Frequently Asked Questions

FDSYS

Configuration, setup

Question

I'm using EZFD and I need to create a master that is a subset of a larger master that I use. How can I easily set this up for one of my users?

Resolution

Create a new master for the user and then copy the entries from your master into the new master.

1. In EZFD, choose **CHANGE, SHOW, OR EDIT THE MASTER** on the Main Screen.
2. **Choose CURRENT MASTER IS <master name>** on the Change, Show, or Edit . . . Screen.
3. Name a master for the user beside **MASTER FILE NAME** on the Master File Name Screen.
4. Choose **COPY ENTRIES FROM ANOTHER MASTER INTO THE CURRENT MASTER** on the Change, Show, or Edit . . . Screen.
5. Name your master (the master from which you want to copy entries).
6. On the Copy Entries Screen, mark all the entries you want to copy into the user's master.

Question

I edited one of my FDs in FDSYS last month. Now, I want to make this edited version of the FD available to a user. How do I do this in FDSYS? We use different usercodes.

Resolution

Log on to the user's usercode or a privileged usercode. Go into FDSYS and enter instructions similar to the following. (Use your own usercodes and file names.)

Get the master:
MASTER (DEPT1101)STAFF/MASTER

Remove the former version of the FD:
REMOVE EMPLOYEES

Enter the new version of the FD into the master:
ENTER EMPLOYEES (FDNAME = (PRIV)FD/EMPLOYEES)

Question

While trying to generate a file description and interface routine, I get the message "INTERFACE DESCRIPTION LEVEL MISMATCH." What does this mean?

Resolution

The ALGOL compiler is used to compile interface routines. By default, EZFD looks for a DMALGOL compiler called ***SYSTEM/DMALGOL ON DISK**. The ALGOL compiler uses **SYSTEM/DMINTERFACE** when compiling interface routines. The error message typically means that there is a difference in the version levels of the ALGOL compiler and **SYSTEM/DMINTERFACE**. For example, one may be at level 44.2 and the other at level 46.1. Get the versions in line with each other and then try again.

Question

We recently upgraded to MCP level 46. When I try to generate an FD, I get the message "LIBRARY (DARGAL)OBJECT/DARGAL/FDFROMDMS/46 NOT FOUND." What do I need to do?

Resolution

The "FDFROMDMS" file is included on the DARGAL tape. In this case, the client was using an old version of DARGAL and did not have the current file. She was able to download the file from our ftp site, **ftp://ftp.dsinc.com**.

Functionality-related

Question

Can a single master contain entries from different data sources?

Resolution

Yes. Masters determine which file descriptions are available to a user. It does not matter whether the original data sources were CANDE, COBOL, DMSII, RPG, or SQL files.

Question

What's the difference between a nickname, an fdname, and a file name in terms of FDSYS?

Resolution

A master determines which files are available to a user. Masters contain two entries for each file description: a nickname and an fdname. See the listing below. The entries that appear on the left when you display entries in a master in FDSYS or EZFD are nicknames. You use nicknames to assign files in URSA, EZSPEC, or DARGAL. The fdnames appear on the right when you display entries. The fdname is the name of the disk file in which the file description is stored. When users refer to file names, they are probably referring to the the nicknames used to assign input files in URSA, EZSPEC, or DARGAL.

An example of a master containing entries for three file descriptions follows:

```
MASTER DARGAL/MASTER % 3 ENTRIES
EMPS (FDNAME=(DARGAL)FD/EMPS ON DISK AT HOST)
HIST (FDNAME=(DARGAL)FD/HIST ON DISK AT HOST)
JOB (FDNAME=(DARGAL)FD/JOB ON DISK AT HOST)
```

Question

I'm working with a very large master in FDSYS. I need to search the master for file names that contain a particular string of characters. Can I do this in FDSYS?

Resolution

Yes, the LIKE option of the FDSYS SHow instruction allows you to search the master for nicknames that contain a specific pattern of characters. The search pattern can include the wild card characters asterisk (*) and question mark (?). An asterisk matches zero or more characters. A question mark matches any single character. Other characters must match exactly. For example, the following instruction shows all nicknames that begin with "**ACCT**":

SHOW:LIKE="ACCT*"

The following instruction shows all nicknames in the specified master with "**COST**" anywhere in the nickname:

SHOW PRODUCTS/MASTER:LIKE="*COST*"

This instruction shows all six-character nicknames:

SHOW:LIKE="??????"

