

DBU GUI USER GUIDE

DATA BASE UTILITY

This software system consists of computer software and documentation. It contains trade secrets and confidential information which are proprietary to ProData Computer Services, Inc. ("ProData"). Its use or disclosure in whole or in part without the express written permission of ProData is prohibited.

This software system is also an unpublished work protected under the copyright laws of the United States of America. If this work becomes published the following notice shall apply:

Copyright @ ProData Computer Services, Inc. All Rights Reserved

Welcome to **ProData Computer Service's Data Base Utility** GUI documentation. **DBU** is a file access utility that can be used to locate and update records from a single file or as many as four different files via logical paths or relative record numbers. It can be used to access journal receivers, data areas and user spaces. You can create **DBU** applications to act as programs to access your data. There are thousands of ways to use DBU, and you will find new uses for DBU as you go.

This release operates on Microsoft Windows 95 and later or IBM'S Network Station with TCP/IP connectivity. The interface was developed using JAVA and the JAVA virtual machine is distributed with the software.

Minimum requirement is a Pentium III with 256M RAM.

We recommend a Pentium IV with 512M RAM for optimum performance.

DBU requires 60M of disk space.

Access to the files and features follows the standards used in the standard windows GUI interface.

When DBU/GUI is opened for the first time, the "New System" dialog will appear.

| New System This wizard creates | a new system (user name and p | password). | |
|-----------------------------------|-------------------------------|------------|--------|
| | | | |
| Connection Name: | | - | |
| IP Address: | | - | |
| User name: | | | |
| Password: | | - | |
| Program Library: | DBU80 | - | |
| | | | |
| | | | |
| | | Finish | Cancel |

Connection Name: The name that will be displayed in DBU/GUI to reference this connection.

IP Address: The IP Address or host name of the System i containing DBU.

User Name: The user id used to connect to the System i.

Password: The password used to connect to the System i. If the password is not entered, you will be prompted upon connection to the System i. The storage of the password is encrypted.

Program Library: The library containing DBU.

The "Navigation View" displays the list of configured DBU systems.

| BB | a | 80 | 宿 4 | 2 0 |
|----------|------|------------|------------|-------|
| Là Là | | A 5 | | Ø V |
| 🛨 📲 Proc | data | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Expanding the system tree will display the libraries, object types, and available objects.



The icons along the top of the Navigation View preform the following functions:

🖡 - Create a new system definition.

Modify the properties of the selected system definition.

- rightarrow Open a file on the selected system.
- 🔍 Connect to the selected system 🍡
 - Disconnect from the selected

system.

- Delete the selected system.
- Refresh the selected system.
- DBU Access Code entry

🕒 - DBU Authority Maintenance

✓ - Perform a web update on the selected system.

Right clicking on a system will produce the system menu. This menu provides the same functions as the icons above.



Right clicking on an object will ahow the object menu.



Show the members for the selected file. The member information will display in the "Members -

View".

Show the fields for the selected file. The field information will display in the "Fieldss View".

Show the record formats for the selected file. The formats information will display in the "Formats ≡ - View".

Show the database relations for the selected file. The relations information will display in the II - "Relations View".



- Refresh the selected object.

The fields view displays the field name and their attributes for the currently selected file.

| Prodata - DBU | 80.LIB/DBPDEMO. | FILE/*FIRST.MBR/DBRDEN | 10.FMT | | | |
|---------------|-----------------|------------------------|--------|--------|----------|---|
| Name | Key Seq | Text | Type | Length | Location | ^ |
| GLLVL3 | | Level3 | Р | 3,0 | 1 | |
| GLLVL2 | | Level2 | Р | 3,0 | 3 | |
| GLLVL1 | | Level1 | Р | 3,0 | 5 | - |
| GLEMP# | | Employee # | S | 4,0 | 7 | |
| ACTTYP | | B/s Or P&I | А | 1 | 11 | |
| SEQ# | | Seq Ctl # | P | 5,0 | 12 | |
| ACCT# | | GI Act# | Р | 5,0 | 15 | |
| SUB# | | Subact | P | 3,0 | 18 | |
| JESRCE | | Source | A | 2 | 20 | ~ |
| CUTOU B | | e | | 2 | | |

The members view will display the member information for the currently selected file. Left double clicking on the file name will bring up that file member, replacing the file in session.

