I-QU ReorgComposer

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Getting Started

To begin, run the following programs from the Windows task bar:

The Setup Programs

Step 1:	Step 2:	Step 3 (optional)
WinQ UTS Config	Script Editor	I-QU ReorgComposer Converter

The following set-up steps are usually taken when first using I-QU ReorgComposer:

1. Execute the WinQ UTS Config program and configure a route, open id. and virtual destination (IP address) to be used by the sign-on script. This program only configures routes that will be used to connect to the host directly through the TCP/IP stacks.
2. Execute Express Script Editor and develop a sign-on script required by the I-QU ReorgComposer program.

   Note: An initial sign-on script, developed by KMSYS Worldwide, is available in the Scripts directory (normally, C:\Program Files\KMSystems\I-QU 2000\3.0\Scripts). The file name is IQRCSO.bas and may be altered as necessary to connect to the host; however, the script should work as originally written for most sites. Also included is the same script in binary form, IQRCSO.bax (default sign-on file). The I-QU ReorgComposer can reference either a .bax or .bas file. The default script from KMSYS Worldwide executes from the host installation file, syslib*iq2k32. If the installer chooses a different installation file, the sign-on script must be changed accordingly.
3. Optionally, execute the I-QU ReorgComposer Conversion Utility. This utility can save all the I-QU ReorgComposer parameters that you set while using version 2 of I-QU 2000. The utility can also be used to convert version 2 I-QU 2000 files (.qit and .qia) to version 3 format. You only need to convert these files if you plan to re-access them.

Normally, the setup programs only need to be run the first time that you install I-QU ReorgComposer.

Note: There is a sample sign-on script that is installed with I-QU ReorgComposer. This script may be altered to fit the sign-on needs at your site, but normally it requires little if any modification. The script may be found in the SCRIPTS directory of your I-QU ReorgComposer installation directory.

The script is stored in two formats: a source file with an extension of .BAS and an executable binary file with an extension of .BAX. Either may be used by I-QU ReorgComposer when signing on, but the binary file is more secure. The script source files should be viewed and edited using eXpress Plus Script Editor. eXpress Plus Script Editor will create the executable .BAX when a Compile Script command is issued from the Edit menu.

The I-QU ReorgComposer Program

 I-QU ReorgComposer

The following steps are normally taken when applying date or other field changes:

1. Choose the Field Search command  within program and specify new date formats.
2. Execute the Reorg Wizard command  to generate the reorg runstream and I-QU PLUS-1 programs.
3. Execute the Impact Analyzer command  to determine which programs/subschemas/copy libraries require alteration.
4. Change and compile a new schema that reflects the date changes.
5. Run the generated reorg runstream and programs.
6. Change and recompile necessary host programs.

I-QU ReorgComposer Conversion Utility

Use this utility to convert I-QU ReorgComposer version 2R1 parameters and files (.qit & .qia) files to version 3R1 format. Only those files that you wish to re-access need be converted.

File menu

Open

Use this selection to open an existing reorg (.qit) or date aging (.qia) file. These files are normally stored in the version 2R1 installation directory (c:\IQ2K200).

Save

Use this selection to save to the currently opened file.

SaveAs

Use this selection to save to an alternate file. The default path is to the version3R1 installation directory.

Exit

Use this selection to exit this utility.

I-QU ReorgComposer

The **I-QU ReorgComposer** beginning dialog contains DMS 2200, RDMS 2200 and PCIOS related parameters used when searching for potential date conversion candidates, setting up database reorganizations or running impact reports.

Note: When generating "vanilla" unload/reload programs (i.e., no data field reformatting required), it is no longer necessary to mark a field with the "NONE" date format. The Reorg Wizard will now make all records available for selection when no fields are marked for change. If fields are marked for change, only the records containing those fields will be made available for selection.

Toolbar Buttons (from left to right)

 Open

 Save

 Save as

 Exit

 Field Search

 Reorg Wizard

 Impact Analyzer

 Editor

 Configure

 Help

Select Data Model

In this group, select an option button that corresponds to the 2200 data model to be accessed:

DMS Schema/Subschema (default)

RDMS Schema/Tables

PCIOS File Description

Note: The appearance of this dialog and the information that may be entered will change depending upon which option is selected.

Code Generation Type

The option buttons in this group are used to specify the type of files to produce as a result of the date search. Both options are mutually exclusive:

Reorg

Select the **Reorg** option button when changing date formats and/or performing database reorganizations. This option will produce a .QIT that will be used as input to the I-QU ReorgComposer Wizard.

Date Aging

Select the **Date Aging** option when date aging is desired. This option will produce a .QIA file that will be input to **I-QU ReorgComposer Date Aging** (see Date Aging Parameters).

Enter Schema Parameters

This group box contains the information necessary to identify the DMS 2200 components required for the search.

Schema Name

In this text box, enter the name of the schema absolute element. This parameter is required.

Trivial Subschema Name

In this text box, enter the name of the subschema absolute element. This parameter is required.

Note: If the schema/subschema is particularly large, you may need to increase the amount of time allowed for file transfers from the host (see **WinQ File Transfer Time Out** on the **I-QU ReorgComposer Parameters** tab of the **I-QU ReorgComposer Configuration Parameters** dialog).

Invoke Key

In this text box, enter the invoke key if required by the schema.

Application Name

In this text box, enter the name of the UDS Application Group. This parameter overrides the **Application Group Name** parameter that is set on the **IRU Parameters** tab reached from the **File, Configuration** menu.

Schema File or TIP Code

In this text box, enter the TIP file code or the fully qualified EXEC file name of the program file containing the production schema and/or subschema absolutes.

This parameter is required. When entering an EXEC file name, the period at the end of the file name is not critical.

Subschema File or TIP Code

In this text box, enter the TIP file code or the fully qualified EXEC file name of the program file containing the production subschema absolutes.

This parameter is optional. It is only required when the schema and subschema absolutes are maintained in separate files.

S$PROC File

In this text box, enter the fully qualified EXEC file name of the program library containing the S$PROC COBOL copy proc (COBP) element generated by the Subschema Data Definition Language (SDDL) Processor.

This parameter is optional. It is only required when the schema file is a TIP file or when the S$PROC elements are maintained in a file other than the file containing the schema and subschema absolutes. If omitted, I-QU ReorgComposer will expect to find the S$PROC element in the same file containing the schema and subschema absolutes (see above). If I-QU ReorgComposer is unable to locate the S$PROC file, an error will be returned. The S$PROC element is required to properly handle OCCURS processing.

RDMS Information

This group box contains the information necessary to identify the RDMS 2200 components required for the search.

RDMS Schema Name

In this text box, enter the name of the RDMS schema or qualifier. This parameter is required.

Version

In this text box, enter the version name of the table(s) to be accessed. This parameter is required and defaults to the default version supplied by Unisys, "PRODUCTION".

I-QU PLUS-1 Call

In this text box, enter the complete I-QU PLUS-1 processor call (normally, "@IQU,I").

UDS Appl Group

In this text box, enter the name of the UDS Application Group. This parameter is required and defaults to the default application group supplied by Unisys, "UDSSRC".

Enter RDMS Table Name

In this text box, enter a table name to be appended to the **RDMS Tables** list box and press the **Add Table** button.

RDMS Tables

This list box contains the RDMS tables to be searched. At least one table name is required.

To add a table name to this list, enter the new table name in the **RDMS Table Name** text box, below, and click on the **Add Table** button. To remove a table name from this list, select the table name with the mouse or keyboard and click the **Delete Table** button.

Add Table

After entering a table name in the **RDMS Table Name** text box, press this button to place the name in the list of RDMS tables to be searched (**RDMS Tables** list box).

Delete Table

After selecting a table name from the **RDMS Tables** list box, press this button to remove the name from the list.

PCIOS File Information

This group box contains the information necessary to identify the PCIOS components required for the search.

I-QU Internal File Name

In this text box, enter the file name that will be used to reference the PCIOS file internally within the I-QU PLUS-1 program. The file name is limited to a maximum of twelve (12) alphanumeric characters.

Exec 2200 File/Element Containing File Description

In this text box, enter the fully qualified file name and element name of the COBOL PCIOS file definition.

File Menu

New

Select this command to download new DMS/RDMS/PCIOS information from the host.

Open

Select this command to open a previously saved reorganization file (.QIT) or date aging file (.QIA).

Save

Select this command to save to the current file.

Save As

Select this command to save to an alternate file.

Search

Select this command to initiate the search dialogs.

ReorgWiz

Select this command to initiate the reorg wizard dialogs.

Impact Analyzer

Select this command to initiate the impact analyzer report.

Configuration

Select this command to open the I-QU ReorgComposer Configuration Parameters dialog.

Exit

Select this command to terminate the I-QU ReorgComposer session.

WinQ Trace Menu

On / Off

Select this command to toggle a WinQ trace to a window and/or file.

I-QU ReorgComposer Field Search

I-QU ReorgComposer Define Search Criteria

The **I-QU ReorgComposer Define Search Criteria** dialog contains name related parameters used when searching for potential matching candidates.

Date Search Parameters

The schema/subschema specified in the **Enter Schema/Subschema Information** group box will be searched for the field names shown in the **Date Search Parameters** group.

Include

This list box contains all of the strings that will be matched during the search.

Exclude

This list box contains all of the strings that will be excluded from the matching process during the search.

For example, "MM" is a common abbreviation for "month" and as such might be placed in the **Include** list. "MM" is also a double consonant frequently found in such words as "COMMENT", "COMMISSION", "COMMUNITY", etc. that have nothing to do with dates. Each of these can be omitted by adding "COMM" to the **Exclude** list. Fields using the "MM" abbreviation (e.g., "ENTRY-MM", "SHIP-MM", etc.) will not be excluded.

