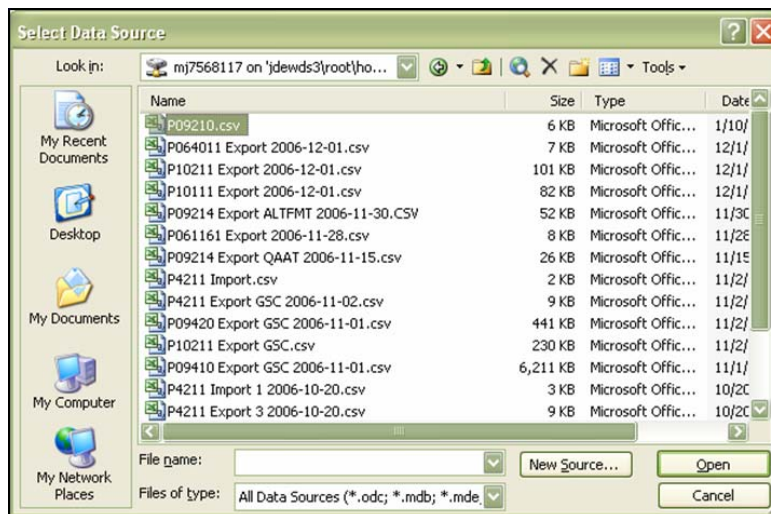
3. On the Select Data Source window, choose the CSV file to import and choose Open.

    The Text Import Wizard displays.
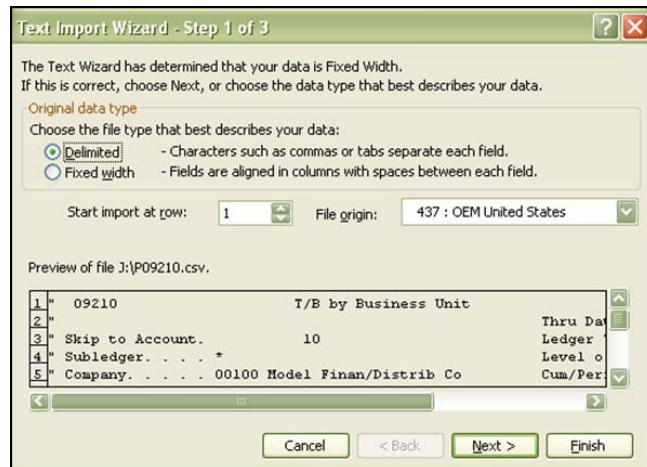
4. On Text Import Wizard – Step 1 of 3, choose the Delimited option and click
    Next.

5. On Text Import Wizard – Step 2 of 3, if you are using a comma for the separator
    character, choose the Comma option under Delimiters. Ensure that the Tab
    option is clear and click Next.
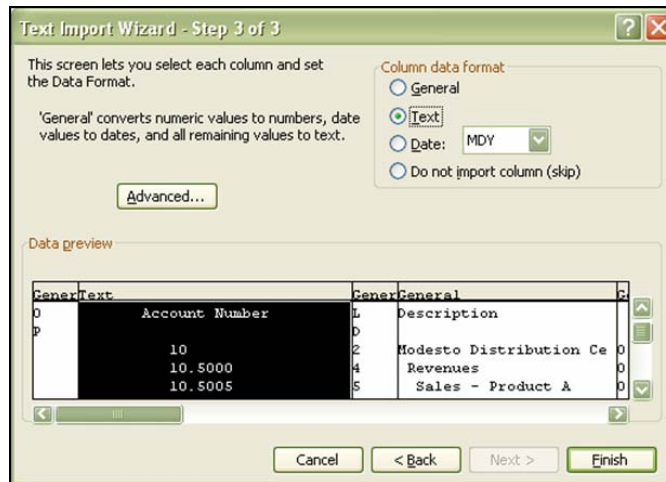
6. On Text Import Wizard – Step 3 of 3, scroll down the Data preview area until Excel recognizes the columns.

7. Select the column containing Account Number, choose the Text option in the Column data format area and click Finish.
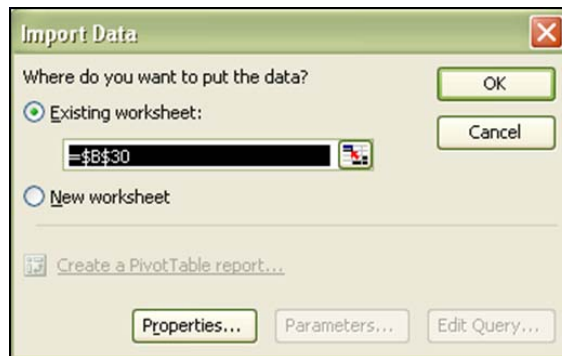
8. On Import Data, click OK.

    Excel imports the CSV file data into a new spreadsheet where all of the account numbers appear as text, rather than a mixture of text and numbers.

Understand Import/Export Messages

During the import and export of data, the system displays informational messages at the bottom of the screen regarding the process. Following are the messages and the explanation for each message.

Import Messages

Message	Explanation
JDE0502 Import Process Completed Normally	All requested records from the CSV file have been successfully imported.
JDE0503 **ERROR** Import Process Failed	The requested import failed as a result of opening or reading the CSV file.
JDE0504 **WARNING** Maximum subfile lines (9998) exceeded	The import process can process only 9998 lines in one attempt and that was exceeded. Change the Start Data Row Number parameter to resume importing after the last record imported.
JDE0507 Import process aborted but parameters were changed	User pressed F3 in the Import parameter window, aborting the import process but the import parameters were changed.
JDE0508 **ERROR** Import parameters not found	Import parameters were not found for Program/Version/User. Setup the parameters and rerun the import process.
JDE0509 **ERROR** Import Parameter Error	Either the Field ID Row Number is incorrect because invalid field names were found in the row or the Start Data Row Number is greater than the last row in the CSV file.
JDE0510 ** ERROR ** Separator Character Inconsistent	The separator character in the CSV file is not the same as the one in Import/Export user preferences. Change one of them to be consistent with the other.
JDE0511 Import process aborted and parameters are unchanged	F3 was pressed in the Import parameter window, aborting the import process. The import parameters are unchanged.
JDE0514 Template file created successfully	The template CSV file was created successfully in the location specified.
JDE0515 ** ERROR ** Template creation failed	For an interactive import template build, the File Name parameter is not a display file or for a batch import template build, the Batch Import File parameter is not a database file.