| B Members View | N × | | | |
|----------------|--------------------|----------|-----------|--------------------------------|
| Prodata - DBU8 | O.LIB/DBPDEMO.FILE | P | | |
| Member | # of Rcds | Dlt Rcds | Data Size | Text |
| DBPDEMO | 50 | 1 | 16384 | Demo Data |
| DBPMBR2 | 9 | 0 | 8192 | Second member of physical file |
| - | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| < | | | | > |

The formats view will display the record format information for the currently selected file.

| Formats View | X | | | | |
|----------------|--------------------|---------|---------|-----------|-----|
| Prodata - DBU8 | 0.LIB/DBPDEMO.FILE | P | | | |
| Format | File | Library | Rcd Len | # of Flds | |
| DBRDEMO | DBPDEMO | DBU80 | 105 | 32 | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| <u> </u> | | | | | 1.2 |

The database relations view will display the database relations information for the currently selected file. All of the access paths built over the physical file are listed. Left double clicking on the file name will bring up that file , replacing the file in session.

| 🔢 Database Relations View 🗙 | | -0 |
|--------------------------------|-----------------------------------|--------|
| Prodata - DBU80.LIB/DBPDEMO.FI | LEP | |
| File | Text | ~ |
| DBPDEMO DBU80 | Demo Data | |
| Format: DBRDEMO | Key: Arrival Sequence | |
| | Records: 50 Last Used: 03/15/2008 | |
| DBLDEMO1 DBU80 | ACCT# SUB#, 2 formats | |
| Format: DBRDEMO | Key: ACCT# SUB# | |
| | Records: 10 Last Used: 03/15/2008 | |
| | S/O: *OMIT ENAUBY EQ 'D' | |
| | *SELECT ACTTYP EQ 'B' | |
| Format: DBRDEMPL | Key: ACCT# SUB# | ~ |
| | | 1.0001 |

The DBU Editor widow is used to edit the data for the requested object. The toolbar at the top of the editor controls the actions within the editor.

| Prodata - DBU80.LIB/DBPDEMO.FILE/ | DBPDEMO.MBR/DBRDEMO.FMT × | |
|-----------------------------------|---------------------------|--|
| RRN: 1 🔠 🖉 🛛 🕯 | | |
| Field | Data | |
| Level3 | 100 | |
| Level2 | 2 | |
| Leveli | 0 | |
| Employee # | 0 | |
| B/s Or P&J | B | |
| Seq Ctl # | 15010 | |
| Gl Act# | 15010 | |
| Subact | 0 | |
| Source | AP | |
| Entry# | 020389 | |
| Text# | 1309 | |
| G/I Amount | 523.20 | |
| Yy Entry | 89 | |
| Mm Entry | 1 | |
| Dd Entry | 31 | |
| Fiscal Yy | 89 | |
| Fiscal Pp | 1 | |
| Fiscal O | 1 | |
| | Update Display Mode | |
| | | |

This field displays the relative record number of the record on the screen. It also can be used to position the file to a certain record number. This is valid only if the file is in arrival sequence, and not a keyed physical or logical file. Enter the RRN of the record to search for, and press

Enter.

This is valid for logical files only. Shows all keys on the logical file and sets DBU to a point at the beginning of a specific key. Fill in the key(s) press OK. The file will be positioned at that key, or the next higher key if that key does not exist.

RDR is a toggle switch to set 'on' or 'off' the displaying of deleted records as they are encountered in the file. The records that have been deleted are highlighted in yellow as they are encountered. There will be a 'reactivate button' on the bottom of the screen, click on it and the record will be reactivated, and the next record in the file will be displayed. RDR is only valid if the file is a physical that is not keyed.

- Position the display to the first record in the file.
- Position the display to the next previous record in the file.
- Refresh is used in Edit Mode to restore the screen to its previous content. e.g. A field is keyed into, but Enter has not been pressed. Refresh will return the screen to its original

content.

| • | Position the display to the next record in the file. |
|----|---|
| IÞ | Position the display to the last record in the file. |
| | This puts the file in Display mode. No updates or deletes can be performed. |

This puts the file in Edit mode. If a field is marked for display only it cannot be edited. Click on the field to be changed and key over the data. Note that the **Update** button at the bottom of the screen is now active. If

any other fields are to be changed, do so now. Click on the **Refresh** button to return all the changed fields back to their original values. Click on the **Update** button to save the changes. Update also positions to the next record in the file.

This puts the file in Add mode. The field names are shown but the data fields are empty. Key in the data for the first record and press Enter. Note that the Add button at the bottom of the screen is now active.

⁺⁺ Enter data into the remaining fields. Click on the Add button to add the record to the file.