Add Include

Press this button to add the string in the **Enter Date Search Parameter** text box to the **Include** list.

Add Exclude

Press this button to add the string in the **Enter Date Search Parameter** text box to the **Exclude** list.

Delete

Press this button to remove a selected string (using the mouse or keyboard) from one of the list boxes in the **Date Search Parameters** group.

Enter Date Search Parameter

This group contains a text box that allows additional field name strings to be entered for inclusion or exclusion from the search. The field name strings may be partial strings (-DT, MO-, etc.) or complete data name entries.

In the text box, enter the new string to be included/excluded from the search. Press the **Add Include** to add the string to the **Include** list, or **Add Exclude** to add the name to the **Exclude** list.

Search

Press this button to begin the search process. The search process takes place locally in the information downloaded from the host when you first signed on. Once the Search is complete, the I-QU ReorgComposer Result of Date Search dialog will appear.

The Date Search program is capable doing recursive searches without eliminating any fields definitions that have been previously changed. Use the following procedure:

1. After making changes to fields from the first date search, be sure to save them in a .QIT file: **SaveAs** from the **File** menu of the main **I-QU ReorgComposer** dialog.
2. In a subsequent I-QU ReorgComposer session, open the saved .QIT/QIA file by selecting **Open** from the **File** menu. The **I-QU ReorgComposer Result of Date Search** dialog will appear. Notice that only the fields that have been changed will appear in the **Date Fields** list box.
3. Press the **Scan** button and change any **Date Search Parameters** you may want on the **I-QU ReorgComposer Define Search Criteria** dialog.
4. Press the **Search** button. Notice that any field that matches the search criteria (new or old) will appear, and yet, any fields changed previously are still shown as changed.

Cancel

Press this button to cancel the dialog.

Host Sign-On

The **Host Sign-On** dialog contains parameters used to connect to the 2200 host.

Select Sign-On Script

This text box allows you to select a Sign-On Script file (.BAX or .BAS). The sign-on script is required when connecting to the 2200 host. To develop a sign-on script, use the **Express Plus32 Script Editor** program/icon located in the **I-QU ReorgComposer 3.0** folder/program group. Complete on-line help for the **Express Plus32 Script Editor** is provided. A sample script (IQ2KSO.BAS) is provided in the SCRIPTS directory of the I-QU ReorgComposer installation directory. This sample script should require little or no modification. It uses all of the parameters entered on this dialog.

You may enter the complete drive, path and file specification directly into the box; select the script previously used to sign on; or use the **Browse** button to locate a new script.

Browse

Press this button to locate and select a WinQ Sign-On Script.

Optional Sign-On Parameters

This group box contains controls that may be used during the sign-on process. If the WinQ Sign-On Script supplies any of the values normally associated with host connection (Open Id., User Id., etc.), then the corresponding parameters in this group are not required.

Open Id

In this text box, enter the string used on the $$OPEN to a DEMAND session at your site. If the open id. is embedded in the WinQ Sign-On Script (e. g., SEND "$$OPEN DEMAND"), this parameter is ignored.

User Id

In this text box, enter your 2200 host user id. If your user id. is embedded in the WinQ Sign-On Script, this parameter is ignored.

Password

In this text box, enter your 2200 host password. If your password is embedded in the WinQ Sign-On Script (not recommended), this parameter is ignored.

Account

In this text box, enter your 2200 account number. If your account number is not required for sign-on or is embedded in the WinQ Sign-On Script, this parameter is ignored.

Project

In this text box enter your project id. If your project id. is not required for sign-on or is embedded in the WinQ Sign-On Script, this parameter is ignored.

Enable WinQ Trace?

Check this box to enable a WinQ trace during sign-on. A separate window will appear tracing WinQ events that occur between WinQ's processing of the script and the host's responses.

Recommendation: Test the WinQ Sign-On Script with the WinQ Script Editor (use the **With Trace** selection from the **Test** menu) before attempting to use the script with I-QU ReorgComposer.

Enable WinQ Trace to File

Check this box to send the WinQ trace to a PC file.

OK

Press this button to begin the host sign-on process. Once connected and after a short pause while host processing (the download of host schema/table/file information) completes, the I-QU ReorgComposer Define Search Criteria dialog will appear.

Note: The sign-on process creates an index file on the host containing all information related to the specified subschema: field names; field locations, lengths and data types; occurring items and number of occurrences; record names and record length. The index file, called a Data Item Index File, is a temporary file and is available to I-QU ReorgComposer as long as I-QU ReorgComposer remains connected to the host. Upon completion of the sign-on, information from the Data Item Index File will be downloaded to be used by other I-QU ReorgComposer processes.

Cancel

Press this button to cancel the sign-on and return to the **I-QU ReorgComposer** main dialog.

I-QU ReorgComposer Result of Field Search

The **I-QU ReorgComposer Result of Field Search** dialog contains information that results from the initial search for field names. From this dialog, the search may be further refined by adding additional fields, by removing fields from the **Date Fields** list and, most importantly, editing or redefining date fields to accommodate turn-of-the-century processing.

Selected Records

This group contains a multicolumn list of records matching the field names specified in the **Include** list on the I-QU ReorgComposer Define Search Criteria dialog. Each record's **Record Code**, **Old Length** and **New Length** (after reformatting) are also shown in the list.

To reformat (redefine) a field in a record, first select the record in this list to view the matched fields within that record in the **Date Fields** multicolumn list box. Next, select the field to be reformatted from the **Date Field** list box and press the **Edit Fields** button. The **Redefine Field** dialog will appear where the field's old and new format may be specified. Note: Double-clicking the left mouse button on a field name will also bring up the **Redefine Field** dialog.

Once a field has been redefined, the record name will be highlighted in red type indicating that the record has at least one reformatted field.

Date Fields

This group box contains a multicolumn list box of field names matching the **Date Search Parameters** entered on the I-QU ReorgComposer Define Search Criteria dialog. The fields in the list box are in the same order as they appear in the record.

To reformat a field in a record, see Selected Records, above.

Once a field has been redefined, the field name will be highlighted in red type and its new **Length** and **Format** displayed in the multicolumn list box.

Add Fields

Press this button to view a complete list of schema/subschema field names. This list may be examined for additional conversion candidates. One or more field names may be selected from this list and included with the fields matched during the initial search.

Delete Fields

Press this button to remove selected field names from the **Date Fields** list. To select multiple fields see Selecting Multiple Fields.

Note: It is not necessary to remove a field prior to generating the date conversion code. If a field has no format change specified, no code will be generated.

If all fields are removed from a particular record, the record name will be removed from the **Selected Records** list.

Edit Fields

Press this button to edit or redefine selected fields in the **Date Fields** list. To select multiple fields see Selecting Multiple Fields. If multiple fields are selected, the **Redefine Field** dialog will be presented for each selected field in turn.

If a date field has more than one definition in the schema/subschema, only one definition may have a format change. For example, a date defined at both the group and elementary level:

```
05  ENTRY-DATE.
    10  ENTRY-MO        PIC XX.
    10  ENTRY-DA        PIC XX.
    10  ENTRY-YR        PIC XX.
```

Would be viewed by I-QU ReorgComposer as:

```
ENTRY-DATE (1,6)
ENTRY-DA   (1,2)
ENTRY-MO   (3,2)
ENTRY-YR   (5,2)
```

ENTRY-DATE or ENTRY-YR may be reformatted, but not both. I-QU ReorgComposer checks for the overlap of positions within the record to determine if a field may be reformatted. ENTRY-DATE and ENTRY-YR overlap in positions 5 and 6. If an attempt is made to reformat two overlapping fields, an error message will be displayed.

Mark Done

After selecting one or more changed fields (red type) from the **Date Fields** list box, click this button to mark the field as "done." Fields marked as "done" will be highlighted in green and no change code will be generated for them.

It is important to mark fields as "done" if you 1) have already converted the fields, 2) have opened an existing reorganization file (.QIT) that has these fields marked as changed and 3) have used the **Update** button to gain updated schema information from the schema file that reflects the field changes.

Note: This button is not available when date aging.

UnMark Done

Clicking this button has the reverse effect of the **Mark Done** button.

Note: This button is not available when date aging.

OK

Press this button to activate the code generation. A text editor dialog will appear containing the generated code. This dialog contains the necessary controls to edit the generated code to meet any site specific requirements. From this dialog, the code may be saved on the PC and/or uploaded to a host file for subsequent inclusion in an I-QU PLUS-1 program.

Note: The use of this button is not required if the generated code is to be included as a part of a DMS 2200 database reorganization. This button is mainly used when generating I-QU PLUS-1 code snippets for use with PCIOS or RDMS 2200 applications. For DMS applications, a complete I-QU PLUS-1 program(s) and runstream will be generated to include the necessary code when the I-QU ReorgComposer Reorg Wizard is run.

Report

Press this button to produce a report of all proposed date format changes. The report will be displayed in the **I-QU ReorgComposer Change Summary** dialog where it may be printed from the PC, saved to a PC file or uploaded to a host file.

Note: This button is not available when date aging.

Update

Press this button to update the original result of the date search with new information from the host schema/subschema. Any changes made to the schema since the original result will be downloaded and updated in the new result. Changes that may be updates are field starting position, field length and data type. Fields that had format changes originally (highlighted in red) will still show the new length and format; however, if you do not want code generated for these fields, use the **Mark Done** button to show that the conversion for these fields has already taken place.

Note: This button is not available when date aging.

Scan

Press this button to scan the original result of the date search. This button acts like a refresh and is useful if you open a previously saved reorganization file (.QIT) where only the fields with format changes are shown. Pressing this button will not affect any format changes already specified, but will display fields shown from the original date search that have not had format changes specified.