Message	Explanation
JDE0517 Group of records imported	A group of records have been imported. Import stopped at the end of the group because header information has changed. Continue to import without exiting the application to import the next group of records.
JDE0519 **ERROR** Attempt to insert invalid data	The batch import process attempted to insert invalid data into a numeric field. The process aborted.
JDE0520 *ERROR** Unsupported display format	An error was encountered during the import process. The system does not currently support importing of data into this display format.
JDE0525 Batch Import Invalid Data Message	No valid import data was encountered in the CSV file during the import process. Either the incorrect CSV file was specified or it does not contain data.

Export Messages

Message	Explanation
JDE0500 Export Process Completed Normally. Exit video to close export file	The requested export completed successfully. The file on the IFS remains open until you exit this screen.
JDE0501 **Error** Export Process Failed	The requested export failed as a result of opening or writing to the export file. This is most commonly caused by having the file opened in Excel. The file should not be in use by another application when exporting data to it. Improper authority to the IFS directory path could also cause this error condition.
JDE0505 Export aborted but parameters were changed	Changes made to export parameter values in the parameter window were applied but the user pressed F3 to abort running the actual export process.
JDE0506 Export parameters not found	The user did not enter and save parameter values in the export parameter window before running the export.
JDE0512 Export process aborted and parameters are unchanged	F3 was pressed in the Export parameter window, aborting the export process. The export parameters are unchanged. To rerun the process, invoke the parameter window again and press F6 to continue with Export

Message	Explanation
JDE0513 Inquiry required before Export	An interactive application must have issued and inquiry and populated the subfile with data before the export process is initiated
JDE0518 Warning** Export	An interactive application attempted to export more than 9999 subfile records in a single export request. Only 9999 records are written to the export file. This is not a restriction of the export file. The export file can exceed this number by issuing multiple export requests in the application.
JDE0521 Batch Export Process Completed Normally	All data successfully exported to the IFS.
JDE0522 **ERROR** Export Process Failed	An error was encountered during the export process.
JDE0523 Export File Has Been Successfully Sent	The export file displayed in the Export parameter window was closed and sent to distribution as a file attachment. The file remains closed until data is exported to it again.
JDE0524 Export File Was Sent, But With Errors	The export file displayed in the Export parameter window was closed but was not sent to distribution as a file attachment. The file remains closed until data is exported to it again.
JDE0526 FASTR/STAR Burst Failed	The required parameters for either FASTR or STAR with bursting were not specified. For non-row FASTR or STAR, AN8 must be Sequence # 1 and Page Break and Total must be set to Y Also Print Descr w/ Keys must not be N. For FASTR with rows, AN8 must be Sequence # 2 and Page Break and Total must be set to Y. Also Print Descr w/ Keys must not be N.

Implement Import/Export

You can implement Import/Export in a variety of JD Edwards World programs.

Although many JD Edwards World programs are similar, there are differences for which you might need to make some adjustments to the actions you perform while implementing Import/Export for a particular program. The following tasks outline the process for implementing Import/Export in JD Edwards World programs; however, each code line change and addition is not in this appendix.

JD Edwards World recommends that you refer to the code for a program in which Import / Export is active to become familiar with functionality of the software.

JD Edwards World does not provide customer support for programs you customize, including those in which you implement this functionality.

See *Working with Import/Export* for more information on setting up and using Import/Export.

This appendix includes the following:

- [Implementing Interactive Export](#)
- [Implementing Interactive Import](#)
- [Implementing Batch Export](#)
- [Programming Considerations](#)

Implementing Interactive Export

You can implement Interactive Export in many of JD Edwards World interactive subfile programs. Interactive Export is not available in programs that display one record at a time, as this is a very time consuming method of exporting data. From subfile programs, Interactive Export exports the entire subfile and you do not need to page through the entire subfile.

Following is the flow for Interactive Export:

1. Users locate or enter data and then enter T (To PC) in the Action Code field or choose Export (F23) if the program is an inquiry only program.

2. The program executes subroutine C00E1, which:

   - Activates the Subfile Export Parameters program (P00SFDLP) and displays the Interactive Export Parameters window.

     - The user completes the fields and chooses Export (F6) on the Interactive Export Parameters window.

     - The system saves the parameters in the Import/Export Parameters file (F00UDP).

   - Performs an inquiry and loads all records into the subfile.

3. The program:

▪ Displays the first page of the subfile.

▪ Executes subroutine C00E2, which activates the Subfile Export Parameters program (P00SFDL) to export the data on the screen.

▪ Displays the next page of the subfile.

▪ Continues to display the subfile and execute C00E2 until it reaches the end of the subfile.

▪ Executes subroutine C00IEM which sends a success or failure message to display on the workstation.

▪ Executes subroutine C00IET, which ends the export process.

When the export is complete, the export process locks the file and it remains in the IFS, because the user can perform multiple exports. When the user exits the program, the system closes the file.

After you implement Interactive Export, you must add the program name to UDC 00/IE, Interactive Export Programs.

Before You Begin

▪ For programs without an Action code field, Export (F23) is a standard function exit for Export. You must include this function key in the Function Key Definition (P9220) and Vocabulary Overrides (P9601) programs for the screens in the programs for which you implement Interactive Export.

▪ If the export file has multiple record formats (the starting-row-for-column-heading, record format names, and so forth) it can have multiple values and you must adjust the code accordingly.

▪ See the *Programming Considerations*.

To implement interactive export

1. In the interactive program, include file F00UDP in input mode to section F.

```
FFilenameIPEAF........L..I........Device+......KExit++Entry+A....U1.
FF00UDP  IF  E           K         DISK
```

2. Include copy modules C00IEM, C00IET, C00E1 and C00E2 or C00E2P at the end of the code.

```
C*
C*    Copy Common Subroutine - Interactive Export
C*
C/COPY JDECPY,C00E1
C/COPY JDECPY,C00E2
C*
C*    Copy Common Subroutine - Import/Export Message
C*
C/COPY JDECPY,C00IEM
C*
C*    Copy Common Subroutine - Import/Export Termination
C*
C/COPY JDECPY,C00IET
C*
```

3. Call subroutine C00IEM after writing the screen and just before reading the screen in MAINLINE.

```
C                     ENDIF
C*
C*    Write video screen.
C*
C                     WRITEV34601
C         ####MD      COMP '0'                      04
C                     WRITEV3460C
C                     MOVE '1'      @@AID
C                     EXSR S001
C*                    ---- ----
C*                                              Insert
C*    Display result of Import/Export           Insert
C*                                              Insert
C                     EXSR C00IEM               Insert
C*
C*    Load data field dictionary parameters (one cycle only).
C*
C         $998        CASEQ' '      S998
C*                    -----         ----
C                     ENDCS
C*
C*    Begin video screen read processing.
C*
C                     SETOF                    999301
C                     READ V3460                 9998
```