This puts the file in Delete mode. A "Delete current record?" warning window will be in displayed. No other DBU functions will work until a "Yes" or "No" answer is selected or the window is closed.

- This controls the layout of the screen fields, and the reading of the formats (see **DBU Preferences**).
- \equiv This option allows the user to Toggle between single record mode and multiple record mode.
- The records displayed may be toggled between Character or Hexadecimal format.

up the parameters to search/replace. See Search.

AA

Ħ

This continues the Search function which has already been initiated in the 'Define Search'. This will not be active (see right icon, above) until a search has been defined.

Click on **Print** and the following dialog box appears. PC printer selections will be printed on the user's default printer. For iSeries/AS400 selections the print out of the record goes to the OUTQ defined by the

user job, or can be overridden to the OUTQ defined in DBU authority. When printing to a PC while in multiple record format mode, the number of records printed will be equal to the **Records to display** value selected in DBU Configuration. See **Printing**.

The **Export to PC** will output the data currently displayed on the screen to a file on the PC. See **Export to PC**.

Display the fields view for this file.

- Display the members for this file.
- Display the database relations for this file.

The DBU Editor widow is used to edit the data for the requested object. The toolbar at the top of the editor controls the actions within the editor.

| Prodata - DBU80.LIB/DBPDEMO.FILE/ | | |
|-----------------------------------|---------------------|---|
| RRN: 1 🕈 🖓 4 | | |
| Field | Data | ^ |
| Level3 | 100 | |
| Level2 | 2 | |
| Leveli | 0 | |
| Employee # | 0 | |
| B/s Or P&J | В | |
| Seq Ctl # | 15010 | |
| Gl Act# | 15010 | |
| Subact | 0 | |
| Source | AP | |
| Entry# | 020389 | |
| Text# | 1309 | |
| G/I Amount | 523.20 | |
| Yy Entry | 89 | |
| Mm Entry | 1 | |
| Dd Entry | 31 | |
| Fiscal Yy | 89 | |
| Fiscal Pp | 1 | |
| Fiscal O | 1 | ~ |
| | Update Display Mode | |

This field displays the relative record number of the record on the screen. It also can be used to position the file to a certain record number. This is valid only if the file is in arrival sequence, and not a keyed physical or logical file. Enter the RRN of the record to search for, and press

Enter.

This is valid for logical files only. Shows all keys on the logical file and sets DBU to a point at the beginning of a specific key. Fill in the key(s) press OK. The file will be positioned at that key, or the next higher key if that key does not exist.

RDR is a toggle switch to set 'on' or 'off' the displaying of deleted records as they are encountered in the file. The records that have been deleted are highlighted in yellow as they are encountered. There will be a 'reactivate button' on the bottom of the screen, click on it and the record will be reactivated, and the next record in the file will be displayed. RDR is only valid if the file is a physical that is not keyed.

- **4** Position the display to the first record in the file.
- Position the display to the next previous record in the file.
- Refresh is used in Edit Mode to restore the screen to its previous content. e.g. A field is keyed into, but Enter has not been pressed. Refresh will return the screen to its original

content.

| • | Position the display to the next record in the file. |
|----|---|
| IÞ | Position the display to the last record in the file. |
| | This puts the file in Display mode. No updates or deletes can be performed. |

This puts the file in Edit mode. If a field is marked for display only it cannot be edited. Click on the field to be changed and key over the data. Note that the **Update** button at the bottom of the screen is now active. If

any other fields are to be changed, do so now. Click on the **Refresh** button to return all the changed fields back to their original values. Click on the **Update** button to save the changes. Update also positions to the next record in the file.

This puts the file in Add mode. The field names are shown but the data fields are empty. Key in the data for the first record and press Enter. Note that the Add button at the bottom of the screen is now active.

⁺⁺ Enter data into the remaining fields. Click on the Add button to add the record to the file.

This puts the file in Delete mode. A "Delete current record?" warning window will be in displayed. No other DBU functions will work until a "Yes" or "No" answer is selected or the window is closed.

- This controls the layout of the screen fields, and the reading of the formats (see **DBU Preferences**).
- \equiv This option allows the user to Toggle between single record mode and multiple record mode.
- The records displayed may be toggled between Character or Hexadecimal format.

up the parameters to search/replace. See Search.

AA

Ħ

This continues the Search function which has already been initiated in the 'Define Search'. This will not be active (see right icon, above) until a search has been defined.