Question

Can I create an FD for a data file? I don't have a DMSII, COBOL source, etc.

Resolution

FDSYS allows you to create file descriptions manually for files that do not have existing source descriptions. To create FDs manually, take the following steps:

1. Make the FD and specify the file name and any other header information you need:

   MAKE <nickname> (NAME= SAMPLE/DATA)

   Note: You can specify information such as file type, file kind, and record size.

2. Using the FDSYS ADD instruction, describe the fields contained in the file:

   ADD #FIELD1 UNPACKED (9,0)
   ADD #FIELD2 STRING (25)
   ADD #FIELD3 UNPACKED (2,0)

   Note: Field specification entries must contain the pound sign (#), a name, a data type, and a width.

3. Save the FD:

   SAVE

See chapter 10 in the *File Description Subsystem Manual* if want more information about making FDs for files without source descriptions.

Question

In EZFD, can I make an FD for a COBOL item that is not from an 01 layout? I need to use layouts 02 and 03.

Resolution

List the COBOL file and locate the line numbers where the items you want begin. Then, when you create your FD in EZFD, enter the line number for the item beside **01 NAME** on the COBOL Record Description Screen. Enter the name of the file containing the data beside **DATA FILE NAME**. Enter any other options you may need. Repeat this process for each item for which you want an FD.

Question

Is there a way to make an URSA define and a join available to all users in all sessions?

Resolution

The best way to provide mass access to a define is to add it to the FD using URSA Administrator, EZFD, or FDSYS. Then make sure that all users who need the FD can access it through their masters. To provide mass access to a join, make an entry for the join FD in the masters of all users who need to access it. Once again, use URSA Administrator, EZFD, or FDSYS to make the entry.

Question

What is the FDSYS UPdate instruction? Is it a way to make FDs updateable?

Resolution

The FDSYS UPdate instruction is used to compile the current file description and report any syntax errors in the file description. It is used only in special circumstances and has nothing to do with making the FD updateable. To flag a file description as updateable, the master update user uses the CHANGE instruction to set the UPDATE option to True. If you need more information about updating file descriptions, see appendix F in the *DARGAL Reference Manual*.

Question

I'm using the DRop feature to drop beginning nodes from field names and I'm getting an error meassage when I try to generate the FD. What is happening and what can I do to fix the problem?

Resolution

The number of fields the File Description Subsystem allows in an FD is 4000. The memory limit for field names and FD defines is 12,288 words or 73,728 bytes. Therefore, if your FD contains long field names, you can run out of memory before you reach the field limit. This situation can arise if you use the DRop feature to drop beginning nodes from field names, since FDSYS stores both the original and new names in the FD. When memory is exhausted, an error message appears and FD generation stops. If you need to drop nodes and have passed the limit, we can provide you with a workaround. If you are using a COBOL source file, for example, you can copy the original COBOL source file to a new file. Use the REPLACE command in CANDE to drop the nodes you do not want and then resave the new file. Generate the FD from this file rather the original. After you generate the FD successfully, you can discard the new COBOL source file if you no longer need it.

Question

We moved our data from DMSII to SQL. Will our existing specs and programs continue to work? What happens if column names contain hyphens?

Resolution

Yes, your specs and programs will continue to work. Create an FD for each SQL table using URSA Administrator, EZFD, or FDSYS and save them under the same nicknames you used previously. If you do not want to overwrite your original DMSII versions of the FDs for these files, specify different FDNodes for the new FDs. Also, save the new FDs in a different master from the one that contains your original DMSII versions. The column names need to be exactly the same in the new SQL tables as they were in the old DMSII tables. If any of the column names used in your specs and programs contain hyphens, DARGAL automatically converts the hyphens to underscores when sending the query to the SQL database, since hyphens are not permitted in SQL column names.

Question

I'm using a define as a parameter to the CENTURYDAY function. When I specify my selection logic, I get the message "SINGLE PARAMETER MUST BE A DATE TYPE FIELD." My define contains date information and I datetyped it, so why am I receiving this error?