Close

Press this button to close the dialog and return to the main **I-QU ReorgComposer** dialog. If a field has been edited, a warning message will appear allowing the date code generation to occur at that time.

File Menu

Add

This selection has the same results as the Add Fields button described above.

Edit

This selection has the same results as the Edit Fields button described above.

Delete

This selection has the same results as the Delete Fields button described above.

OK

This selection has the same results as the **OK** button described above.

Exit

Select this command to close the dialog.

Select Fields

The **Select Date Fields** dialog contains lists of all records and fields included in the **Data Item Index File** created during the search phase of I-QU ReorgComposer.

Records in Subschema

This list box contains the complete list of records found in the **Data Item Index File**.

To view the data fields of a given record, select the record with the mouse or keyboard (**Arrow** keys). The data fields are displayed in the **Select Date Fields** list box.

Select Date Fields

This list box contains a complete list of data field names found in the selected record. To add a field to those resulting from the date search, select the field with the mouse or keyboard (**Tab**, **Arrow** and **Space Bar** keys) and click on the **Add** button. To select multiple fields see Selecting Multiple Fields.

Add

Press this button to add the selected field(s) to the list of date fields resulting from the search and to return to the **I-QU ReorgComposer Result of Date Search** dialog.

Close

Press this button to finish the selection process and return to the **I-QU ReorgComposer Result of Date Search** dialog.

Selecting Multiple Fields

Multiple fields may be selected with the standard Windows multiple selection feature. To select individual fields (not adjacent), hold down the **Ctrl** key and select each field with a left mouse click (Note: A left mouse click over a selected field while holding down the **Ctrl** key will deselect the field). To select multiple fields in a range (adjacent), select a field at either end of the range with a left mouse click and, while holding down the **Shift** key, select the field at the other end of the range with a second left mouse click.

Define Date Format

The **Define Date Format** dialog is used to specify the format of the date field for the date aging process.

Date Format

From this drop-down list box, select the format of the date to be aged.

OK

Press this button to accept the date formats specified and return to the **I-QU ReorgComposer Result of Date Search** dialog.

Cancel

Press this button to cancel the date format process and return to the **I-QU ReorgComposer Result of Date Search** dialog.

Redefine Field

The **Redefine Field** dialog contains the controls necessary to specify the format of a selected date field as it currently exists in the record and as it will appear upon completion of the date conversion process.

Record_Name_Information_Box

This information box contains the sizes of the record before and after format changes.

Old Date Field Information

This group box contains format information of the date as it appears before the conversion.

Date Format

This drop-down combo box is used to specify the old (current) date format. You may enter the format directly into the box or click the drop-down button and select from the list of Predefined Old Date Formats.

If the format is not in the predefined list, enter the combination of Date Descriptors desired directly into the text box.

"NONE" may be selected when increasing or decreasing the size of a non-date field.

I-QU PLUS-1 Field Definition

This information line shows the current starting position of the field in the record, the field length and the field data type.

New Date Field Information

This group box contains format information of the date, as it will appear after the conversion.

Date Format

This drop-down combo box is used to specify the new date format. You may enter the format directly into the box or click the drop-down button and select from the list of Predefined New Date Formats.

If the desired format is not in the predefined list, enter any combination of Date Descriptors directly into the text box.

If the selected field is not a date field, select "NONE" and enter the new field length in the **Date Field Length** text box.

Date Field Length

This text box is used to optionally specify the new field length. When used, it must be large enough to accommodate the **Date Format** specified or an error will occur. When omitted, the size will be exactly that required for the specified **Date Format** and **Data Type**.

Data Type

This text box and drop-down selection list are used to specify the data type of the new date format. You may enter the data type directly into the box or click the drop-down button and select from the Data Type Selection List.

OK

Press this button to accept the date formats specified and return to the **I-QU ReorgComposer Result of Date Search** dialog.

Cancel

Press this button to cancel the date format process and return to the **I-QU ReorgComposer Result of Date Search** dialog.

Insert Filler

Are You Going to Insert a Filler After the Field to Retain Word Alignment within the Record?

This confirmation dialog allows you to specify the alignment method for subsequent fields when a converted field decreases in size.

Yes

Pressing the **Yes** button will retain the converted field's relative position to all fields in the record; i.e., no code will be generated to shift the fields beyond the converted field.

If this method is used exclusively, and provided that no other fields increase in length, I-QU PLUS-1 will be able to perform an "in-place reorganization" since the record size remains constant. When an in-place reorganization can be performed, the records in the database area do not have to be physically unloaded and reloaded. The records are simply modified in place. An in-place reorganization can represent a considerable amount of savings in time and resources, especially for large areas.

No

Pressing the **No** button will cause all fields following the converted field to be shifted left.

Generated Date Code

The **Generated Date Code** dialog appears after at least one date field has been reformatted and the **OK** button is pressed on the **I-QU ReorgComposer Result of Date Search** dialog.

The dialog is actually an editor where the generated code may be tailored to apply any site-specific formatting requirements using I-QU PLUS-1 commands and directives (see the I-QU PLUS-1 Programmer Reference). The generated/tailored code may be saved on the PC, printed to a printer attached to the PC or network and/or uploaded to the host and stored for subsequent inclusion in an I-QU PLUS-1 program.

Note: I-QU ReorgComposer also contains a function called the Reorg Wizard that will generate the necessary I-QU PLUS-1 code to perform complete database reorganizations. The Reorg Wizard will automatically ***regenerate*** the date conversion code and include it in the reorganization programs. If you are planning to use the I-QU ReorgComposer Reorg Wizard and you need to tailor the generated date conversion code, you should ***not*** alter the code here. Instead, wait and alter the code generated by the I-QU ReorgComposer Reorg Wizard.

File Menu

Open

Select this command to open a previously saved generated date code file (.IQU).

Save

Select this command to save to the current generated date code file.

Save As

Select this command to save to an alternate generated date code file.

Upload

Select this command to transfer the generated code to a host file. A dialog will appear prompting for the name of a new or existing host file.

Print

Select this command to print the generated date code. The standard Windows Print dialog will appear.

Change Font

Select this command to change the font, font style, point size, etc. This change will affect both the display font and the font used for printing.

Exit

Select this command to return to the **I-QU ReorgComposer Result of Date Search** dialog.

Edit Menu

Cut

Select this command to move the selected code to the Windows Clipboard.

Copy

Select this command to copy the selected code to the Windows Clipboard.

Paste

Select this command to paste the contents of the Windows Clipboard to the current cursor location.

Select All

Use this command to select all the code in the dialog work area.

Transfer Generated Code to Host

The **Save Generated Code to Host** dialog is used to specify the host file that will receive the generated code when doing an Upload.

Enter Host File Name

In this text box, enter the fully qualified file name of a host data file or program file, including an element name, to receive the uploaded generated code.

The file does not have to be previously cataloged. If the file does not exist, a new file will be cataloged.

Warning: Care should be taken ***not*** to upload to a program file without specifying an element name. The result would be to write to the program file as if it were a data file — all elements would be lost.

OK

Press this button to accept the entered information and continue to the next step.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

I-QU ReorgComposer Change Summary

The I-QU ReorgComposer Change Summary dialog appears after at least one date field has been reformatted and the **Report** button pressed on the **I-QU ReorgComposer Result of Date Search** dialog.

The summary report may be saved on the PC, printed to a printer attached to the PC or network and/or uploaded to the host and stored.

File Menu

Open

Select this command to open a previously saved text file (.TXT).

Save

Select this command to save to the current text file.

Save As

Select this command to save to an alternate text file.

Upload

Select this command to transfer the summary to a host file. A dialog will appear prompting for the name of a new or existing host file.

Print

Select this command to print the summary. The standard Windows Print dialog will appear.

Change Font

Select this command to change the font, font style, point size, etc. This change will affect both the display font and the font used for printing.

Exit

Select this command to return to the **I-QU ReorgComposer Result of Date Search** dialog.

Edit Menu

Cut

Select this command to move the selected information to the Windows Clipboard.

Copy

Select this command to copy the selected information to the Windows Clipboard.

Paste

Select this command to paste the contents of the Windows Clipboard to the current cursor location.

Select All

Use this command to select all the information in the dialog work area.