Click on **Print** and the following dialog box appears. PC printer selections will be printed on the user's default printer. For iSeries/AS400 selections the print out of the record goes to the OUTQ defined by the

user job, or can be overridden to the OUTQ defined in DBU authority. When printing to a PC while in multiple record format mode, the number of records printed will be equal to the **Records to display** value selected in DBU Configuration. See **Printing**.

The **Export to PC** will output the data currently displayed on the screen to a file on the PC. See **Export to PC**.

Display the fields view for this file.

- Display the members for this file.
- Display the database relations for this file.

Controls the layout of the screen fields, and the reading of the formats

| Text | Field Name | Key Seq | Select | Display Only | Auto Dup | Upper Case | Туре | Length | Dec | Loc | Column Head |
|------------|------------|---------|--------|--------------|----------|------------|------|--------|-----|-----|-------------|
| Level3 | GLLVL3 | | YES | | | | Ρ | 3 | 0 | 1 | Level3 |
| Level2 | GLLVL2 | | YES | | | | Р | 3 | 0 | 3 | Level2 |
| Level1 | GLLVL1 | | YES | | | | P | 3 | 0 | 5 | Level1 |
| Employee # | GLEMP# | | YES | | | | S | 4 | 0 | 7 | Employee # |
| B/s Or P&I | ACTTYP | | YES | | | | A | 1 | | 11 | B/s Or P& |
| Seq Ctl # | SEQ# | | YES | | | | Ρ | 5 | 0 | 12 | Seq Ctl # |
| Gl Act# | ACCT# | | YES | | | | Ρ | 5 | 0 | 15 | GI Act# |
| Subact | SUB# | | YES | | | | Р | 3 | 0 | 18 | Subact |
| < | | | | |) | | | | | | > |

The Fields Preference allows the user to:

- Use column heading or text on the fields display
- Choose a particular format in the file to display
- Choose/move the fields to be displayed and indicate whether they can be updated/duped or are case sensitive .

The Position to Field box will position the screen to the first or last field in the record .

The **Description** box selects the source for the field description.

- **Text** the text of the field
- **Field Name** the field name
- Heading the column headings for the fields
- Alias a name the user creates
- The **Format** box is for logical files only, and selects the fields that are in one particular logical format

The next portion of the window is used to make changes to the ways fields are presented and handled on the screen. All the fields in the file are initially shown.

Text - text defined for the field in DDS.

Field Name - name of the field as described in DDS. To move a field from its current position on the screen, click on the field and use the Up/Down keys to position the field on the screen.

Key Sequence - shows the keys in the file, numbered from 1 (highest key) to nth (lowest key).

Select - is a toggle to either select a field for the screen, or to not show the field on the screen.

Display Only - is a toggle to select whether a field may be updated or not.

Auto Dup - is a toggle to select whether this field may be duped using the dup key.

Upper Case - is a toggle to select whether only upper case characters may be keyed, or whether mixed case characters are allowed.

The rest of the fields are definition only:

Type - defines the field type, whether numeric, alpha, etc.

Length - the length of field.

Dec - if a numeric field, this is the decimal positions.

Loc - position in the file of the starting character of the field.

Column Headings - the column headings for the field.

Alias - the alias for the field.

When all the desired changes have been made, click **OK** to apply the changes.

Arranging fields

To arrange the fields on the screen in a different order, select the field by clicking on it and then use the **up** and **down** buttons to move the field to another position.

Import

| Source File | |
|-----------------------|-----------------|
| | C Physical File |
| Source File | |
| Library | DBU80 |
| Source Member | |
| RPG File Name | DBPDEMO |
| Replace Existing File | |
| Physical File | |
| Library | DBU80 |
| | |

Use the **Import** button to define a DBU application which will allow the user to work with a file that is not externally described as though it is externally described. Select Source File to pull the field descriptions from an RPG source file. An RPG program must exist which has "I" specs defining the file. Select Physical File to pull the field descriptions from an existing physical file.

Import - Source File selected

- **Source File** the name of the source file that contains the RPG program which has "I" specs defining the field layout
- Library the library where the source file resides
- **Source Member** the member of the source file
- RPG File Name the name of the RPG program with internal "I" specs defining the field names
- Replace Existing File –

Checked – DBU will present the file on the screen as though it was externally defined by the "I" specs. The original layout will not be presented. All applicable DBU operations can be performed.

Not Checked – DBU will present the fields defined in the "I" specs after the file defined fields. This works as a data structure but the data will be presented twice. Updating either the original data field or the imported fields will update the file. All applicable DBU operations can be performed.

Import - Physical File selected

With this function a physical file description can be used to separate data in a data area into fields.