Resolution

A define cannot be used as a single parameter to a date function. All date functions take parameters in one of the following forms:

- three numeric expressions corresponding to year, month, and day separated by commas
- the name of a field that has been flagged as a date in a DARGAL file description
- a numeric expression preceded by a character (C, D, M, J, or Y) that indicates what date form the expression is in and a colon (for example, J: with a Julian date)

You were trying to use the second form listed above with a define rather than a flagged date field. We recommend that you flag your date fields in your FDs to make the best use of the URSA *info*Suite's date handling capabilities. You can flag your date fields by setting the datetype option on the EZFD Date Type Screen, with the FDSYS DATEtype or CHange instructions, or on the Attributes tab in URSA Administrator. There are over twenty recognized date types available. See chapter 11 in the *File Description Subsystem Manual* for more information.

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Recreating and editing file descriptions

Question

How do I make an FD updateable?

Resolution

First of all, only the master update user (designated by the URSA *info*Suite Administrator in EZINSTALL) can create updateable file descriptions. The administrator also creates user profiles for users allowed to use the UPDATE command. Steps for making the file description updateable follow. For more information, see Appendix F in the *DARGAL Reference Manual*.

1. To create an updateable file description, bring the file description into workspace (in FDSYS) with the MAKE or GET instruction.

2. To flag a file description as updateable, use the CHANGE instruction to set the UPDATE option to True:

   CHANGE (UPDATE=TRUE)

3. If the file description is for a DMSII dataset, generate (or regenerate) the interface routine:

   GEN

   This step is not needed for other file types — only for DMSII files. If the file description is for a KEYEDIO or KEYEDIOII file, use the standard KEYEDIO interface routine distributed with EZSPEC/DARGAL.

4. Save the file description:

   SAVE

Question

When I try to directly edit an FD in FDSYS, I get the message "YOU MUST BE A PRIVILEGED USER." Why is this happening?

Resolution

When you want to edit an FD in FDSYS, use the ADD, CHange, DATEtype, DEfine, FILE, HIDE, and UNHIDE instructions. Do not try to edit the FD directly by using the DARGAL editing command *Page. When you list an FD (with the List instruction), the entries are displayed with line numbers. These line numbers are purely for reference and are not part of the file description.

Question

I'm trying to access a field in a dataset using EZSPEC. I'm positive that this field is in this dataset, but it does not appear in the list of available fields. What could be wrong?

Resolution

The field you need to access has probably been hidden in the file description. To unhide a field, you must be set at Privilege Level 2 or higher. If you do not know the password for Privilege Level 2, see your DARGAL administrator for the password and other information about field-level security and privilege levels at your site. Once you are set at Privilege Level 2, unhide the field by using the FDSYS UNHIDE instruction or unmarking the field on the EZFD Hide Fields and Change Names Screen.

Question

I edited an FD in EZFD and saved the editing changes in a DARGAL program. When I listed the program, I noticed that the HIDE instruction is not shown. What went wrong?

Resolution

You must be set at Privilege Level 2 or higher to generate a DARGAL program that contains the instructions to hide sets and fields. If you are not at this level, EZFD generates a program that lists all your editing changes except the "hidden" changes. If you do not know the

password for Privilege Level 2, see your DARGAL administrator for the password and other information about field-level security and privilege levels at your site.

Question

I created my file descriptions and interface routines a while ago. Can I eliminate the beginning node from field names without remaking the FDs?

Resolution

Yes, first get the FD in FDSYS. Then, use the DRop instruction to drop a beginning node (or beginning characters) from the field names. (FDSYS skips any fields that do not result in valid or unique names.) Then, save the FD. For example, the following instructions get a file named **PRODUCTS**, drop the beginning node **PROD**, and then resave the FD:

GET PRODUCTS
DROP PROD
SAVE

Question

How do I list the byte and nibble boundaries for fields in an FD?

Resolution

The list options of the FDSYS Setup instruction determine how much information is displayed when you list a file description. These options affect the FDSYS List instruction. To display the byte and nibble boundaries, go into FDSYS, get the FD, set the AT option to True, and then list the FD:

FDSYS
GET <nickname>
SETUP AT = TRUE
LIST

Question

My database was recently reorganized. Can I use my existing FDs or do I have to recreate all of them?