4. Call subroutine C00IET, just before end of MAINLINE and after EOJ tag.

```
C         EOJ       TAG
C*        ---       ---
C*                                              Insert
C*    Terminate the Import/Export process       Insert
C*                                              Insert
C                     EXSR C00IET               Insert
C*
C*    END MAINLINE PROGRAM
C*    --------------------
C****************************************************
```

5. Perform one of the following:

  ▪ If the screen has an Action Code field, add the following code to MAINLINE, prior to S003 and then replace copy module C0001 with C0001T. For an example, see the Enter/Change Forecast (P3460) program.

```
C*
C*     IF clear screen requested, process and return.
C*
C          @@AID      IFEQ #FCLR
C                     EXSR S001
C*                    ---- ----
C                     GOTO END
C*                    ---- ---
C                     ENDIF
C*
C*     If Exporting, process data and bypass subroutine
C*
C          *IN27      IFEQ '1'
C*
C*     Set the starting row number for column headings
C*
C                     Z-ADD7         ##IESH  20
C*
C*     Number of lines in fold - zero if no fold
C*
C                     Z-ADD3         ##FDLN  20
C*
C*     Set the subfile record format name
C*
C                     MOVEL'V3460S'  ##IEF3  10
C*
C*     Set export parameters
C*
C                     EXSR C00E1
C*
C*     Write each subfile page and call export program
C*
C          ##IERC     DOWEQ*BLANKS
C                     WRITEV3460C                    99
C                     EXSR C00E2
C*                    ---- ------
C                     ENDDO
C*
C                     GOTO END
C*                    ---- ---
C*
C                     ENDIF
C*
C*     Load subfile records.
C*
```

- Replace copy module C0001 with C0001T as follows:

```
C*
C*     Copy Common Subroutine - Edit Action Code
C*
C/COPY JDECPY,C0001T
```

- If the screen does not have an Action Code field, add the following code to Subroutine S00EX. For an example, see the Trial Balance by Company program (P09216).

```
C*
C*    If F7 pressed, exit to error messages and return.
C*
CSR        @@AID     IFEQ #FERRD
|
|
|
CSR                  ENDIF
C*
C*
C*    If F23 is pressed, export subfile
C*    ---------------------------------
C*
CSR        @@AID     IFEQ #F01
C*
C*    Set the starting row number for column headings
C*
Insert same code, as in export with Action Code
C*
C                  EXSR C00E2
C*                 ---- ------
CSR               ENDDO
C*
CSR               GOTO ENDEXE
C*                 ---- ------
C*
CSR               ENDIF
C*
C*    If F20 pressed, clear screen and return.
C*
CSR        @@AID     IFEQ #FCLR
CSR               EXSR S001
```

- If the screen has a preloaded value in the subfile records, replace copy module C00E2 with C00E2P. This copy module passes an additional parameter ##IESL to the export process. ##IESL informs the export process of the number of records to export on the current subfile page. This avoids exporting records that do not have data on the last page. ##IESL must be set with the number of subfile records to be exported from the current page prior to executing subroutine C00E2. If every record has data for the page, the number of records contained in a page must be passed in the value. Alternatively, the value 99 can be passed. This tells the export process to export every subfile record on the page.

6. Add the program to UDC 00 / IE.

Implementing Interactive Import

You can implement Interactive Import in subfile maintenance programs and programs that you use to maintain one record at a time. The subfile programs can import the entire subfile automatically and you do not need to page through the entire subfile.

In addition to this task, JD Edwards World recommends that you review the *Programming Considerations*.

Following is the flow of Interactive Import:

1. In the program, the user enters F (From PC) in the Action Code field.

2. The program executes subroutine C00I1, which:

   - Activates the Interactive Import Parameters program (P00IULP) and displays the Interactive Import Parameters window.

- On the Interactive Import Parameters window, the user completes the fields and chooses Export (F6).

  - The system saves the parameters in the Import/Export Parameters file (F00UDP).

- Activates the Interactive Import program (P00IUL), which brings the data into the program from the CVS files.

- Loads the header information or a single record into the screen.

3. The program:

   - Loads records into one page of the subfile (if present).

   - Continues to import each subfile page, until it reaches the end of the subfile.

   - Displays the import records.

   - Executes subroutine C00IEM, which sends a success or failure message to display on the workstation.

   - Executes subroutine C00IET, which ends the export process.

After you implement Interactive Import, you must add the program name to UDC 00/II, Interactive Import Programs.

To implement interactive import

1. Include the Import/Export Parameters file (F00UDP) in input mode to section F.

```
FFilenameIPEAF........L..I........Device+......KExit++Entry+A....U1.
FF00UDP  IF  E        K        DISK
```

2. Include copy modules C00I1, C00I2, C00IEM and C00IET at the end.

```
C*
C*     Copy Common Subroutine - Import/Export Message
C*
C/COPY JDECPY,C00IEM
C*
C*     Copy Common Subroutine - Import/Export Termination
C*
C/COPY JDECPY,C00IET
C*
C*     Copy Common Subroutine - Interactive Import
C*
C/COPY JDECPY,C00I1
C*
C*     Copy Common Subroutine - Subfile Import       If required
C*                                                   If required
C/COPY JDECPY,C00I2                                  If required
C*                                                   If required
```

3. Copy C0001T.

```
C*
C*     Copy Common Subroutine - Edit Action Code
C*
C/COPY JDECPY,C0001T
```

4. Define a data structure (define two data structures if a subfile exists) with the fields in the exact order as they appear on the screen. Then define a data structure for $BFOUT

```
I*
I*      Data structure for header fields
I*
IDSIIMP       DS
I                                         1   12 VDMCU
I                                        13   20 VDTYPF
I                                        21   22 VDUOM
I                                        23   23 ACTION
I                                        24   49 VDUITM
I*
I*      Data structure for subfile fields
I*
IDSIMSF       DS
I                                         1    8 SFTYPF
I                                         9   16 SFDRQJ
I                                        17   31 SFFQT
I                                        32   32 SFBPFC
I                                        33   53 SF#N8
I*
I*
I* Upload Video Data Buffer
I$BFOUT       DS                                    1919
I*
```

Change these field names and positions appropriately (see notes)