Export

| 🗑 Export Physical Fil | le to DDS 🛛 🛛 |
|--------------------------|---------------|
| Source File | 1 |
| Library | |
| Source Member | DBPDEMO |
| 🔲 Replace Existing Membe | er |
| Member Text | *SAME |
| Record Format Name | |
| Г | OK Cancel |
| L | |

Use the **Export** button to create/change the physical file member in a source file from the fields selected on the field selection screen. The fields will be ordered by the sequence number on the field selection screen. If no fields are selected, all fields will be copied. This may be used two ways:

- 1. Create source specs for an S/36 described file.
- 2. Create new source member for an existing externally described file

Caution: The default source member name is the file name of the externally described file. If using this method, change the source member name and/or the source and library name or the original physical file specification will be replaced

- **Source File** the name of the source file which will contain the physical file specifications to be created or changed.
- Library the library where source file resides.
- Source Member the physical file member to be created or changed. Replace Existing Member -
- Checked replace existing file specifications with fields selected on screen.

• Not checked – the selected field will be added to the end of the existing physical file specification in the source member.

• Member Text –

***SAME** - do not change the text on an existing member.

Text - either change text on an existing member or define text for a new member. Text will not carry to new member if it is being created from an existing member.

• **Record Format Name** – the name to be used for the record format if it is different from the physical file name.

Create Field

The Create Field button can be used two ways:

- 1 Breakup fields into smaller fields if they are not packed.
- 2 Combine contiguous fields into larger fields.

Click on the **Create Field** button and the following screen appears.

| Page Negral | 11 | AP DIRECT |
|--------------|---------------|-----------------|
| Franci | [thermise]#] | T Depair Jacky |
| Contraction: | 1. | T writter. |
| | C | "I" there there |
| Aire . | 1 | |
| Part Tault | | |

Fill in the boxes:

- Field Name the name of the new field, must be unique in the file
- Type- pull down box for field type
- Length- total length of new field
- Dec- number of decimals, if created field is numeric
- Loc- is the starting position of the first contiguous field to be combined
- Field Text- New text for the created field
- Select- Toggle switch to select fields, if the toggle is off, the field will disappear when Preferences screen is exited
- Display Only- Toggle switch to make a field display only, or to allow updates to that field
- Auto Dup- is valid in add mode, when the Auto Dup toggle is checked on a field, the last value of that field will appear on the screen when a new record is to be added
- Upper Case- Toggle switch between upper case and mixed case entry into a field. If the toggle is checked, then only upper case may be keyed into these fields

When all the boxes are filled in, press **OK**, and the new field will appear at the top of the Preferences screen. Create as many fields as desired. New fields will appear in order as they are created and will have a * in the field type to identify which are the created fields. The new fields can then be selected for a DBU application and all applicable DBU operations will apply. Fields are created for applications only. The source member of the physical file will not change.

Remove Field

The **Remove Field** button will work only for fields that have been created using the **Create Field** button. If no fields have been created the **Remove Field** button will be inactive. To remove a field, click on the field to be removed to highlight it and make the **Remove Field** button active, then click on **Remove Field**.

Sort Keys

The **Sort Keys** button is used with keyed physical and logical files. Pressing **Sort Keys** will reorder the displayed fields, placing the keyed fields at the top in key sequence order.

Define Search

The parameters used to execute a search or a search/replace are defined on the following screen.

| Define Sea | rch and Repla | ce | | | | | |
|------------|----------------|-------------------|------|------------------------|------------------------|-------|---------|
| Search | | | 1000 | | | | |
| Operator | Field Name | From | To | Operation | Value | | |
| | | | | | | | |
| | | | | | | | |
| 9 | | | Add | Edit | Delete | | |
| | | | | | Delete | | |
| Replace | | | | | | | |
| Field Name | From | To V | alue | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | ٥dd | Edit | Delete 1 | | |
| | | | | | Delete | | |
| Setting | | | | | | | |
| | Format DBRDEM | 10 | • Fs | Submit to batch | Occurences to process | Next | 2 |
| | Cutput results | s to ISeries file | ΓN | 1atch case | Desculate second | [| _ |
| | Cutput results | s to PC file | E P | rint results | Records to search | 15000 | |
| | Create subset | of records | | nclude deleted records | Progess Messages every | 1000 | records |
| | | | | | | | |
| | | | | | | | |
| | | | | | | OK | Cancel |

There are three parts to this screen.