Resolution

When your database is reorganized, you must recreate any datasets affected by the reorganization. Your DARGAL FDs that are affected must be updated to match the current description of the database. If you have applied editing changes to your FDs, use the FDSYS REMAke instruction or the Remake command in URSA Administrator to recreate the FDs and reapply the changes.

Question

How can I create a separate FD for each record type within a dataset?

Resolution

To create a separate FD for each record type of a variable format dataset, you need to create a customized interface routine (IR). You can preselect records by using special FDSYS instructions when generating the IR. To use these features, enable Privilege Level 2 capabilities by using the DARGAL **PASS** command with the password for Privilege Level 2. (See the URSA *info*Suite administrator at your site if you don't know the password.)

After you set Privilege Level 2 capabilities, you have access to special FDSYS instructions. These instructions allow you to add an ALGOL pointer to the source file for the field that you want to preselect. You can then use this pointer to select records based on a value.

To create the file description, enter FDSYS and issue the **Make** instruction:

FDSYS

MAKE CLIENT FROM DESCRIPTION/CLIENT FOR CLIENT

If the field you want to preselect is *not* a key, use the FDSYS **FIELDS** instruction with the name of the field:

FIELDS #CLT-RECTYPE

Note: This step is not needed if the item that you are preselecting is a key. You can proceed with the **GEN SELECT** instruction.

After you enter the **FIELDS** instruction, a pointer named **PCLT_RECTYPE** is set up. It is used when the IR is generated. The pointer name consists of a **P** followed by the field name with hyphens changed to underscores.

Next, use a special variable called **IRVALUE** with the **GEN SELECT** instruction to create a standard IR to be used by several FDs.

To create a standard interface routine you can use with the FD for each of three record types, for example, use an instruction similar to the following:

GEN SELECT="PCLT_RECTYPE=IRVALUE"

IRVALUE is a numeric variable. When creating an FD for each record type, a record type value is passed to it.

After you enter the **GEN SELECT** instruction, save the FD:

SAVE

To create a separate FD for each record type, get the FD you just created under a new name, pass the record type value to the **IRVALUE** variable, hide the fields not pertaining to the particular record type, and save the new FD. These steps are shown below for Record Type 01. Repeat the steps for the other record types.

GET CLIENT AS CLIENT01
FILE VALUE=01
HIDE #CLT02-FIELD15 THRU CLT03-FIELD28
SAVE

If you need more detailed information about creating a separate FD for each record type of a variable format dataset, see chapter 13 in the *File Description Subsystem Manual*.

Question

How do I make an FD for the report log file? I want to create reports in EZSPEC based on it.

Resolution

In FDSYS, enter the following instruction and specify the pack name you use at your site:

```
ENTER REPORTLOG (FDNAME=(DARGAL)DEMODB/REPORTLOG ON <pack name>)
```

The file is entered in your master. EZSPEC will list **REPORTLOG** with the other files in your master on the File Selection Screen. You can now report from it like you would any other

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Question

I have an EZSPEC report spec that uses the report log file. When I run the report all the information is for last year rather than this year. Any thoughts on why this might be happening?

Resolution

The file description for the report log file is pointing to the incorrect data file. Go into FDSYS and list the FD using the FDSYS List instruction. Look at the name of the file listed in line 100 of the FD. The default name of the report log file is **(DARGAL)DARGAL/REPORTLOG ON PACK**. However, you may be using a different file at your site.

In this user's case, no pack was listed. DARGAL used the CANDE FAMILY DISK statement and found a file on the user's pack that happened to contain last year's data. The user needed to change the name in the FD so that it pointed to the pack that contained the current year's data.

As this user did, you must determine the correct name and change the name that appears in line 100 of the FD. For example, the following instructions allow you to get the FD, change the name to point to a report log file stored on the **DP** pack, and save the FD:

GET REPORTLOG
FILE NAME=(DARGAL)DARGAL/REPORTLOG ON DP
SAVE

Question

I frequently create reports in EZSPEC based on a date range. Sometimes we enter two-digit years in the selection; sometimes we use four-digit years. It doesn't always work. Also we can't seem to use the DATE format. What's wrong?