DO NOT CHANGE THESE NAMES

Include this data structure only if the program uses subfiles

5. Call subroutine C00IEM after writing the screen and just before reading the screen in MAINLINE

```
C*
C*      Write video screen.
C*
C                    WRITEV34601
C          ####MD    COMP '0'                      04
C                    WRITEV3460C
C                    MOVE '1'       @@AID
C                    EXSR S001
C*                   ---- ----
C*                                             Insert
C*      Display result of Import/Export        Insert
C*                                             Insert
C                    EXSR C00IEM                Insert
C*
C*      Load data field dictionary parameters (one cycle only).
C*
C          $998      CASEQ' '       S998
C*                   -----          ----
C                    ENDCS
C*
C*      Begin video screen read processing.
C*
C                    SETOF                      999301
C                    READ V3460                   9998
```

6. Add the following code to MAINLINE, just before S003. For an example, see the Enter/Change Forecast (P3460) program.

```
C           @@AID      IFEQ #FCLR
C                      EXSR S001
C                      GOTO END
C                      ENDIF
C*
C*     If Importing, process data and redisplay screen
C*
CSR        *IN26      IFEQ '1'
C*
CSR                   MOVEL*BLANKS    ##IEF1
CSR                   MOVEL'V3460C'   ##IEF1
CSR                   MOVEL*BLANKS    ##IEF2
CSR                   MOVEL'V3460S'   ##IEF2
C*
C*     Import values from CSV file
C*
CSR                   EXSR C00I1
C*
CSR        ##IERC     IFEQ ' '
CSR                   SETON                        31
CSR                   WRITEV3460C                  99
CSR                   SETOF                     203193
CSR                   ENDIF
C*
C*     If subfile exists, import values for subfile fields     Include these
C*                                                             lines only if
CSR        ##IERC     DOWEQ*BLANKS                             subfile exists
CSR                   EXSR C00I2
CSR        ##IERC     IFEQ ' '
CSR                   WRITEV3460S                  81
CSR                   ENDIF
CSR                   ENDDO
C*
CSR                   GOTO END
C*                    ---- ---
C*
CSR                   ENDIF
C*
C*     Load subfile records.
C*
C                     EXSR S003
```

7. Call subroutine C00IET, just before end of MAINLINE and after EOJ tag.

```
C           EOJ        TAG
C*          ---        ---
C*                                                    Insert
C*     Terminate the Import/Export process            Insert
C*                                                    Insert
C                      EXSR C00IET                    Insert
C*
C*     END MAINLINE PROGRAM
```

8. Add the program to UDC 00 / II.

Implementing Batch Export

JD Edwards World includes Batch Export in World Writer and certain DREAM Writers. You can implement Batch Export to work with additional DREAM Writers. The export runs when you run the DREAM Writer or World Writer. When the system creates the spool file, the Batch Export process reads the spooled file and exports the contents to the IFS file set up in the parameters. The batch export currently works only if the job generates only one spooled report file. The system cannot accommodate more than one generated report.

You access the Spooled File Export Parameters window from the Additional Parameters screen of the corresponding DREAM Writer or World Writer version by choosing Batch Export Parameters (F6).

Batch Export from a DREAM Writer uses literals, or Export Tags, that you add to the right-hand side of the report. These Export Tags should only print when you use the

report for Export. You add six characters to the normal width of the report when you enable Export and run the report. The conditions for this logic to work correctly follow:

- The Export Tags must exist in the report Data Description Specifications (DDS)

- The system compiles the report DDS file with the new report width (the original width plus 6 characters)

- The system updates the F9805 Printer Overrides file record for the report to the new report width (the original width plus 6 characters)

- The program name exists for UDC 00/BE Batch Export Programs.

If the UDC record 00/BE) does not exist, the system bypasses all of the special logic for export capable reports and uses the Form Width in the Printer Override record. If the Form Width is blank or there is no Printer Override record then the system does not override the form width and the width remains as you set it in the printer file.

If the UDC record exists then the report should be capable of export. The system always uses the DSPFD command as a starting point for the form width because this is the true length of the printer file including the 6 bytes of export tag characters. If the Enabled export parameter is N, the system calculates form width as the width of the printer file record minus six.

If a parameter record in the F00UDP file does not exist, the system also determines that the Enabled export parameter is N.

If a Print Override record exists and has a form width that is greater than the actual report width (the printer file width minus six), the system replaces the Print Override width with the correct width (the printer file width minus six). This prevents you from entering a longer width that would cause the tags to print when you disable the export function. You can enter a width that is shorter than the actual report width and this width remains in effect as long you do not set a processing option for the report to produce an export file. This produces a shortened report.

If you enable the report to produce an export file, the tags must be present so the Print Override width is always set to be the printer file width.

In addition to this task, JD Edwards World recommends that you review the *Programming Considerations*.

To implement batch export

1. In the CL program, declare the variables as shown.


```
                                                        Replace with appropriate report
                                                        and width (width before changes)

DCL        VAR(&PRTFILE)   TYPE(*CHAR) LEN(10)   VALUE('R09410      ')
DCL        VAR(&PRTWIDTH)  TYPE(*DEC ) LEN(3 0)  VALUE(132)
DCL        VAR(&RETCD)     TYPE(*CHAR) LEN(1)    VALUE(' ')
```

2. Immediately after the RPG report program call, call the Spool File Export program and add error handler for export failure.

```
CALL PGM(P09410) PARM(&PSPID &PSVERS)

CALL PGM(P00SPDL) PARM(&PSPID &PSVERS &PRTFILE &PRTWIDTH &RETCD)    Insert
IF          COND(&RETCD *EQ 'F') THEN(DO)                          Insert
     GOTO        ABEND                                             Insert
ENDDO                                                              Insert
```

> **Note:** In standard DREAM Writer CL, P98315 is called prior to calling the report program. This program calls P983151 that builds the printer override in the LDA. P983151 assumes that a standard printer file name is used (the P in the program name is replaced with R). If this is not the case, the printer file name designated in the variable &PRTFILE must be passed to P983151 as an optional third parameter. This is specified as an optional seventh parameter in the call to P98315 which in turn is passed to P983151. The section of the LDA that specifies the PAGESIZE for the printer override must not be altered in the CL program after P983151 has been called.

3. Change the RPG program as necessary.

   If you alter any field in the report, you might need to make corresponding changes in the RPG code. You might have to recompile the RPG program over the changes in the report file.

4. To change the report file, skip 1 print position and then add a blank 1 byte field at the end and then the 4 byte literal on each line on the DDS. This action adds 6 extra bytes to the print width. Use the following convention where n can be 1 through 9 followed by A through Z:

   PHDn – On all Page Heading lines

   CHDn – On all Column Heading lines

   DTLn – On all Detail lines

   TOTn – On all Total lines

   ULNn – On all Underlines

   TXTn – On all Text lines

5. Add a prefix of "R@" for the one-byte field.

   R@PHDn – On all Page Heading lines

   R@CHDn – On all Column Heading lines

   R@DTLn – On all Detail lines

   R@TOTn – On all Total lines

   R@ULNn – On all Underlines

   R@TXTn – On all Text lines

6. Always assign sequence numbers to the literals and one byte fields in numerical sequence followed by alphabetic sequence. Corresponding one byte field and

associated literal must have the same sequence number or alphabetic character. Sequence numbers can be duplicated for different record formats.