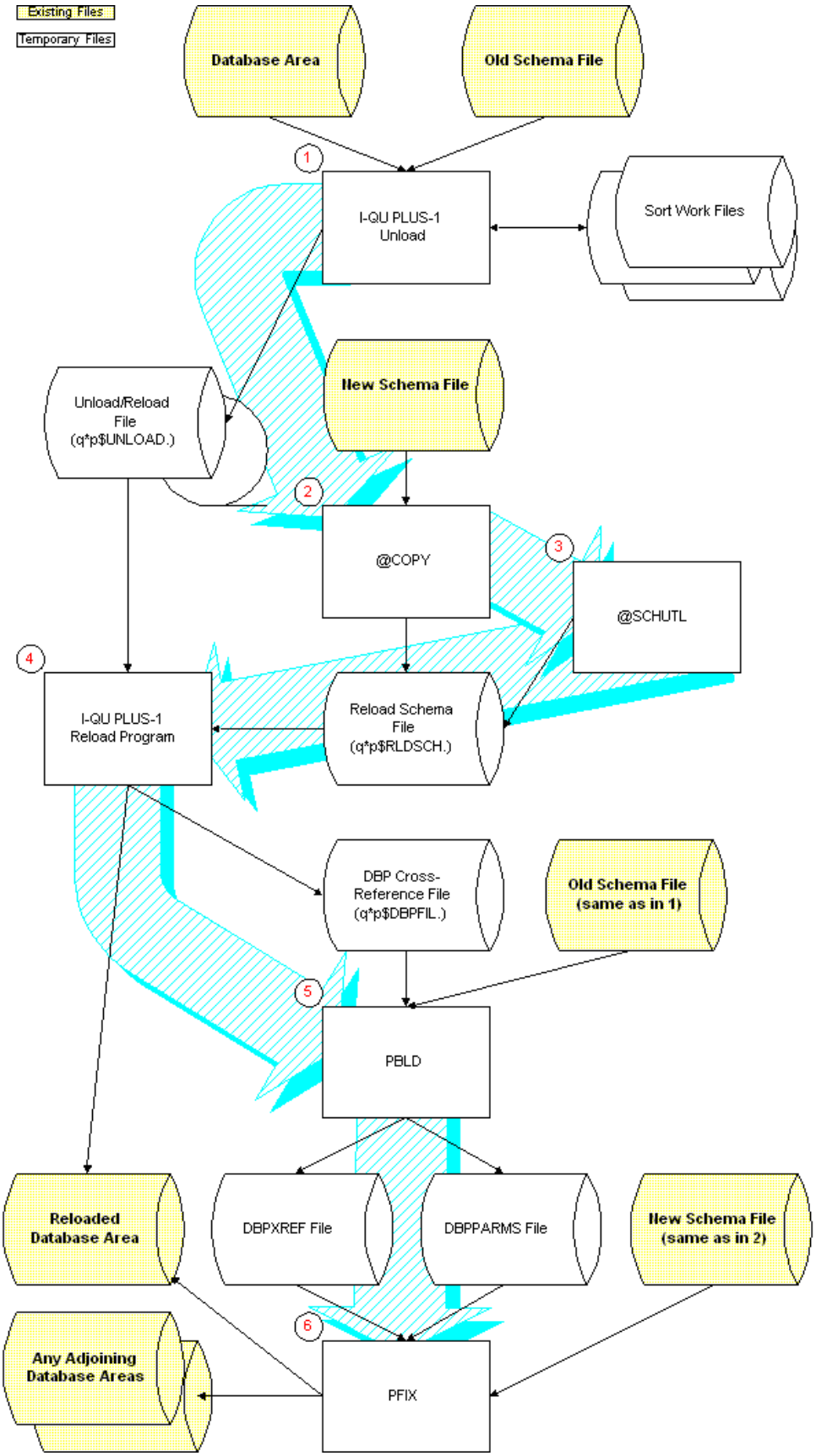
The I-QU ReorgComposer Wizard

Reorganization Runstream Flow

This topic is designed to give an overview of the I-QU PLUS-1 process used to perform a database reorganization. The process parallels the runstream that will be generated by I-QU ReorgComposer. The following flow chart shows the various files, utilities and processors that will be used to perform the database reorganization. A numbered circle illustrates each step.

To view additional information on any part of the diagram, move the mouse cursor over an item in the diagram (the mouse cursor will change to a hand) and click the left mouse button on the item.

Note: This diagram illustrates the files and programs that are used in basic unload/reload type reorganizations. In-place reorganizations do not follow this floe. It should also be noted that I-QU ReorgComposer may create and use other files depending upon choices made by the user. For instance, the user is given an option to create and use a special unload schema file. This file is necessary when the user chooses to reorganize TIP areas as if they were EXEC areas. In this case, the file would be altered by the I-QU PLUS-1 utility, SCHUTL, to temporarily change from TIP to EXEC.


Existing Files
Temporary Files
Database Area
Old Schema File
1
I-QU PLUS-1
Unload
Sort Work Files
New Schema File
Unload/Reload
File
(q*p$UNLOAD.)
2
@COPY
3
@SCHUTL
4
I-QU PLUS-1
Reload Program
Reload Schema
File
(q*p$RLDSCH.)
DBP Cross-
Reference File
(q*p$DBPFIL.)
Old Schema File
(same as in 1)
5
PBLD
Reloaded
Database Area
DBPXREF File
DBPPARMS File
New Schema File
(same as in 2)
6
Any Adjoining
Database Areas
PFIX

I-QU ReorgComposer Wizard

The **I-QU ReorgComposer Wizard** dialog contains controls to begin the automatic generation of the I-QU PLUS-1 database reorganization programs and runstream. The dialog also allows the review of date field conversions.

Generate

After selecting a record name from the **Records with Date Changes** list box, press this button to begin the process of generating I-QU PLUS-1 database reorganization programs and runstream. Any conversion code will automatically be included in the unload program.

Once the **Generate** button has been pressed, a series of verification dialogs will appear followed by dialogs prompting for the various files, parameters and information required to complete the generation process.

Note: Before pressing this button for the first time, use the **Configure** button (see below) to configure the various processors, utilities and parameters to be used during the reorganization.

Exit

Press this button to terminate the I-QU ReorgComposer Reorg Wizard.

Editor

Click this button to view, edit, transfer and/or print the generated code.

Configure

Press this button to configure all parameters (I-QU PLUS-1 processor names, DMU parameters, etc.) required to complete the code generation process.

Application Group

In this text box, enter the name of the UDS Application Group. This parameter overrides the **Application Group Name** parameter set on the **IRU Parameters** tab reached from the **Config** menu.

Records Available to Reorg

The records in this list box are available to the generation of the runstream and programs necessary to complete the reorganization. The list will contain all of the records that are undergoing format changes. If no fields were marked for format changes, this list will contain all the records found in the specified subschema (this is the means by which "vanilla" reorgs are generated — those requiring no changes to the data).

When the **Generate Reorg** button is pressed, the I-QU ReorgComposer Reorg Wizard can automatically include conversion code for any format changes into the resulting I-QU PLUS-1 unload program. A verification dialog will appear asking if the conversion code should be included for the affected records.

To generate the reorganization, select a record from this list with the mouse or keyboard and click the **Generate Reorg** button. Only one record may be selected.

Note: I-QU ReorgComposer generates the reorganization programs and runstream based on the selected record; however, all records that reside in the same area as the selected record may also be included in the unload and reload process.

Also note that some reorganizations may be done in-place and do not require an unload and reload. If record sizes do not increase, I-QU ReorgComposer will offer the option to do an in-place reorganization. When doing an in-place reorganization, only those records with fields marked for change will be modified.

When a record in this list is selected with the mouse or keyboard, the date fields with format changes (if any) will be shown in the **Fields Changed** list box.

Fields Changed

The fields in this list box are being converted in the selected record in the **Records Available to Reorg** list box.

To review the format changes being made to a field, select the field with a single click of the left mouse button.

File Menu

Generate

This selection has the same results as the Generate button described above.

Editor

This selection has the same results as the Editor button described above.

Configuration

This selection has the same results as the Configure button described above.

Exit

Select this command to terminate the I-QU ReorgComposer Reorg Wizard.

WinQ Trace Menu

Off/On

Select this command to toggle a WinQ trace to a window or file.

I-QU PLUS-1 Parameters

The **I-QU PLUS-1 Parameters** tab on the **I-QU ReorgComposer Configuration Parameters** dialog solicits information necessary to generate the correct I-QU PLUS-1 processor calls and INVOKE directive for the single-thread interface.

Note: The actual processor call names are dependent upon the COMUS mode used to install I-QU PLUS-1. The possible modes are "IQU" (the default) and "IQUA" through "IQUK". The table below shows the recommended processor calls for the default mode and a mode "A" install:

Processor	Default Call Name	Mode "A" Call Name
I-QU PLUS-1	@IQU,IA	@IQU**A**,IA
PBLD	@PBLD,L	@PBLD**A**,L
PFIX	@PFIX,L	@PFIX**A**,L
SCHUTL	@SCHUTL	@SCHUT**A**

For modes "B" through "K", substitute the appropriate letter for the letter "**A**", above.

I-QU PLUS-1 Processor Name

In this text box, enter the complete I-QU PLUS-1 processor call and the desired processor options (see Chapter 4, "I-QU PLUS-1 Processor Call Format," in the *I-QU PLUS-1 Programmer Reference*).

Pbld Processor Name

In this text box, enter the complete PBLD processor call and the desired processor options (see Section 5.1.1, "PBLD Processor Call and Options," in the *I-QU PLUS-1 Database Reorganization Utility Reference*).

Pfix Processor Name

In this text box, enter the complete PFIX processor call and the desired processor options (see Section 5.2.1, "PFIX Processor Call and Options," in the *I-QU PLUS-1 Database Reorganization Utility Reference*).

Schutl Processor Name

In this text box, enter the complete SCHUTL processor call and the desired processor options (see page 4-2 of the *I-QU PLUS-1 Database Reorganization Utility Reference*).

Single-Thread DMR Invoke Name

In this text box, enter the single-thread DMR name (normally, "ST") to be used on the INVOKE directive in the I-QU PLUS-1 reorganization programs. This name is dynamically configurable in COMUS and is normally required for I-QU ReorgComposer. If omitted, I-QU ReorgComposer will use the default DMR of I-QU PLUS-1 as configured in COMUS.

Note: The default DMR is normally a multi-thread DMR which is not suitable when doing a reorganization that requires and unload and reload.

Multi-Thread DMR Invoke Name

In this text box, enter the multi-thread DMR name to be used on the INVOKE directive in the I-QU PLUS-1 reorganization program when doing an "in-place" reorganization. This name is dynamically configurable in COMUS. If omitted, I-QU ReorgComposer will use the default DMR of I-QU PLUS-1 as configured in COMUS.

OK

Press this button to accept all changes and return to the previous dialog.

Cancel

Press this button to cancel any configuration changes and return to the previous dialog.