Resolution

To use all the date features available in the URSA *info*Suite, you need to flag fields that contain dates as date fields. Once you have marked these fields as dates, you can use EZSPEC/DARGAL's date formats and EZSPEC's Date Field Comparison Screens. You can also use date features in URSA.

You can datetype fields in your FD by using EZFD, FDSYS, or URSA Administrator. If you use EZFD, choose the option **SET DATE TYPES** on the Edit a File Description Screen. EZFD displays the EZFD Date Type Screen. For example, if your date is stored in YYYYMMDD form, mark this type on the screen. If you use FDSYS, use the DATEtype instruction and specify the form in which the date is stored. If you use URSA Administrator, select the **Date** check box in the **Edit File** dialog box. Then select the field's form (YYYYMMDD, for example) from the drop-down list. For more information about setting datetypes in EZFD and FDSYS, see chapters 11 and 15 in the *File Description Subsystem Manual*. For more information about setting datetypes in URSA Administrator, see chapter 8 in the *URSA Administrator User's Guide*.

Question

Can I delete or modify the view name that appears in front of all field names in my DQbroker files?

Resolution

In FDSYS, you can modify the table name to make it shorter by assigning an alias. You can set this up when you make file descriptions for DQ*broker* files. You can then reference fields using shorter names. For example, the following instruction allows you to refer to the table **accounts** as **a**:

MAKE ACCOUNTS! FROM DQBROKER FOR a=accounts (SQLINFO = "TEMP", "dev", "pw")

You can then refer to the field called **name** in the table **accounts** as follows:

#a.name

Question

I'm using a custom FD that points to a particular interface routine. Can I use this FD with a different interface routine that's on another pack? If so, how?

Resolution

You can use a different interface routine with the FD. Just get the FD in FDSYS, use the FILE instruction to name a different interface routine, and then save the FD under a new name. Use the following FDSYS instructions as an example:

GET LICENSES
FILE IRNAME=(PROD)OBJECT/APPSDB/LICENSES ON TESTPACK
SAVE LICENSESTEST

Question

I'm trying to save an FD that I created based on an existing FD. I made my changes to the original FD and then saved the modified FD using the FDSYS SAVE AS instruction. FDSYS keeps overwriting my original FD even though I am specifying a unique name. Why?

Resolution

This situation can occur if you are using a very long nickname. Try to use a shorter but more unique nickname. Although a nickname can contain up to 23 characters, keep the following point in mind if the nickname is longer than 17 characters. By default, the File Description Subsystem creates an fdname by appending the nickname to the node set with the FDNode option of the Setup instruction. Under Unisys naming conventions, a node has a limit of 17 characters. Therefore, if you create a nickname that contains more than 17 characters, the

fdname is truncated after the seventeenth character. This could result in duplicate fdnames if the first 17 characters are not unique.

For example, if the nickname for the original FD is named **DEPENDENTS-HEALTH-TRN** and you try to save the modified FD as **DEPENDENTS-HEALTH**, the fdname for the original FD (which is probably **FD/DEPENDENTS-HEALTH** due to the Unisys node limit of 17 characters) is overwritten . The **-TRN** part of the name was never used — it was truncated.

Question

How do I create an FD for an extract file in FDSYS?

Resolution

You can create FDs for files created by EZSPEC, DARGAL, or URSA by specifying the **EXTRact** file attribute in parentheses after the disk file name. When you use the **EXTRact** file attribute, DARGAL marks the extract file as a DARGAL extract file (a file type recognized by DARGAL). DARGAL also automatically generates and saves an FD for the extract file. The title (fdname) of this file consists of the name of the extract file plus an ending node of **EXFD**.

To access the extract file, open the file without a nickname in EZSPEC, DARGAL, or URSA. To open the extract file, enter an asterisk (*) (in place of the nickname) and the **Names** file option followed by the name of the extract file (in parentheses). When you open the extract file, DARGAL reads the FD associated with the extract file. The file is assigned and all the fields you included in the extract file are available.

Note: If you need more detailed information about creating and using extract files, see chapter 9 in the File Description Subsystem Manual.

Question

Can I restrict a user's access to certain records within an FD? In other words, I want this user to be able to access only records where the category is 35. How do I set this up?