The underline associated with the column headings must be coded as a CHD line instead of a ULN line. This allows it to be displayed when the Include Column Headings option = Y and not displayed when the option is set to N. It is also recommended that when there is only row of column headings that a row of column headings be inserted above the row. It only requires one VTX column set to blanks to function properly. The PHDs must be defined in only one record format and it must be the first record format in the DDS.

```
A          R HEADING1
A                                2'09410'
A                                  SKIPB(1)
A          VC0CO        40A      46TEXT('Company Name            ')
A          VTX019       12A     112TEXT('Page    -               ')
A                               129PAGNBR
A                                  EDTCDE(Z)
A          R@PHD1        1A     134                          Insert
A                               135'PHD1'                    Insert
A          RRTTL@       40A      46TEXT('Trial Balance          ')
A                                  SPACEB(1)
A          VTX003       12A     112TEXT('Date    -               ')
A                               125DATE
A                                  EDTCDE(Y)
A          R@PHD2        1A     134                          Insert
A                               135'PHD2'                    Insert
A          RRTXT2       40A      46TEXT('Processing Option Text  ')
A                                  SPACEB(1)
|
|
A          VTX001        8A     103TEXT('Postings              ')
A          VTX017       14A     116TEXT('    Current             ')
A          R@CHD1        1A     134                          Insert
A                               135'CHD1'                    Insert
A          VTX008        1A      36TEXT('D                     ')
A                                  SPACEB(1)
A          VTX013       14A      66TEXT('   Balance            ')
A          VTX015       14A      83TEXT(' This Period          ')
A          VTX016       14A     100TEXT(' Year-to-Date         ')
A          VTX018       14A     116TEXT('    Balance           ')
A          R@CHD2        1A     134                          Insert
A                               135'CHD2'                    Insert
A                                 1'-----'
A                                  SPACEB(1)
|
|
A          R DETAIL1
A          RRCO          5A       1TEXT('Company               ')
A                                  SPACEB(1)
|
A          RRAYTD       17A      99TEXT('Amount - YTD          ')
A          RR#BAL       17A     116TEXT('Amount - Current Balance ')
A          R@DTL1        1A     134                          Insert
A                               135'DTL'                     Insert
A          R DETAIL2
|
|
A          R DETAIL3
A                                65'----------------'
A                                  SPACEB(1)
A                                82'----------------'
A                                99'----------------'
A                               116'----------------'
A          R@ULN2        1A     134                          Insert
A                               135'ULN'                     Insert
```

7. To add Level Break Structure to XML output, add 2 additional literals to print lines that have a level break field.

   Following the 4 byte literal described in step 4, add a 10 byte literal that contains the field name (left justified) on which the level break occurs. Follow this literal with a 2 byte literal that contains the length of the level break data. This must contain a value of 01 through 99. This allows level breaking to occur on 2 or more contiguous fields as well as a single field. These literals add an additional 12 bytes to the 6 extra bytes previously mentioned. The print width is extended by a total of 18 bytes when level breaks are implemented.

An example of this can be found in the DDS of R43530. Scan for report fields RRAN8 and RRUITM, which are level break fields. RRUITM has a length of 35 specified because this level break occurs on both RRUITM and the neighboring field RRDRQJ.

```
A              RRTXT3        40A        47TEXT('Processing Option Tex
A                                          SPACEB(1)
A              RRAN8          8A       125TEXT('Supplier
A              R@PHD4         1A       134
A                                      135'PHD4'
A                                      139'RRAN8       '
A                                      149'08'
```

8. Some additional changes to the report may be necessary.

   Fields occupying the same or overlapping positions on the same report line (conditioned by indicators) must be broken out into separate formats.

   Fields in the same format must have unique data items, even if the prefix makes them unique. If two fields in the same format use the same data item (e.g. RRAAP and R1AAP), change one of the field names to use a different data item (e.g. RRAAP to RRAD).

   Values on the report brought in through keywords (such as the system date or page number) do not display in the XML. Replace the keyword with a new report field and add code to the program to load the field.

   Report fields based on data items with a glossary group of U (report and screen display fields) must have an alpha description for the data item in which the first 30 characters of the description are unique for the format (e.g. RR##01 and RR##02 cannot be used in the same format). If this is the case, change one of the field names to use a different data item (e.g. RR##01 to RRQD01).

   If the data item for the report field is not defined as alphanumeric or open (e.g. RRSOQS, any non-numeric data do not display in the XML. Create a new report field for the non-numeric data.

9. Add the program to UDC 00 / BE.

   After you implement Interactive Export, you must add the program name to UDC 00/BE, Batch Export Programs.

   If Level Break Structure being implemented is for XML output, then you must also place a Y in the first character of the Special Handling Code in the UDC record. This action informs the export process that level break logic must be enabled.

10. Grouping elements can be added to the XML by the application program.

    This only applies to programs that need to implement Level Break Structure (see items 7 and 9) but because of the complexity of the report require a program-controlled level break. This feature allows DREAM Writer programs to add hierarchical structure to the XML in addition to the structure already provided by Level Breaks or in place of the Level Breaks. Although these can be defined anywhere in the XML, they are intended primarily for grouping related detail or total lines together and can be nested up to 9 levels. They are used primarily in the XML/BIP template processing.

Grouping elements might be required if:

There are multiple formats used to print detail or total information that must be grouped together, but no main format that always prints first.

There is no report field with a unique value to key the Level Break.

Grouping elements work like Level Breaks in that you add additional literals to the report line in the DDS in order to signal the beginning or end of a group. Unlike Level Breaks, no field name containing a level break value is specified and it is up to the application to control when the grouping starts and ends.