IRU Parameters

The **IRU Parameters** tab on the **I-QU ReorgComposer Configuration Parameters** dialog solicits information necessary to generate the correct code to down, up and backup the necessary areas with the IRU processor.

IRU Processor Name

In this text box, enter the complete IRU processor call and the desired processor options. The default is "@IRU,IX".

Application Group Name

In this text box, enter the name of the UDS Application Group. This parameter is required and defaults to the default application group supplied by Unisys, "UDSSRC".

IRU Backup Device Type

In this text box, enter the device type that will be used to receive the IRU backup.

Assume Commands for Dump Processing

This list box contains any IRU ASSUME commands required at your site (primarily used for data compression). The commands are entered by positioning the cursor in the **Assume Command to Add / Insert** text box (see below), typing the complete ASSUME command and clicking on the **Add / Insert** button.

Example:

```
ASSUME CONFIG CTL-POOL-NAME = 1;
ASSUME CONFIG DATA-COMP-5073 = CMPCOM;
ACT APPL UDSSRC;
```

For more information on the ASSUME command, see the *OS 2200 Integrated Recovery Utility Operations Guide*, Unisys Publication 7830 8194.

Add / Insert

Press this button after typing the IRU command in the **Assume Command to Add / Insert** text box.

To add a command to the bottom of the list, do ***not*** select an existing command in the list prior to clicking the **Add / Insert** button.

To insert a command within the list, select an existing command from the list prior to clicking the **Add / Insert** button. The new command will be inserted in front of (before) the selectred command.

Delete

Press this button to delete the selected IRU command in the **Assume Commands for Dump Processing** list box.

Assume Command to Add / Insert

Type the complete IRU command (including the simicolon) and press the **Add / Insert** button to add the command to the **Assume Command for Dump Processing** list box**.**

OK

Press this button to accept all changes and return to the previous dialog.

Cancel

Press this button to cancel any configuration changes and return to the previous dialog.

DMS Utilities

The **DMS Utilities** tab on the **I-QU ReorgComposer Configuration Parameters** dialog solicits information necessary to generate the correct code to verify an area with the single-thread DMU.

Single Thread DMU Processor Name

In this text box, enter the complete single-thread DMU processor call and the desired processor options. The call must include the fully qualified file name in order to avoid using the multi-thread DMU.

Note: A single-thread DMU is provided on the I-QU PLUS-1 release tape (see page 1-6 in the *I-QU PLUS-1 Installation Guide*).

DMU Subschema Name

In this text box, enter the name of the DMU subschema absolute element.

DRU Processor Name

In this text box, enter the complete DRU processor call. The call must include the fully qualified file name. Note: This processor is only required when reorganizing IPA sets.

Reorg Processor Name

In this text box, enter the complete REORG processor call. The call must include the fully qualified file name. Note: This processor is only required when reorganizing IPA sets.

OK

Press this button to accept all changes and return to the previous dialog.

Cancel

Press this button to cancel any configuration changes and return to the previous dialog.

I-QU ReorgComposer Parameters

The **I-QU ReorgComposer Parameters** tab on the **I-QU ReorgComposer Configuration Parameters** dialog solicits information necessary to communicate with the host component of I-QU ReorgComposer.

Enter Host I-QU ReorgComposer Installation File

In this text box, enter the name of the I-QU ReorgComposer installation file that resides on the host. Normally, this file name is SYSLIB*IQ2K32.

WinQ Message Time Out

In this text box, enter the amount of time the I-QU ReorgComposer PC program should wait, before timing out, for a message from the host. If communications speeds are slow at your site, you may need to increase this value.

WinQ File Transfer Time Out

In this text box, enter the amount of time the I-QU ReorgComposer PC program should wait, before timing out, for a file transfer to complete from the host. I-QU ReorgComposer does a file transfer from the host anytime you press the **OK** button on the **Host Sign-on** dialog or run the Reorg Wizard or Impact Analyzer. At that time, it is necessary for I-QU ReorgComposer to download (file transfer) information from the host. If the source of that information is very large (e.g., large schemas/subschemas), it may be necessary to increase this value to allow enough time for the transfer to complete.

OK

Press this button to accept all changes and return to the previous dialog.

Cancel

Press this button to cancel any configuration changes and return to the previous dialog.

Recovery and Verification Options

Down Area before Reorganization

Check this box to allow I-QU ReorgComposer to automatically generate code to remove the affected areas from production usage.

KMSYS Worldwide, Inc., highly recommends that you answer "Yes" to this option. Leaving affected areas UP to production during an I-QU PLUS-1 reorganization can yield unpredictable results!

Save Areas before Reorganization

Check this box to allow I-QU ReorgComposer to automatically generate code to backup the affected areas prior to the reorganization.

Save Areas after Reorganization

Check this box to allow I-QU ReorgComposer to automatically generate code to backup the affected areas after the reorganization.

Up Areas after Reorganization

Check this box to allow I-QU ReorgComposer to automatically generate the code to place the affected areas back into production.

Verify Areas and Sets Affected by Reorganization

Check this box to allow I-QU ReorgComposer to automatically generate the code to verify affected areas and sets at the end of the reorganization.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Apply Changes

From this dialog, check the box beside each record name where field format changes are to be applied.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Exec Schema File

The **Exec Schema File** dialog is used to supply the name of the EXEC file that contains the TIP schema absolute.

Host File Name

In this text box, enter the fully qualified file name of the EXEC file housing an off-line copy of the schema absolute. At most sites, this is the same file created at compile-time by the @DDL processor.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

In-place Reorg

Do you want to Perform an In-place Reorg?

When the selected record has format changes but its total length is the same, it is possible to perform an "in-place reorganization". In this instance, records are modified in place rather than being unloaded and reloaded. This dialog only appears if the record size remains unchanged.

Prev

Press this button to go back to the previous step in the wizard.

Yes

Press this button to direct I-QU ReorgComposer to generate the code necessary to perform an in-place reorganization of this record type only.

Note: If other records in the area have format changes and must be unloaded and reloaded due to new record lengths, you may wish to consider answering "No" to this question since this record will have to be unloaded and reloaded as a result of the record length changes to other records in the area.

No

Press this button to require I-QU ReorgComposer to generate complete unload and reload code for all records in the area.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

DMR Type

Do You Want to Perform Reorg in Single-Thread?

An in-place reorganization allows you to choose whether to perform the reorganization with I-QU PLUS-1's single-thread interface or the multi-thread facility under UDS Control.

Prev

Press this button to go back to the previous step in the wizard.

Yes

Press this button to direct I-QU ReorgComposer to generate the code that will use the single-thread DMR included in I-QU PLUS-1. If this option is chosen, the generated code will remove the area from production access during the reorganization.

No

Press this button to require I-QU ReorgComposer to generate the code to perform the in-place reorganization under UDS Control. With this method, the generated code will leave the area up during the reorganization, but will open the area exclusively to prevent access by other run-units.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

File Constants

The **File Constants** dialog is used to specify the host file **Qualifier** and **File Prefix** to be used when creating the files to be used during the course of the database reorganization.

Qualifier

In this text box, enter one (1) to twelve (12) alphanumeric characters to be used as the qualifier for the files, or select a previously entered qualifier from the drop-down list box. The drop-down list contains the nine (9) most recent qualifiers used.

File Prefix

In this text box, enter one (1) to five (5) alphanumeric characters to be used as the file name prefix of each file, or select a previously entered file prefix from the drop-down list box. The drop-down list contains the nine (9) most recent file prefixes used..

The additional seven (7) characters of the file name will be automatically supplied by the I-QU ReorgComposer Reorg Wizard.

Note: Files do not not have to be previously cataloged. All files will be created with a plus-one (+1) cycle.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Reorg Schema File Parameters

The **Reorg Schema File Parameters** dialog solicits information necessary to generate the correct code to create a schema file for an in-place reorganization utilizing I-QU PLUS-1's single-thread DMR interface.

Select Parameters for Unload Schema File

This group box contains the information used to catalog the file.

This file name is constructed with the **Qualifier** and **File Prefix** previously entered. The file name format is as follows:

*qqqqqqqqqqq***ppppp*$REORG

Where *qqqqqqqqqqq* is the **Qualifier** and *ppppp* is the **File Prefix**.

Note: This file should never be used by production programs.

Tip File Number

In this text box, enter the TIP file code reserved for the above host file. If the schema file specified in the I-QU ReorgComposer Date Search program is not a TIP file, this text box will not be visible.

Device Type

This text box and accompanying drop-down selection list may be used to specify the 2200 disk device type of the reorg schema file. The default, if not specified, is "F". If the device type desired is not shown in the drop-down selection list, it may be directly entered into the text box.

Pack Id

This text box may be used to specify the removable disk pack id. on which the reorg schema file is to be placed. If specified, the **Device Type** must also be specified. If omitted, fixed disk is assumed.

Change All Areas to Exec

Check this box to change all TIP areas in the schema absolute to EXEC files. This feature is useful when copying production areas in order to prototype and test a database reorganization during production hours.

Mass Storage Parameters

This group box contains the information used to specify the mass storage file size.

Granularity

This drop-down selection list box may be used to specify the granule size: TRK (the default) or POS.

Initial Allocation

This text box may be used to specify the initial reserve of the file.

Maximum Allocation

This text box may be used to specify the maximum reserve of the file.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Select Area to Reorg

The **Select Area to Reorg** dialog appears when I-QU ReorgComposer determines that a record may be stored in more than one area. If there are multiple Index Sequential areas, this same dialog will be used to select the associated index area.

From the list of areas where the record may be stored, select the area to be reorganized and press the **OK** button.

Note: Only one area may be reorganized at a time; therefore, to reorganize the record in other areas, you will need to repeatedly use the I-QU ReorgComposer Reorg Wizard to generate reorganization runs for each area.