Resolution

The DARGAL security library allows you to limit access to keyed files by usercode or username. The security library provides record-level security based on a primary key field. As long as the category field is a primary key field, you can restrict a user's access to a particular category. It is a very efficient way of implementing security, since it limits the records read. DARGAL does not have to evaluate selection conditions for each record. See chapter 14 in the *File Description Subsystem Manual* for complete details.

Question

I need to change the name of the data file associated with the TIMELOG FD. How do I do this?

Resolution

Use the FDSYS FILE instruction with the Name option to change the name of the data file. Follow these steps:

1. Go into the File Description Subsystem by entering FDSYS at the DARGAL command prompt:

    FDSYS

2. Enter an instruction like the following to specify a data file name:

    FILE NAME = (DARGAL60)DARGAL/TIMELOG ON DISK2

    Note: Specify the usercode and pack in use at your site.

3. Save the FD:

    SAVE

Question

I'm using the DRop feature to drop beginning nodes from field names and I'm getting an error meassage when I try to generate the FD. What is happening and what can I do to fix the problem?

Resolution

The number of fields the File Description Subsystem allows in an FD is 4000. The memory limit for field names and FD defines is 12,288 words or 73,728 bytes. Therefore, if your FD contains long field names, you can run out of memory before you reach the field limit. This situation can arise if you use the DRop feature to drop beginning nodes from field names, since FDSYS stores both the original and new names in the FD. When memory is exhausted, an error message appears and FD generation stops. If you need to drop nodes and have passed the limit, we can provide you with a workaround. If you are using a COBOL source file, for example, you can copy the original COBOL source file to a new file. Use the REPLACE command in CANDE to drop the nodes you do not want and then resave the new file. Generate the FD from this file rather the original. After you generate the FD successfully, you can discard the new COBOL source file if you no longer need it.

Question

How do I create FDs when a DASDL has two datasets that contain embedded datasets with the same name?

Resolution

To create an FD for an embedded dataset that has the same name as a previous embedded dataset in the same DASDL, you need to follow some special procedures. First, here is an example to illustrate the situation:

```
MEMBER STANDARD DATA SET (
. . .
   CHECK-LIST ORDERED DATA SET (
   . . .
   )
)

MBR STANDARD DATA SET (
. . .
   CHECK-LIST ORDERED DATA SET (
   . . .
   )
)
```

You need to create the FD for the second embedded dataset (CHECK-LIST) in such a way that FDSYS knows it belongs to the second dataset (MBR) as opposed to the first (MEMBER). Follow these steps:

1. Make sure you are set at Privilege Level 2.
2. Go into FDSYS and enter a MAKE instruction for the second embedded dataset, for example:

    MAKE CHECK-LIST FROM DESCRIPTION/MSEDB FOR MBR, CHECK-LIST

3. List the FD to a data file, for example:

    LIST: F=DATA/CHECK-LIST

4. Go into CANDE and get the data file:

    GET DATA/CHECK-LIST

5. Change the appropriate dataset statement to indicate that it is embedded. For example, change "DATASET CHECK-LIST (" to "DATASET CHECK-LIST EMBEDDED VIA CHECK-SET(".

6. Save the data file:

   SAVE

7. Go back into FDSYS and create the FD from the CANDE data file, for example:

   MAKE CHECK-LIST FROM DATA/CHECK-LIST

8. Generate the interface routine, providing the name of the description file:

   GEN D=DESCRIPTION/MSEDB

9. Save the FD:

   SAVE

   Now, you can report from the file as usual.

Joins

Question

I'm in EZFD and I'm joining two files. The relationship is one-to-many (SELECT); however, I only want to match the first record. How should I set up this join?

Resolution

Even though the join relationship is one-to-many (SELECT), set up the join as if it were one-to-one (INDEX). This means that you must match all the key items to read a single record from the secondary file. If you cannot match all the key items, you must use a primitive string expression. See **"Using string expressions in joins"** for more information.

Question

I need to redefine my one-to-many join as a one-to-one join, since I want to read just one record from the secondary file. I cannot match all the key items. What should I do?

Resolution

You need to specify a primitive string expression. You can use a primitive string expression to specify key elements instead of using a KEY = expression. When you use this method instead of "KEY =" to join files, you must make sure that you match up the key elements properly in terms of type and size. If any of the key elements are numeric, convert them to string items using the $ (string) function. You can change the join type from SELECT (one-to-many) to INDEX (one-to-one) and enter the text of the string expression on the EZFD Join Summary Screen. Remove the KEY = expression that is already on the Join Summary Screen. More detailed information follows.