Search - The top section of this screen is used to define the parameters to find the data

Replace - Defines the parameters to be used to update the file

Seetings- Parameters to control other aspects of the Search

Search

Press Add, and the Search Entry dialog box appears.

| 🗑 Search | i Entry 🛛 🔯 |
|------------|-------------|
| Operator | AND - |
| Field Name | *RCD |
| From | |
| То | |
| Operation | Contains |
| Value | · |
| | OK Cancel |

Fill out the parameters and press OK. The Search/Replace screen will now contain this information. Continue adding selections, as wanted. Then press Search to find the record. The search will begin using the current record displayed on the screen. If the current record is one that has already been found using the search criteria, the search begins with the next record in the file.

The fields for this Dialog Box are defined below:

Operator - The user may have a multiple argument search to group or string the search criteria together.

- Blank A blank operator signifies a new set of search criteria.
- AND Use to string search criteria together so that all criteria must be true in order for the search to be satisfied.
- OR Use if only one of the defined equations are necessary for search parameters to be met or to start a new group of search criteria.

Field Name - A Relative Record Number, a Range, Entire Record or a Field Name can be searched on. Combinations of the four may also be used.

- *RRN = Relative Record Number Select Relative Record Number to search using RRN as a base.
- *STRPOS = Starting Position Click on *STRPOS if a search is to be made from one position in the record to another.
- *RCD = Entire Record Click on Entire Record to search for decimal data errors or a specific data string within the record.
- Field Name Enter field name to be searched. If the field names are not known, position the cursor on the Field Name drop down arrow and right click. A list of fields in the file will be displayed, just click on the field wanted and continue filling out the Dialog Box.

From - Enter numerical starting position in the record. This is only if *STRPOS is requested.

To - Enter numerical ending position in the record. This is only if *STRPOS is requested.

Operation - User has a choice of logical expressions to apply to search parameters:

- Contains Find record(s) that contain user-defined character string any where inside the defined search range.
- Equal Find record(s) equal to search parameters.

- Greater Than Find record(s) greater than search parameters.
- Greater Than or Equal Find records(s) greater than or equal to search parameters.
- Less Than Find records(s) less than search parameter.
- Less Than or Equal Find record(s) less than or equal to search parameters.
- Not Equal Find records(s) not equal to search parameters.
- Not Greater Than Find records(s) not greater than search parameters.
- Not Less Than Find record(s) not less than search parameters.

Value - The use of the Values parameter, gives the user almost unlimited ways of searching/replacing. Values are as below:

- field name Enter the name of the field that contains the data to be used as search parameter. If the field names are not known, position the cursor on the Field Name drop down arrow and right click. A list of fields in the file will be displayed, just click on the field wanted.
- a number Enter a number that is to be used as the search parameter.
- characters Enter the character string that is to be used as the search parameter. If using 'from and to' positions instead of field names, put single quotes around the value (even if numeric).
- hex string Enter a valid 'X' String (i.e. Zoned Decimal 09 = X'F0F9' and Packed Decimal 09 = X'09F').
- decimal data error Select Decimal Data Error from the drop down, when searching for data decimal errors.
- When all parameters are filled in, click on Search to initiate the search function.

Replace

The middle part of the Search/Replace screen prompts the user to define the parameters used to make a replace to any records satisfying the search parameters defined in the top (search) half of the Search/Replace screen.

Click on Add to bring up the Replace Entry dialog box.

| 🗃 Replac | ce Entry | × |
|------------|-----------|---|
| Field Name | *RCD | ł |
| From | | _ |
| То | | |
| Value | | • |
| | OK Cancel | |

Field Name - From the drop down box choose one of the following.

- *STRPOS
- *RCD

- *RRN
- field name click on a field name

From - Enter numerical starting position of desired character string in the record, if range is requested.

To - Enter numerical ending position of desired character string in the record, if range is requested.

Value - User has option of what type of data is to be placed into field or character string to be changed.

- FIELD Enter the name of the field that contains the data to be copied into the field or character string to be changed.
- NUMBER Enter a number that is to be copied into the field or character string to be changed.
- CHARACTERS Enter the character string that is to be copied into the field or character string to be changed. If using start positions instead of field names, put single quotes around the value (even if numeric).
- HEX Enter a valid 'X' String (i.e. Zoned Decimal 09 = X'F0F9 and Packed Decimal 09 = X'09f').
- DELETE Click Delete to perform a global delete of information in the Search area of the screen.

After all the Search and/or Replace parameters are filled out, the search is performed by clicking on the Search button. The search can be further controlled by using the additional parameters on the bottom of the search screen.