OK

Press this button to accept the entered information and continue to the next step.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Create an Unload Schema

Do You Want to Create an Unload Schema?

In some cases, it might be advantageous to create a special schema for the unload program. Create an unload schema when you:

1. Want to reorganize off-line copies of areas.
2. Have time-limited access (24-hour shops) to production schema file.
3. Want to reorganize TIP areas as EXEC areas.

The I-QU PLUS-1 Schema Utility (SCHUTL) will be used to alter a copy of the production schema to create the unload schema. The I-QU ReorgComposer Reorg Wizard automatically generates the SCHUTL code to produce this special schema.

Prev

Press this button to go back to the previous step in the wizard.

Yes

Press this button to confirm the generation of the code to create a schema file to be used by the unload program.

Note: If this button is pressed, a ***copy*** will be made of the schema file specified for the **I-QU ReorgComposer Date Search** program.

No

Press this button to skip the creation of an unload schema file.

Note: If this button is pressed, the same file specified for the **I-QU ReorgComposer Date Search** program will be used for the unload.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Unload Schema File Parameters

The **Unload Schema File Parameters** dialog solicits information necessary to generate the correct code to create an unload schema file.

Select Parameters for Unload Schema File

This group box contains the information used to catalog the file.

This file name is constructed with the **Qualifier** and **File Prefix** previously entered. The file name format is as follows:

*qqqqqqqqqqq*ppppp*$ULDSCH

Where *qqqqqqqqqqq* is the **Qualifier** and *ppppp* is the **File Prefix**.

Note: This file should never be used by production programs.

Tip File Number

In this text box, enter the TIP file code reserved for the above host file. If the schema file specified in the I-QU ReorgComposer Date Search program is not a TIP file, this text box will not be visible.

Device Type

This text box and accompanying drop-down selection list may be used to specify the 2200 disk device type of the unload schema file. The default, if not specified, is "F". If the device type desired is not shown in the drop-down selection list, it may be directly entered into the text box.

Pack Id

This text box may be used to specify the removable disk pack id. on which the unload schema file is to be placed. If specified, the **Device Type** must also be specified. If omitted, fixed disk is assumed.

Change All Areas to Exec

Check this box to change all TIP areas in the schema absolute to EXEC files. This feature is useful when copying production areas in order to prototype and test a database reorganization during production hours.

Mass Storage Parameters

This group box contains the information used to specify the mass storage file size.

Granularity

This drop-down selection list box may be used to specify the granule size: TRK (the default) or POS.

Initial Allocation

This text box may be used to specify the initial reserve of the file.

Maximum Allocation

This text box may be used to specify the maximum reserve of the file.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Select Qualifier for Exec Area

The **Select Qualifier for Exec Area** dialog provides the controls to generate code to reorganize areas as EXEC areas.

This dialog only appears if the area is an EXEC area or if the area is TIP and the **Change All Areas to Exec** check box was set on the **Unload Schema File Parameters Dialog**. Also, this dialog will appear once for each area affected by the reorganization unless the **Use Qualifier for All Areas** check box is set (see below).

Enter Exec Qualifier

In this text box enter the EXEC qualifier of the database areas.

Note: If the affected areas are not located under the production qualifier, it will be necessary to add code to copy the areas before and after the reorganization. Normally, copying the areas is not necessary since I-QU ReorgComposer can automatically generate the necessary IRU code to back up the areas before and after the reorganization.

Use Qualifier for All Areas

Check this box to use the qualifier for all areas affected by the reorganization.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

File That Contains New Schema

The **File That Contains New Schema** dialog solicits the location of the "new" schema.

Specify Exec File That Contains New Schema/Subschemas

The new schema/subschemas must reflect the changes specified in the I-QU ReorgComposer Date Search program.

Host File Name

In this text box, supply the fully qualified name of the file containing the absolutes for the new schema and subschemas.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Calsim Parameters

The **Calsim Parameters** dialog provides the means to instruct I-QU PLUS-1 to simulate the use of the CALC algorithm during unload, under reload conditions. The CALC simulator returns the new location (new-CALC-page-number) of each record allowing the unload program to sort the records in new-CALC-page-number sequence. The reload program will subsequently reload the area in new-CALC-page-number sequence, thus improving load performance.

The code generated will be placed in the unload program. Since the unload program invokes the "old" schema, information about the area in the "new" schema is only available through this dialog.

Calc Algorithm

From this list box, select the CALC algorithm used by this record type. The default is DMSCALC.

Note: The record name is shown in the dialog's caption (the window's title bar).

The five algorithms supported correspond to those available on the I-QU PLUS-1 DEFINE C directive (see Section 12.3, "DMS 1100 CALC Routine Definition," in the *I-QU PLUS-1 Programmer Reference*).

Record Mode

In this group, select the option button that matches the data type of the record's CALC keys: **ASCII** (the default) or **Fieldata**.

Load Sequence

In this group, select the load sequence preferred for this record: **Ascending** or **Descending** (the default). Selecting **Ascending** will cause the records to be sorted in ascending new-CALC-page-number sequence; **Descending**, in descending new-CALC-page-number sequence.

Reload Area Parameters

This group contains parameters that will be used on the I-QU PLUS-1 DEFINE C directive profiling the area as it will appear during the reload.

Number of Pages

In this text box, enter the total number of pages allocated to the area.

Number of Calc Chains

In this text box, enter the number of CALC chains to be used.

Upper Range Boundary

In this text box, enter the upper page number of the page range boundary in which the record may be stored.

Lower Range Boundary

In this text box, enter the lower page number of the page range boundary in which the record may be stored.

Interspersed O/F Page Interval

In this text box, enter the interval at which interspersed overflow pages are allocated.

Number of O/F Pages at Interval

In this text box, enter the number of overflow pages in each interval.

Number of O/F Pages at End

In this text box, enter the number of overflow pages allocated at the end of the area.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Host Unload/Reload File Parameters

The **Host Unload/Reload File Parameters** dialog solicits information necessary to generate the correct code to create an unload/reload file. This unload/reload file will contain all the records from the area being reorganized, each record's old location (DBP) and each record's non-primary set pointers (for records defined as a members of automatic sets).

Select Parameters for Host Unload/Reload File

This group box contains the information used to catalog the file.

This file name is constructed with the **Qualifier** and **File Prefix** previously entered. The file name format is as follows:

*qqqqqqqqqqqq***ppppp*$UNLOAD

Where *qqqqqqqqqqqq* is the **Qualifier** and *ppppp* is the **File Prefix**.

Device Type

This text box and accompanying drop-down selection list may be used to specify the 2200 disk device type of the unload/reload file. The default, if not specified, is "F". If the device type desired is not shown in the drop-down selection list, it may be directly entered into the text box.

Block Size

In this text box, enter the blocking factor. The blocking factor may be specified as a physical block size of characters (default is 7168 characters – 1 track) or as a number of records per block.

Block Size Increments

In this group, select one of two blocking options: **Records** per block or **Characters** per block (the default).

Mass Storage Parameters

This group box contains the information used to specify the mass storage file size.

Granularity

This drop-down selection list box may be used to specify the granule size: TRK (the default) or POS.

Pack Id

This text box may be used to specify the removable disk pack id. on which the unload/reload file is to be placed. If specified, the **Device Type** must also be specified as a mass storage device. If omitted, fixed disk is assumed.

Initial Allocation

This text box may be used to specify the initial reserve of the file.

Maximum Allocation

This text box may be used to specify the maximum reserve of the file.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Sort Work File Parameters

The **Sort Work File Parameters** dialog solicits information that will be used to generate the temporary sort work file used to sort the output of the I-QU PLUS-1 unload program.

Select Parameters for Sort Work Files

The defaults shown are the same as those generated by I-QU PLUS-1: Three work files (XA, XB and XC) with a maximum of 5,000 tracks each. All other parameters are optional.

Number of Work Files

This text box contains the number of sort work files to be used by the I-QU PLUS-1 unload program.

Device Type

This text box and accompanying drop-down selection list may be used to specify the 2200 disk device type of the sort work files. The default, if not specified, is "F". If the device type desired is not shown in the drop-down selection list, it may be directly entered into the text box.

Note: If you wish to spread the sort work files over multiple devices, you may alter the programs and runstream upon completion of the generation process.

Pack Id

This text box may be used to specify the removable disk pack id. on which the sort work files are to be placed. If specified, the **Device Type** must also be specified. If omitted, fixed disk is assumed.

Granularity

This drop-down selection list box may be used to specify the granule size: TRK (the default) or POS.

Initial Allocation

This text box may be used to specify the initial reserve for each of the sort work files.

Maximum Allocation

This text box may be used to specify the maximum reserve for each of the sort work files.

Sort Memory Parameter

This parameter determines the amount a memory reserved for sorting. I-QU ReorgComposer always generates an external sort, which allows the use of extended mode sorting.

Core (in thousands of words)

This numeric text box may be used to specify the amount memory to be assigned for sorting. To force and extended mode sort, this value must be greater than 210K (see

Table 2-2 in the OS1100 Sort/Merge Programming Guide, Unisys Publication 7831 0687-000).

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Reload Schema File Parameters

The **Reload Schema File Parameters** dialog solicits information necessary to generate the correct code to create a reload schema file.

Select Parameters for Reload Schema File

This group box contains the information used to catalog the file.

This file name is constructed with the **Qualifier** and **File Prefix** previously entered. The file name format is as follows:

*qqqqqqqqqqqq***ppppp*$RLDSCH

Where *qqqqqqqqqqqq* is the **Qualifier** and *ppppp* is the **File Prefix**.

Note: This file should never be used by production programs.