Using a string expression is the best way to specify key elements for a one-to-many join when you are interested in matching only the first or last record in the secondary file for each record in the primary file. Although multiple records may be present in the secondary file for each record in the primary file, you should specify this type of join as a JOIN INDEX, since you are interested in matching only one record from the secondary file for each record in the primary file. For example, to define a join between the demo files **EMPLOYEES** and **TRAINING** that returns just the first record in the secondary file for each record in the primary file, enter text like the following on the Join Summary Screen:

VIA TRN-SSNSET INDEX FORWARD REQUIRED $(1#EMP-COMP,Z2) & 1#EMP-SSN

The $ function converts the company number to a string. It is two digits and the Z in the format forces leading zeros.

The joined file contains records for the first training class an employee attended. To return the last record in the secondary file for each record in the primary file, change FORWARD to BACKWARD in the previous example.

Question

I joined two files in EZFD. When I run my report, EZSPEC/DARGAL returns only the first record from the secondary file for each record I read from the primary file. It should return multiple records. What's the problem?

Resolution

It sounds like the join is set up to read one record rather than multiple records from the secondary file. You probably matched all key items when you set up the join. When you match all key items, EZFD establishes an INDEX (one-to-one) join. Go back into EZFD and read the syntax that EZFD is using for the join you set up. It appears on the Join File Descriptions Screen. Choose the join part you want to modify. The Join Summary Screen appears. Make any changes you need to make. In this case, change the word INDEX (which establishes a one-to-one join) to SELECT (which establishes a one-to-many join).

Question

DECISION SUPPORT
Data Integration & Reporting

I have joined several files in EZFD. When I create my report in URSA, it seems that some of the records from the files are not present. Did I define the relationships incorrectly?

Resolution

Go back into EZFD and read the syntax that EZFD is using for the join you set up. It appears on the Join File Descriptions Screen. Choose the join part you want to modify. The Join Summary Screen appears. Make any changes you need to make. In this case, a join was defined as a REQUIRED (inner) join rather than an OPTIONAL (outer) join. Joins are either REQUIRED or OPTIONAL, depending on the information you want returned (in the reporting cycle) when no matching records are found in the secondary file. If the join is REQUIRED, the primary record is discarded when no matching records are found. This is what was occurring in this user's case. If the join is OPTIONAL, the primary record is returned and the secondary record is set to missing. This is how the user wanted the join to be defined.

Question

When I try to discard a join part from an eight-file join in EZFD, I get the message "UNABLE TO DISCARD THIS JOIN PART." What should I do? I need to replace it with a different join part.

Resolution

A file in the join part that you are trying to discard is probably used in another join part of the same join FD. Discard or change the other join part first. Then discard the one you originally tried to remove. Then add the new join part. See chapter 12 in the *File Description Subsystem Manual* for more information.

Question

I want to join two files in EZFD, but I do not have a match for the last of the fields I need to match. What should I do?

Resolution

You do not need to match the last key field. If you do not match all key fields, EZFD sets up your join as a JOIN SELECT (a one-to-many relationship). For each record read from the primary file, multiple records can be read from the secondary file. The primary record and each secondary record are returned as a single logical record. The same primary file record is returned for each secondary file record associated with it.

Question

When I open a joined file that I created in EZFD a while back, I get the message "JOIN WILL BE OBSOLETE IN VERSION 61." What can I do to prevent this from happening?

Resolution

FDs are supported for two levels back. If you are using Version 60, for example, the join FD was last updated in Version 57. (Version 58 does not count as a different version, since it was a special international release.) To update the join FD to the current version, go into EZFD, open the file, and then save it. EZFD "stamps" the file with the current version.

Question

With our COBOL files, we extract data from two databases into one flat file and then sort it. Can I perform this same type of task using DARGAL?

Resolution

Yes, you can perform the same type of task in DARGAL with a join. Join the two datasets in URSA Administrator or EZFD and save it. Then, create a report in EZSPEC, DARGAL, or URSA using the joined file. Sort the report by specifying group or order fields. Send your output to a system disk file.