Settings

The search is controlled by the bottom parameters of the Search/Replace screen.

- **Submit to batch** is a toggle. If checked, then the DBU search is submitted to the JOBQ defined on DBU authority. The search will start at the currently displayed record location, just like an interactive search. DBU allows a user to create a search and then submit the search to batch. When performing a straight search in batch with no replace and Print Results is checked, the report will contain the record numbers that fulfilled the defined search parameters. When performing a search/replace in batch and Print Results is checked, the search/replace will take place and a full audit log of all changes made will be created. If performing a search/replace with Print Results not checked, a short report will be created showing which records were changed, but there will be no full audit log.
- Occurrences to process prompts the user to define the type of search that is to occur. The user has three options:
- Next causes the search to search forward through the file. The next record to satisfy the search criteria is displayed. If a replace is defined, a Dialog Box to initiate the replace function is displayed. Replace will change only the displayed record and then the search automatically continues from that record. Skip will continue the search without updating the record. Cancel returns the user to the primary DBU screen.
- All causes the search to search forward through the file. If used in conjunction with the replace function, all records which satisfy the search criteria will have the replace function performed without presenting any of the records back to the screen. USE WITH CAUTION.
- **Previous** causes the search to search backward through the file. The next previous record to satisfy the search criteria is displayed. If a replace is defined, a Dialog Box to initiate the replace function is displayed. Replace will change only the displayed record and then the search automatically continues

backward from that record. Skip will continue the search without updating the record. Cancel returns the user to the primary DBU screen.

- **Output results to iSeries file** allows the user to create a new subset of the data or add/replace the data to an existing file. A dialog box prompts the user for the parameters for the file.
- **Output results to PC file** Output to a PC requires that Create subset of records be selected. A dialog box prompts the user for the parameters for the file.
- Match Case is a toggle. It prompts user to specify whether the search and replace function is to accept only those records that match with the same case of the defined search parameters or whether the case is to be ignored.
- **Print Results** is a toggle. It prints an audit log of all records updated with the replace function. The printout goes to the OUTQ defined by the user's job, or can be overridden to the OUTQ defined in DBU authority.
- **Records to search** defines the number of records to process in a search. If a search is satisfied before this number is reached, the record will be presented on the screen. If the search is continued, the file will be searched until the total number of records read matches this number. If the search is not satisfied, this number of records will be read and a message "Maximum records read, scan condition not found" will be returned to the screen. The last record read will be presented. Continuing the search at this point, will start the search using the next record in the file and the same number of records will be searched.
- **Create subset of records** Replaces the record(s) currently displayed with a subset of the records meeting the search criteria. The display format of the subset will be the same as the format of the initial display. A subset of the data, with the word **Subset** in the lower left hand corner, will be displayed. Any changes to this subset will update the file. To create a subset of the data in a separate file, choose Output results to iSeries file or Output results to PC file before searching. To go back to the original search screen, click on Search on the Menu Bar, and then Define Search. De-select the Create subset of records, and click on Search again. The original screen will be returned.
- **Include deleted records** Deleted records will be included in the search and highlighted in yellow. Deleted records cannot be included in a subset.
- **Progress Messages** works in conjunction with 'Records to Search'. e.g. A user may want to search 10,000 records and have a message indicate when 500 records have been searched. This is effective when searching a very large set of records and there may be very few hits on the search criteria.

Export to PC

This option will export data to a PC file. The data exported is the data that is currently displayed.

| 🗑 Define PC Output File | |
|---|--------|
| PC Output Type • HTML • XML • Comma • Excel | |
| File: | Browse |
| ОК | Cancel |

- HTML create the PC file in HTML format
- XML create the PC file in XML format
- Comma create the PC file in comma delimited format
- Excel create the PC file in Microsoft Excel format

File: - Enter the name of the PC file in the text box. Click the browse button to select a folder to place the file.

Click the OK button to create and export the PC file.