TIP File Number

In this text box, enter the TIP file code reserved for the above host file. If the schema file specified in the I-QU ReorgComposer Date Search program is not a TIP file, this text box will not be visible.

Device Type

This text box and accompanying drop-down selection list may be used to specify the 2200 disk device type of the reload schema file. The default, if not specified, is "F". If the device type desired is not shown in the drop-down selection list, it may be directly entered into the text box.

Pack Id

This text box may be used to specify the removable disk pack id. on which the reload schema file is to be placed. If specified, the **Device Type** must also be specified. If omitted, fixed disk is assumed.

Change All Areas to Exec

Check this box to change all TIP areas in the schema absolute to EXEC files. This feature is useful when copying production areas in order to prototype and test a database reorganization during production hours.

Mass Storage Parameters

This group box contains the information used to specify the mass storage file size.

Granularity

This drop-down selection list box may be used to specify the granule size: TRK (the default) or POS.

Initial Allocation

This text box may be used to specify the initial reserve of the file.

Maximum Allocation

This text box may be used to specify the maximum reserve of the file.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Database Pointer Cross-Reference File Parameters

The **Database Pointer Cross-Reference File Parameters** dialog solicits information necessary to generate the correct code to create a cross-reference file of database pointers (old record location to new record location). This file will be used by the PBLD/PFIX utilities to correct the old set pointers placed back into the reloaded records by the reload program.

Select Parameters for Database Pointer Cross-Reference File

This group box contains the information used to catalog the file.

This file name is constructed with the **Qualifier** and **File Prefix** previously entered. The file name format is as follows:

*qqqqqqqqqqqq***ppppp*$DBPFIL

Where *qqqqqqqqqqqq* is the **Qualifier** and *ppppp* is the **File Prefix**.

Device Type

This text box and accompanying drop-down selection list may be used to specify the 2200 disk device type of the database pointer cross-reference file. The default, if not specified, is "F". If the device type desired is not shown in the drop-down selection list, it may be directly entered into the text box.

Pack Id

This text box may be used to specify the removable disk pack id. on which the database pointer cross-reference file is to be placed. If specified, the **Device Type** must also be specified. If omitted, fixed disk is assumed.

Mass Storage Parameters

This group box contains the information used to specify the mass storage file size.

Granularity

This drop-down selection list box may be used to specify the granule size: TRK (the default) or POS.

Initial Allocation

This text box may be used to specify the initial reserve of the file.

Maximum Allocation

This text box may be used to specify the maximum reserve of the file.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Calc and ISAM Record Reload Strategy

The **Calc and ISAM Record Reload Strategy** dialog allows you to specify how member record are to be stored in relation to their LOCATION MODE CALC or LOCATION MODE INDEX SEQUENTIAL owners.

Select Calc and ISAM Record Reload Strategy

From this group choose one of two options.

Store Members Directly after Owner Records

Choose this option to cluster members physically close to the owner. This option is the best choice when all the members of an owner need to be accessed with the fewest number of I/Os.

Store All Owner Records before Storing Members

Choose this option to give the entire area over to the owners. This option prevents owner records from being displaced by VIA SET members and is the best choice when entry point records (CALC and INDEX SEQUENTIAL) need to be accessed with the fewest number of I/Os.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Direct Record Reload Strategy

The **Direct Record Reload Strategy** dialog allows you to specify how records with a Location Mode of Direct are to be returned to the area.

Select Reload Strategy for All Direct Records in Area

From this group choose one of two options. In either case, all Direct records will be reloaded before records of any other location mode.

Store Direct Records Where They Were Found

Choose this option to reload the LOCATION MODE DIRECT records to the same location (page and record number) where they were found during the unload.

Store Direct Records Sequentially

Choose this option to reload the LOCATION MODE DIRECT records sequentially from the beginning of the area.

Number of Records per Page

In this text box, enter the number of LOCATION MODE DIRECT records that I-QU PLUS-1 is to load on a page. This text box is only visible when the **Store Direct Records Sequentially** option is chosen.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Enter Direct Dummy Owner Record Values

The **Enter Direct Dummy Owner Record Values** dialog is used to provide a record key for storing a single "dummy' owner record occurrence. I-QU ReorgComposer has detected a DMS structure where a Via Set record type has the owner of its primary set located outside the area being reorganized. I-QU ReorgComposer needs to generate code to store a dummy owner to which all members will be linked as they are reloaded. In addition, member records will have their old set pointers returned after they are stored for subsequent fixing by the PFIX utility. At the end of the reload, the dummy owner will be deleted.

From the schema, I-QU ReorgComposer has determined that the Location Mode of the dummy owner is Direct. I-QU ReorgComposer can determine the required Area Name from the schema, but needs a Page Number and Record Number on which to store the record. Suggestion: Use I-QU PLUS-1 in conversational mode to browse the owner's area and determine a vacant address. The DMU or DBE may also be used.

Enter Page Number

In this text box, enter the page number where a vacant address exists.

Enter Record Number

In this text box, enter the record number of the vacant address.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Enter Dummy Owner Record Key Value

The **Enter Dummy Owner Record Key Value** dialog is used to provide a record key for storing a single "dummy' owner record occurrence. I-QU ReorgComposer has detected a DMS structure where a Via Set record type has the owner of its primary set located outside the area being reorganized. I-QU ReorgComposer needs to generate code to store a dummy owner to which all members will be linked as they are reloaded. In addition, member records will have their old set pointers returned after they are stored for subsequent fixing by the PFIX utility. At the end of the reload, the dummy owner will be deleted.

From the schema, I-QU ReorgComposer has determined that the Location Mode of the dummy owner is CALC or Index Sequential. I-QU ReorgComposer can determine the required Area Name from the schema, but needs key value(s) in order to store the dummy owner. I-QU ReorgComposer will present this dialog once for each data field that comprises the key. The fields are presented in the order that they are coded in the schema. Suggestion: Use I-QU PLUS-1 in conversational mode to browse for a nonexistent owner (e.g., look for a CALC record with a CALC key containing all zeros or retrieve an Index Sequential record with the lowest key value).

Enter Key Value to Store Dummy Owner Record

In this text box, enter the value of the key field. The length and data type of the field is shown above the text box.

Prev

Press this button to go back to the previous step in the wizard.

Next

Click this button to proceed to the next step in the wizard.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

Generated Reorganization

The **Generated Reorganization** dialog appears once the generated I-QU PLUS-1 database reorganization program and runstream have been completed.

The dialog is actually an editor where the generated code may be tailored to apply any site-specific formatting requirements using I-QU PLUS-1 commands and directives (see the *I-QU PLUS-1 Programmer Reference*). The generated/tailored code may be saved on the PC, printed to a printer attached to the PC or network, and/or uploaded to the host and stored for subsequent execution.

To see a diagram of the completed runstream, see Reorganization Runstream Flow.

File Menu

Open

Select this command to open a previously saved generated reorg file (.IQU).

Save

Select this command to save to the current generated reorg file.

Save As

Select this command to save to an alternate generated reorg file.

Upload

Select this command to transfer the generated code to a host file. A dialog will appear prompting for the name of a new or existing host file.

Print

Select this command to print the generated reorg. The standard Windows **Print** dialog will appear.

Change Font

Select this command to change the font, font style, point size, etc. This change will affect both the display font and the font used for printing.

Exit

Select this command to return to the **I-QU ReorgComposer Result of Date Search** dialog.

Edit Menu

Cut

Select this command to move the selected code to the Windows Clipboard.

Copy

Select this command to copy the selected code to the Windows Clipboard.

Paste

Select this command to paste the contents of the Windows Clipboard to the current cursor location.

Select All

Use this command to select all the code in the dialog work area.

Transfer Generated Code to Host

The **Save Generated Code to Host** dialog is used to specify the host file that will receive the generated code when doing an Upload.

Enter Host File Name

In this text box, enter the fully qualified file name of a host data file or program file, including an element name, to receive the uploaded generated code.

The file does not have to be previously cataloged. If the file does not exist, a new file will be cataloged.

Warning: Care should be taken ***not*** to upload to a program file without specifying an element name. The result would be to write to the program file as if it were a data file — all elements would be lost.

OK

Press this button to accept the entered information and continue to the next step.

Cancel

Press this button to cancel I-QU ReorgComposer Reorg Wizard processing. Control will return to the **I-QU ReorgComposer Reorg Wizard** dialog.

The I-QU ReorgComposer Impact Analyzer

I-QU ReorgComposer - Impact Analyzer

The **I-QU ReorgComposer - Impact Analyzer** dialog contains controls to begin the automatic analysis of DMS 2200 subschema files, COBOL source libraries and COBOL COPY PROC libraries. The analysis will produce a report of required actions to be taken as a result of changes made by the I-QU ReorgComposer process.

Files to Search

This group identifies the three source libraries that may be analyzed.

Subschema File

In this text box, enter the program file containing the subschema source.

Program Source File

In this text box, enter the program file containing the COBOL source programs.

Proc Source File

In this text box, enter the program file containing any COBOL COPY PROC source.

OK

Press this button to accept the entered information and continue to the next step.

Exit

Press this button to terminate the I-QU ReorgComposer session.

File Menu

Open

Select this command to initiate the standard **Open** dialog and open any previously created reorganization file (.QIT).

Exit

Select this command to terminate the I-QU ReorgComposer session.

WinQ Trace Menu

Off/On

Select this command to toggle a WinQ trace to a window or file.

I-QU ReorgComposer Impact Field Change Summary

The **I-QU ReorgComposer Impact Field Change Summary** dialog contains a list of records and fields being changed during the reorganization.

Changed Records

The records in this list have changes specified in the **I-QU ReorgComposer Date Search** program.