Following the 4 byte literal described above (see item 4) in the first byte position where the level break field name begins, include an asterisk on the print line to be written. The asterisk informs the export process that some type of grouping function is being defined for this print line. The next byte after the asterisk, defines a grouping operation. A Blank requests the start of a new group and is followed by a 10 character group name. It automatically results in the termination of an open group of that name if one exists as well any subordinate groups. An E followed by a 10 character group name requests the termination of that group and all subordinate groups. A C requests the start of a new group and is followed by a 10 character group name. It   automatically results in the termination of all open groups.

```
06/18/10      06/25/10      07/02/10      DTL2* DETAIL
------------- ------------- -------------  DTL3
       1221-         1842-         2470-   DTL4
       1954          1333           705    DTL4
        621           628           705    DTL4
       1842-         2470-         3175-   DTL4
       1333           705                  DTL4
                                           DTL4
                                           DTL4
      17136-        17136-        17136-   DTL4
                                           DTL4
09/30/10      10/29/10                     DTL2* DETAIL
------------- -------------                DTL3
       9412-        14082-                 DTL4
       1819          2029                  DTL4
       4670          3054                  DTL4
```

The example above is from a spooled file that is input to the export process. The first '* DETAIL' tag requests a Grouping element before the DTL2 print line. It creates the XML start tag <DETAIL_Group> (see below). The second '* DETAIL' tag requests a Grouping element before the next DTL2 print line. The export process creates an XML end tag </DETAIL_Group> after the last DTL4 print line to close that group of detail lines before starting a new group. It then creates the new Group element before the next DTL2.

```
- <DETAIL_Group>
 - <HEADING2_DTL2>
    <HEADING2_DatesForecasting01 xsi:nil="true" />
    <HEADING2_DatesForecasting02>2010-05-28</HEADING2_DatesForecasting02>
    <HEADING2_DatesForecasting03>2010-06-04</HEADING2_DatesForecasting03>
    <HEADING2_DatesForecasting04>2010-06-11</HEADING2_DatesForecasting04>
    <HEADING2_DatesForecasting05>2010-06-18</HEADING2_DatesForecasting05>
    <HEADING2_DatesForecasting06>2010-06-25</HEADING2_DatesForecasting06>
    <HEADING2_DatesForecasting07>2010-07-02</HEADING2_DatesForecasting07>
   </HEADING2_DTL2>
```

```
- <DETAIL1_DTL4>
    <DETAIL1_VC001>Cumulative Avail to Promise</DETAIL1_VC001>
    <DETAIL1_QtyDRPMPSMRPCRPDisplay01>0</DETAIL1_QtyDRPMPSMRPCRPDisplay01>
    <DETAIL1_QtyDRPMPSMRPCRPDisplay02>-330</DETAIL1_QtyDRPMPSMRPCRPDisplay02>
    <DETAIL1_QtyDRPMPSMRPCRPDisplay03>-330</DETAIL1_QtyDRPMPSMRPCRPDisplay03>
    <DETAIL1_QtyDRPMPSMRPCRPDisplay04>-330</DETAIL1_QtyDRPMPSMRPCRPDisplay04>
    <DETAIL1_QtyDRPMPSMRPCRPDisplay05>-330</DETAIL1_QtyDRPMPSMRPCRPDisplay05>
    <DETAIL1_QtyDRPMPSMRPCRPDisplay06>-330</DETAIL1_QtyDRPMPSMRPCRPDisplay06>
    <DETAIL1_QtyDRPMPSMRPCRPDisplay07>-35</DETAIL1_QtyDRPMPSMRPCRPDisplay07>
  </DETAIL1_DTL4>
</DETAIL_Group>
<DETAIL_Group>
- <HEADING2_DTL2>
    <HEADING2_DatesForecasting01>2010-07-09</HEADING2_DatesForecasting01>
    <HEADING2_DatesForecasting02>2010-07-16</HEADING2_DatesForecasting02>
    <HEADING2_DatesForecasting03>2010-07-30</HEADING2_DatesForecasting03>
    <HEADING2_DatesForecasting04>2010-08-31</HEADING2_DatesForecasting04>
    <HEADING2_DatesForecasting05>2010-09-30</HEADING2_DatesForecasting05>
    <HEADING2_DatesForecasting06>2010-10-29</HEADING2_DatesForecasting06>
    <HEADING2_DatesForecasting07 xsi:nil="true" />
  </HEADING2_DTL2>
```

The following example is from a spooled file that is input to the export process. The *E DETAIL tag requests that the DETAIL group be terminated. It generates an XML end tag for the group of detail print lines preceding DTL5 print line.

```
                                         DTL5*EDETAIL
                    . .Recommended. .    CHD1
    Supplier Name      Start     Due     CHD2
------------------- -------- --------    CHD3
Elmer's Wood and Pl 05/26/10 05/26/10    DTL7
Elmer's Wood and Pl 06/02/10 06/03/10    DTL7
Elmer's Wood and Pl 06/16/10 06/17/10    DTL7
```

```
</DETAIL_Group>
<HEADING3_DTL5>
  <HEADING3_VTX033>......Planning Messages......</HEADING3_VTX033>
</HEADING3_DTL5>
<_Column_Headings>
- <HEADING3_CHD1>
    <HEADING3_CHD_1>. .Recommended. .</HEADING3_CHD_1>
  </HEADING3_CHD1>
- <HEADING3_CHD2>
```

The following grouping tags are defined in the DDS and can be conditioned at runtime to be written or not written with indicators.

```
A               RR#907          13A        120TEXT('Dates - Forecasting 0
A               R@DTL2           1A        134
A                                          135'DTL2'
A                                          139'* DETAIL  '
```

```
A               RR#PG            4A        129TEXT('Page Number
A               R@PHD1           1A        134
A                                          135'PHD1'
A   43                                     139'*EDETAIL  '
```

Typically, a new group is not opened every time the line with the group tag is printed, the tag must be conditioned by an indicator. This also means the program must be modified to track whether or not a new group opens and to set on the indicator when required.

Implementing grouping tags requires a careful analysis of the report and program to determine which formats belong to the group, which formats and lines within the formats might be printed first in the group, and which formats outside of the group might follow on the report and require the group to be closed.

Programming Considerations

Correct the values in the following generic fields in the copy module:

Field	Value
##USER	User running the application program.
PSKEY	Display file.
$PGSZ	Number of subfile records in one page (with subfile folded).
$SVI1	Total records in the subfile.
#SFRNO	Number of first subfile record on display.
ACTION	Action Code.
$CYCLE	Used to indicate fresh screen to display.
*IN38	Used in screen to indicate an empty subfile.

For all interactive programs, you must declare or change @NAC in S999 to allow or prohibit the values of F (From PC) and T (To PC) in the Action Code field. Extend the array from 5 to 7 bytes, with the 6th byte controlling import and 7th byte controlling export. A blank allows the corresponding action and any value prohibits the corresponding action. Leave the first 5 bytes as they are, otherwise you can compromise existing functionality. For example:

    1234567

@NAC = '   '. Allows both import and export.

@NAC = '   N '. Prohibits import and allows export.