Print Record

Click on **Print Record** and the following dialog box appears. PC printer selections will be printed on the user's default printer. For iSeries/AS400 selections the print out of the record goes to the OUTQ defined by the user job, or can be overridden to the OUTQ defined in DBU authority. When printing to a PC while in multiple record format mode, the number of records printed will be equal to the Records to display value selected in DBU Configuration.

| 🗑 Printing Dialog | |
|---|------------|
| PC Printer | C System i |
| Repeat Header Bold Header Repeat Coll Outline | |
| Page Numbers | |
| ✓ Suppress Leading Zeros | |
| Number of records to print | 1 |
| | OK Cancel |

Preferences

Selecting Window->Preferences will bring up the Eclipse preferences window. Select DBU to set the DBU relative preferences.

| Preferences | | | |
|--|--|-----------|------------------------|
| Workbench Build Order DBU | DBU Format: | *DBUAUT - | |
| Help Install/Update | Mode: Records to display | *DBUAUT • | |
| | Print Audit Log J.D. Edwards Format | *DBUAUT - | |
| | | | |
| | | | Restore Defaults Apply |
| Import Export | | | OK Cancel |

Format:

- *DBUAUT Use the setting from DBUAUT on the System i.
- *SGL Start in single record mode.
- *MLT Start in multiple record mode.

Mode:

- *DBUAUT Use the setting from DBUAUT on the System i.
- Display Start in display mode.
- Change -Start in change mode.
- Add Start in add mode.

Record to Display - The number of records to display when in multiple record mode. The maximum is 50.

Print Audit Log:

- *DBUAUT Use the setting from DBUAUT on the System i.
- Off Turn off the print log. J.D. Edwards Format:
- *NONE Do n ot apply J.D. Edwards formating.
- World Use the J.D. Edwards World format
- OneWorld Use the J.D. Edwards OneWorld format

Press Apply or OK to save your changes.

Updating DBU/GUI

To update DBU/GUI select Help->Software Updates->Find and Install

| Window | Help | |
|--|--------------------|----------------------|
| 🗄 Syste | Help Contents | |
| | Software Updates 🕨 | 🔗 Find and Install |
| •••••••••••••••••••••••••••••••••••••• | About DBU/GUI | Nanage Configuration |

The next screen will display the available updates. Select the files to update and click next.

| 🗑 Install | | | | |
|---|----------------|----------------|--------|---------------|
| Search Results Select features to install from the search result list. | | | | M |
| Select the features to install: | | | | |
| Feature | Version | Provider | | Select All |
| ☑ [®] DBU/GUI | 8.0.2.1 | Prodata | Compu | Deselect All |
| | | | | More Info |
| | | | | Properties |
| | | | | Error Details |
| | | | | |
| DPI I Devenenti ve festure | | | | |
| This is a required feature for the DBU/GUI interface. | | | | |
| 1 of 1 selected. | | | | |
| Filter features included in other features on the list | | | | |
| | < <u>B</u> ack | <u>N</u> ext > | Einish | Cancel |

You must accept the license agreement to install the update. Click Next.

| 🗑 Install | | |
|---|---|-------|
| Feature License Some of the features have license agr installation. | eements that you need to accept before proceeding with the | |
| DBU/GUI 8.0.2.1 | ProData Computer Services, Inc. Software License Agreement Warning: ProData Computer Service, Inc. ("Licensor") is willing to License the enclosed software to you only upon the condition that you accept all of the terms contained in this license agreement ("Agreement"). Opening the package will indicate your acceptance of these terms, so please read the terms carefully before opening. If you do not agree to all of the terms(including those relating to warranties, limitations and disclaimers of warranties and limitations of remedies), licensor is unwilling to license the software to you, in which event you should return the unopened package and all other related items (including written materials and binders or other containers) to licensor (or to the dealer or reseller from which it was acquired) within 30 days of the date you acquired them. Software License | < |
| | < U | > |
| I accept the terms in the license a □ I do not accept the terms in the license a | reements ense agreements | |
| | < <u>Back</u> <u>N</u> ext > Einish Ca | ancel |

Use the default install location. Press Finish.

| 🗑 Install | | |
|---|--------------------------|-------------|
| Install Location Choose the location where the fea | tures will be installed. | |
| Features to install: | Available sites: | |
| BU/GUI 8.0.2.1 | 😤 e:\DBUGUI\eclipse | Add Site |
| | | Remove Site |
| Required space: 0KB Free space: 29360596KB | | |
| | | ish Cancel |

The feature in unsigned. This is OK. Select Install to complete the installation.

| Jar Verification | | |
|--|---------------------------------|-----------------------|
| Feature verification Warning: You are about to install an unsigned feature. | | |
| Warning: This feature has not been digitally signed. The provider of this feature cannot be verified. | | |
| Feature name: | DBU/GUI | |
| Feature Identifier: | com.prodata.dbu_8.0.2.1 | |
| Provider: | Prodata Computer Services, Inc. | |
| File Identifier: | com.prodata.dbu_8.0.2.1 | |
| | | Install <u>Cancel</u> |