Changed Fields in Selected Record

The fields in this list have changes specified in the **I-QU ReorgComposer Date Search** program. To view the changes in a particular record, first select the record in the **Changed Records** list.

Delete

After selecting a field in the **Changed Fields in Selected Record** list, press this button to delete the field.

Note: The **Delete** function only removes the field from consideration in the **Change Impact Report** that is the result of this program. To eliminate the field from the generated code, delete the field in the **I-QU ReorgComposer Date Search** program and rerun the **I-QU ReorgComposer Reorg Wizard** program.

OK

Press this button to accept the entered information and continue to the next step.

Close

Press this button to cancel I-QU ReorgComposer Impact Analyzer processing. Control will return to the I-QU ReorgComposer Impact Analyzer dialog.

Change Impact Report

The **Change Impact Report** dialog appears once the host source libraries have been analyzed.

The dialog is actually an editor where the impact report may be viewed, altered, saved on the PC, printed to a printer attached to the PC or network and/or uploaded to the host.

File Menu

Open

Select this command to open a previously saved impact report file (.IQU).

Save

Select this command to save to the current impact report file.

Save As

Select this command to save to an alternate impact report file.

Upload

Select this command to transfer the impact report to a host file. A dialog will appear prompting for the name of a new or existing host file.

Print

Select this command to print the impact report. The standard Windows Print dialog will appear.

Change Font

Select this command to change the font, font style, point size, etc. This change will affect both the display font and the font used for printing.

Exit

Select this command to return to the **I-QU ReorgComposer Impact Field Change Summary** dialog.

Edit Menu

Cut

Select this command to move the selected code to the Windows Clipboard.

Copy

Select this command to copy the selected code to the Windows Clipboard.

Paste

Select this command to paste the contents of the Windows Clipboard to the current cursor location.

Select All

Use this command to select all the code in the dialog work area.

I-QU ReorgComposer Date Aging

Date Replacement Values

The **Date Replacement Values** dialog contains controls that allow the entry of search and replacement values that may be applied to all or selected dates. The values entered on this dialog are optional. To use values entered on this dialog, check the **Use Replacement List** box on the Date Aging Parameters dialog.

Date Replacement Entries

This list box contains the list of old and new values that have been entered by you.

Date to be Replaced

Enter in this text box, enter the date that is to be replaced. Note: A dates entered in this box must always be specified in "yyyy/mm/dd" format regardless of how the date to be matched is formatted in the record.

Use the calendar button to the right of this text box to select a date by year, month, week and day of the week.

Replacement Value

In this text box, enter the date to be used as the replacement value. Note: A dates entered in this box must always be specified in "yyyy/mm/dd" format regardless of how the date to be replaced is formatted in the record. The resulting format will always be the same as specified in the record.

Use the calendar button to the right of this text box to select a date by year, month, week and day of the week.

Add

After entering the **Date to be Replaced** and the **Replacement Value**, press this button to add the values to the **Date Replacement Entries** list box.

Delete

Select an entry from the **Delete Replacement Entries** list box and click this button to delete the entry.

Replace

Select an entry from the **Delete Replacement Entries** list box and after entering dates in the **Date to be Replaced** and the **Replacement Value** text boxes, press this button to replace the selected entry.

Prev

Click this button to return to the previous dialog in the date aging process.

Next

Press this button to accept the selections entered, close the dialog and continue the generation process.

Cancel

Click this button to cancel the generation process and return to the **I-QU ReorgComposer Result of Date Search** dialog.

Date Aging Parameters

The **Date Aging Parameters** dialog contains controls that allow the selection of the date aging parameters.

Date Aging Calculation Information Area

This read-only portion of the dialog is used to display the affected **Record Name**, the **Field Name**, the **Base Date** and **Aged Date** or **Date Offset**. The displayed information will be updated after changing the controls below and pressing the **Calculate** button.

Date Aging Method

Choose from one of five date aging methods.

Go Back in Time

Choose this option to calculate a date based on an offset entered in the **Enter Date Offset (in Days)** text box. The offset will be used to decrement a date marked for aging.

Go Forward in Time

Choose this option to calculate a date based on an offset entered in the **Enter Date Offset (in Days)** text box. The offset will be used to increment a date marked for aging.

Specify Year

Choose this option to set the year portion of a date to a fixed year entered in the **Enter Year Value (yyyy)** text box. Note: This value must be entered as a four-digit year even if the receiving date has less than four characters for the year. The year will replace the year portion of a date marked for aging.

Find Offset from Date

Chose this option to calculate an offset based on the difference between the value entered in the **Base Date (yyyy/mm/dd)** text box and that entered in the **Enter Aged Date (yyyy/mm/dd)** text box. The calculated offset will be used to increment/decrement a date marked for aging.

Set to Exact Date

Chose this option to set the date to the exact value entered in the **Enter Aged Date (yyyy/mm/dd)** text box.

Date Offset Increment

Choose from one of two types of increments. These options are only enabled for the **Go Back in Time** and **Go Forward in Time** options.

Days

Choose this option if the increment to be used is in number of days.

Years

Choose this option if the increment to be used id in number of years.

Use Date Parameter for All Fields

Check this box to have I-QU PLUS-1 perform date aging on all dates identified for date aging.

Use Replacement List

Check this box to have I-QU PLUS-1 use the previously entered date replacement list (see Date Replacement Values) instead of a value entered/calculated on this dialog.

Calculate

Click this button to calculate the **Date Offset** or **Aged Date** based on the parameters entered above.

Prev

Click this button to return to the previous dialog in the date aging process.

Next

Press this button to accept the selections entered, close the dialog and continue the generation process.

Cancel

Click this button to cancel the generation process and return to the **I-QU ReorgComposer Result of Date Search** dialog.

Formats and Types

Date Descriptors

The date format may be specified by using one of the supplied formats from the drop-down list, or by using any combination of date descriptors (shown below). Examples:

D2.M2.Y4
Y4-M2-D2

The valid date descriptors are:

Date Descriptors	Explanation
D2	Day of the Month: Values will be in the range of 01-31.
D3	Day of the Year: Values will be in the range of 001-366; however, 366 only appears for a leap year.
M2	Month of the Year: Values will be in the range of 01-12.
M3	Month of the Year Abbreviation: This format will always be 3 alphabetic characters (e.g., JAN, FEB, etc.).
M9	Alphabetic Month of the Year: The longest month name is 9 characters. Shorter month names will be space filled to the right.
Yn	Year: n is the number of positions (1-4) required to represent the year. Values will be in the range of 0001-2100. If n is less than 4, the high order positions of the year are truncated (e.g., if Y2 is specified, 1994 would be formatted as 94).
W1	Day of the Week: Values will be in the range of 1-7 where 1 is Sunday, 2 is Monday, etc.
W3	Day of the Week Abbreviation: This format will always be 3 alphabetic characters (e.g., SUN, MON, etc.).
W9	Alphabetic Day of the Week: The longest weekday name is 9 characters. Shorter names will be space filled to the right.
/	Slash: Allows a slash in the old field, or inserts a slash in the new field.
-	Dash: Allows a dash in the old field, or inserts a dash in the new field.
.	Period: Allows a period in the old field, or inserts a period in the new field. The period is used in European date formats which are normally formatted as D2.M2.Y2 (e.g., 31.01.94).
,	Comma: Allows a comma in the old field, or inserts a comma in the new field.
B	Blank: Allows a blank in the old field, or inserts a blank in the new field. An actual blank or space character can also be used as the descriptor (e.g., M9D2,Y4 will produce the same result as M9BD2,BY4).

The only allowable insertion characters are the slash (/), dash (-), period (.), comma (,) and blank (B). All others will cause an error.

Predefined Old Date Formats

The following date formats may be selected from the list:

Format	Example
M2/D2/Y2	02/29/96
M2D2Y2	022996
Y1M2D2	60229
Y2M2D2	960229

D2/M2/Y2	29/02/96
D2 M3 Y2	29 FEB 96
D2M2Y2	290296
M9 D2 Y2	FEBRUARY 29 96
Y1D3	6060
Y2D3	06060
D2M2Y4	29021996
M2D2Y4	02291996
M9 D2,Y4	FEBRUARY 29,1994
Y4M2D2	19990229
Y4D3	1996060
NONE	No data format – select for non-date fields.

Predefined New Date Formats

The following date formats may be selected from the list:

Format	Allowable Data Types	Example
M2/D2/Y4	A only	02/29/1996
M2D2Y4	N or A	02291996
D2/M2/Y4	A only	29/02/1996
Y4M2D2	N or A	19960229
D2 M3 Y4	A only	29 FEB 1996
D2M2Y4	N or A	29021996
M9 D2 Y4	A only	FEBRUARY 29 1996
Y4D3	N or A	1996060
D2M2Y2	N or A	290296
M2D2Y2	N or A	022996
M9 D2,Y2	A only	FEBRUARY 29,96
Y2M2D2	N or A	960229
Y4D3	N or A	1996060
NONE	N or A	No date format – select for non-date fields.

Valid Data Types

The following are valid data types:

Data Type	Description
A9 or DISP	ASCII alphanumeric display.
SN9	Signed ASCII numeric display.
UN9	Unsigned ASCII numeric display.
SB9 or COMP	Signed ASCII aligned binary.
UB9	Unsigned ASCII aligned binary.
A6 or DISP-1	Fieldata alphanumeric display.
SN6	Signed fieldata numeric display.
UN6	Unsigned fieldata numeric display.
SB6 or COMP-4	Signed fieldata aligned binary.

UB6	Unsigned fieldata aligned binary.
FP1 or COMP-1	Single-precision floating point.
FP2 or COMP-2	Double-precision floating point.

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