@NAC = '   N'. Allows import and prohibits export.

Remove copy module D0001 or D0001L from all programs with an Action Code field.

If you implement both Import and Export in a program, enter the call for subroutines C00IEM and C00IET only once.

You must define the Invite keyword on all control record formats in the screen to export the fold area correctly. Review the screens for Enter/Change Forecast (V3460) and Trial Balance by Company (V09216) to determine where to define this.

The screen must use *IN38 on the SFLDSP keyword for the export to function correctly. Also, turn this indicator on or off from the program RPG, depending on whether the subfile has records or not. Review the screens in the Enter/Change Forecast (P3460) and Trial Balance by Company (P09216) programs for details. If you do not set this indicator, the user receives an error message that they must perform an inquiry before the export (error message JDE0513), even if the user performs an inquiry.

Before declaring the data structures DSIIMP and DSIMSF for interactive import, run the command DSPFFD with the display file to view the order in which fields appear on the screen. Include all fields that are input capable and have a valid value for Row and Column. If these fields contain blanks, the fields are hidden.

You can import data into a screen with multiple record formats. However, different record formats might have different fields in a different order and you must declare separate data structures to match each record format. The import process always places data in DSIIMP/DSIMPSF. You must add code to move data from DSIIMP/DSIMPSF to the corresponding data structure.

You must decide whether to implement import in multiple formats. If you allow importing in only one format and you import in another format the system issues the 582O or JDE0520 results errors. For example, see the Transfer Order Entry program (P4242).

RPG programming does not allow a particular field to appear in multiple data structures. If you define a screen field in multiple data structures, it must have different names and you must enter separate code to move data into the screen field.

For example, VDTRDJ is currently defined in a data structure in the Transfer Order Entry program (P4242). It is defined as V@TRDJ in DSIIMP.

```
0121.40      IDSIIMP      DS
0121.50      I                                          1   8 V@TRDJ
```

```
C*
C*     Import values from CSV file
C*
C                   EXSR C00I1
C*
C           ##IERC   IFEQ ' '
C                    SETON
C           $SCRN    IFEQ ' '
```

The import process places data in DSIIMP. V@TRDJ contains the correct value. You must add code to move this to VDTRDJ.

```
C                   EXSR S995



CSR         S995    BEGSR
C*          ----    -----
C*
CSR                 MOVE V@TRDJ    VDTRDJ
```

After changing the printer file for batch export, update the form width accordingly before compiling to accommodate the data you add.

Before running the report for batch export, verify the printer overrides as the form width should be the same as the report width, before changes. The export program adds six characters to the width to accommodate the data you add.

If the screen/report contains two header rows and if a heading on one row spans more than one column in the second row, you should split that header field into multiple fields. For example:

```
Forecast··Request···············Quantity·················································
··Type·····Date·····Adjusted·········Original·····Pass····
BF········01/31/97·············138·············138···N········BEFORE·IMAGE
BF········02/28/97·············164·············164···N·······
```

```
Forecast·Request·····Quantity········Quantity·····························
··Type·····Date·····Adjusted········Original·····Pass····
BF········01/15/98·············1000·············1000···N········AFTER·IMAGE
BF········01/15/98·············100·············100···N·······
```

Programs Enabled for Interactive Import

As of JD Edwards World Release A9.2.1, the following interactive application programs are enabled for Import. This list is contained in the UDC 00/II:

Program	Explanation
P00151	Set Daily Transaction Rates
P0030	Bank Account Cross-Reference
P01P21	P-Card Merchant Cat. Codes
P01051	Address Book Information
P010514	Socio-Economic Information
P0305	Credit Granting/Management
P03105	A/R Invoice Entry
P04105	Voucher Entry
P061121	Time Entry by Individual
P061161	Time Entry by Job
P061191	Daily Time Card Entry
P069121	Union Rates Revisions
P082003	Pay Step Table Entry
P09101	Journal Entry
P1201	Asset Master Information
P1207	Item PM Schedule
P3002	Bill of Material Revisions

Program	Explanation
P3003	Routing Master Revisions
P3006	Work Center Revisions
P3111	Work Order Parts List Revision
P3112	Work Order Routing Instruction
P311221	Work Order Employee Time Entry
P3460	Detail Forecast Maintenance
P3711	Test Results Revisions
P4001Z	Batch Order Entry
P40300	Preference Revisions
P4070	Price Adjustment Schedule
P4071	Price Adjustment Types
P41002	Unit of Measure - Item Conversions
P41003	Unit of Measure - Standard Conversion
P4101	Item Master Information - Revisions
P41024	Item Location Information
P41026	Item Branch Information - Revisions
P4105	Item Cost Revisions
P4106	Base Price Revisions
P41061	Speed Catalog Maintenance
P4108	Lot Master Revisions
P42090	Order Hold Constants
P42100	Related Salesperson
P4211	Sales Order Entry - Detail
P42110	Commission Constants
P4242	Transfer Order Entry
P4243	Direct Ship Order Entry
P4271	Inventory Pricing Types
P4311	Purchase Order Entry - Detail
P4402	Preference Revisions

Program	Explanation
P48011	Equipment Work Order Entry
P48013	Manufacturing Work Order Entry
P48014	Project Task Details
P48096	Cost Plus Mark Up Information
P5201	Contract Master Revisions
P5202	Contract Billing Line Details
P74R0903	Correspondence Rules - RUSSIA
P98480	Processing Options Conversion

Programs Enabled for Interactive Export

As of JD Edwards World Release A9.2.1, the following interactive application programs are enabled for Export. This list is contained in the UDC 00/IE:

Program	Explanation
P00151	Set Daily Transaction Rates
P0030	Bank Account Cross-Reference
P00921	User ID Review
P010514	Socio-Economic Information
P01200	Name Search
P01P200	P-Card Transaction Workbench
P01P21	P-Card Merchant Cat. Codes
P03101	AR & AP Journal Entry
P03105	A/R Invoice Entry
P032002	Customer Ledger Inquiry
P04105	Voucher Entry
P042003	Supplier Ledger Inquiry
P042004	Supplier Payment Inquiry
P061161	Time Entry by Job
P069121	Union Rates Revisions
P080200	Profile Data Inquiry

Program	Explanation
P082003	Pay Step Table Entry
P08201	Review and Rank Employees
P09101	Journal Entry
P09200	Account Ledger Inquiry
P09210	T/B by Business Unit
P092121	Account Balance Comparison
P09214	T/B by Object Account
P09216	Trial Balance by Company
P09217	Masked Trial Balance
P1202	Depreciation and Accounting Values
P1204	Item Search and Location
P1207	Item PM Schedule
P12120	Meter Readings
P14101	Detailed Budget by Account
P14102	Annual Budget by Business Unit
P14103	Annual Budget by Account
P15210	Tenant/Lease Search
P3002	Bill of Material Revisions
P3003	Routing Master Revisions
P3111	Work Order Parts List Revision
P3112	Work Order Routing Instruction
P311221	Work Order Employee Time Entry
P34301	Supplier Schedule Revisions
P3460	Detail Forecast Maintenance
P3711	Test Results Revisions
P4001Z	Batch Order Entry
P40300	Preference Revisions
P4070	Price Adjustment Schedule
P40721	Check Price and Availability

Program	Explanation
P41002	Unit of Measure - Item Conversions
P41003	Unit of Measure - Standard Conversion
P41024	Item Location Information
P4105	Item Cost Revisions
P4106	Base Price Revisions
P41061	Speed Catalog Maintenance
P420111	Order Release
P42040	Sales Order Speed Release
P42045	Customer Service Inquiry
P4207	Shipment Workbench
P42070	Held Order Release
P42090	Order Hold Constants
P42100	Related Salesperson
P4211	Sales Order Entry - Detail
P42110	Commission Constants
P42117	Back Order Release (On-line)
P42120	Commission Maintenance
P4242	Transfer Order Entry
P4243	Direct Ship Order Entry
P4271	Inventory Pricing Types
P42999	Commit/Decommit Workbench
P43081	Orders Awaiting Approval
P43101	Purchase Workbench
P43105	Progress Payment Entry
P4311	Purchase Order Entry - Detail
P4312	Receipts by PO/Item/Account
P4402	Commitment Revisions
P48014	Project Task Details
P48096	Cost Plus Mark Up Information

Program	Explanation
P512000	Job Status Inquiry
P5202	Contract Billing Line Details
P700415	Payments done to other companies
P74R0903	Correspondence Rules - RUSSIA
P76A394	Adjustments review
P76A6211	Upgrade / Inquiry Details of Draft with SQL
P76A6214	Inquiry Applications Details
P98480	Processing Options Conversion

DREAM Writer Reports Enabled for Batch Export

All DREAM Writer reports are able to Export to TXT format. DREAM Writer reports that are "enabled" are able to export to all formats, with the exception of a few reports not suitable for columnar representation, noted below, which do not export to CSV format. Some DREAM Writer reports, with the burst control field noted below, are also enabled for bursting in JD Edwards World EDD. As of JD Edwards World Release A9.2.1, the following DREAM Writer reports are enabled for Export. This list is contained in the UDC 00/BE:

Program	Explanation	EDD Bursting	CSV Export
P01P401	Employee Card Information Rpt		Yes
P01301	Mailing Labels		Yes
P014021	Mailing Labels - One Line		Yes
P014031	Mailing Labels - Full w/Codes		Yes
P014051	Mailing Labels - Full w/Notes		Yes
P03413	A/R Summary Report		Yes
P034201	Accounts Receivable Detail – Optional Aging		Yes
P035001	A/R Statements	AN81	No
P03505	Print Invoices	AN81	No
P035111	Delinquency Notices	AN8	No
P03530	Payment Reminders	AN81	No
P04423	A/P Detail by Supplier		Yes

Program	Explanation	EDD Bursting	CSV Export
P04572B	A/P Payments - BACS Remittance	PYE	No
P04572T1	A/P Payments - PPD	PYE	No
P04572T2	A/P Payments - CTX	PYE	No
P04572T3	A/P Payments - IAT	PYE	No
P063001	Time & Pay Entry Journal		Yes
P064011	Employee Roster		Yes
P080424	Salary History Analysis		Yes
P09301	Unposted G/L Transactions		Yes
P09410	T/B by Business Unit Report		Yes
P09411	Trial Balance by Bus. Unit		Yes
P094121	Trial Balance by Object		Yes
P09420	G/L by Business Unit Report		Yes
P09421	G/L by Object Account Report		Yes
P10111	Simple Balance Sheet		Yes
P10211	Simple Income Statement		Yes
P10521	Statement of Cash Flows		Yes
P12424	Cost Analysis		Yes
P12850	Compute Depreciation		Yes
P12855	Compute User Defined Depreciation		Yes
P30410	Single Level Bill of Material		Yes
P34450	Print Supplier Schedule	AN8	Yes
P3450	Plan and Message Detail Report	AN8	No
P41411	Cycle Count Selection		Yes
P41510	Price Book		Yes
P42118	Release Backorders		Yes
P42565	Invoice Print	SDAN	No
P42590	Print Backorders to Fill		Yes
P42620	Open Orders by Customer		Yes
P43421	Order Ledger Detail by Supplier	AN81	No

Program	Explanation	EDD Bursting	CSV Export
P43500	Purchase Order Print	AN8	No
P43530	Quote Request Report	AN8	No
P51420	Detail by Job		Yes
P74Y0501	Yearly VAT List - Customer		Yes
P74Y0502	Yearly VAT List - Supplier		Yes
P76A0360	Sales VAT Subsidiary in Paper		Yes
P76A0394	Sales Report		Yes
P76A0494	Purchasing Report		Yes
P76A8016	CITI File Generation		Yes
P76B4121	Four Columns Balance Sheet – Print Report		Yes
P76B415	General Journal		Yes
P76B417	Auxiliary Journal Accts Payable		Yes
P76B903	Cotepe Block H - Generation of Inventory Info.		Yes
P76B905	Cotepe Block H Rec 230/235 Work Order		Yes
P76B907	Cotepe Block H Rec 250/255 Industrialization Return/Send		Yes
P76B909	COTEPE Block I Rec.050 – Chart of acct.		Yes
P76B910	COTEPE Block I Reg.100 Cost Center		Yes
P76B911	COTEPE Block I Rec.150 Monthly Balance		Yes
P76B912	COTEPE Block I Reg.200/250/300/350		Yes
P76B916	Cotepe Block 0 - Generation of A/B Info.		Yes
P76B947	Cotepe Block 0 - Record 0400 – CFOP Codes		Yes
P76B948	Cotepe Block 0 - Generation of MSG Info.		Yes
P76B950	Cotepe Block 0 - Generation of IM Info.		Yes
P76B954	Cotepe Block Z - Generation of Fixed Assets Info.		Yes
P76B9553	Cotepe Block Z - Generation of AR Info.		Yes
P76B9554	Cotepe Block Z - Generation of AP Info.		Yes

Program	Explanation	EDD Bursting	CSV Export
P98570P	Report/Version Workfile Print		Yes
P98640	Report version Archive/Delete		Yes