ACR/Summary® and ACR/Detail®

Installation Guide for z/OS® | Release 4.5

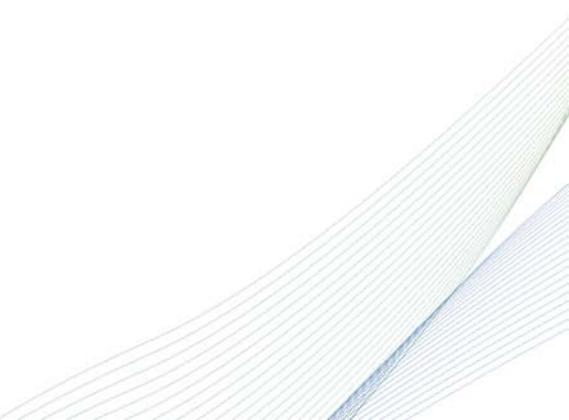# Contents

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Introduction

This chapter introduces you to the ACR/Summary and ACR/Detail installation processes in the z/OS environment. It provides the purpose and audience of the guide and briefly describes each chapter. The sections include:

- "About the Installation Guide" on page 5
- "System Requirements" on page 6
- "What You Should Know Before Starting" on page 7
- "History Database: Managing Shared DASD" on page 8
- "Overview of Installation Steps" on page 9
- "Contacting Customer Support" on page 10

About the Installation Guide

This guide allows the user to install and test the ACR/Summary and ACR/Detail products.

Audience

This guide is written for the personnel at your site who will perform the installation. A knowledge of system installation and JCL procedures is required.

Organization of Information

Chapter 1, "Introduction" includes an overview of the guide, a description of the chapters, system requirements, what you should know before starting, and contact information for Customer Support.

Chapter 2, "Creating the Installation Datasets" is the installation chapter that includes all the steps necessary to unload the CD, as well as how to prepare the system for operation by creating the necessary datasets.

Chapter 3, "Updating Your License" describes how to create and update the control file used to license Infogix software.

Chapter 4, "Establishing the Online Environment" discusses the tasks necessary to establish your ISPF user interface.

Chapter 5, "Testing the Installation" provides the procedures necessary to test the installation.

Chapter 6, "Preparing the DB2 Environment" discusses how to set up the DB2 environment in order to access a DB2 database.

Chapter 7, "Installing an Upgrade" provides instructions required for any upgrade.

Chapter 8, "Upgrading from a Pre-Release 4.0 Release" provides additional special instructions for upgrading to this release.

System Requirements

The table below describes the minimum system requirements for a z/OS installation of ACR/Summary or ACR/Detail. Newer versions may also be supported. Contact Customer Support for additional information. See "Contacting Customer Support" on page 10.

Category	Requirement
Operating System	IBM z/OS 1.12 or higher
ISPF Profile	ISPF profiles are not compatible with releases of ACR/Summary and ACR/Detail older than 3.0.
TSO Region Size	*6144 (7168 suggested) plus space required by LE runtime libraries.
COBOL	Enterprise COBOL 3.3 or compatible COBOL is required if you wish to compile user exits.

*Additional region size will be needed to process large files in the extract window, particularly for delimited data in ACR/Summary access modes 1-4.

What You Should Know Before Starting

- Before installing the ACR/Summary or ACR/Detail software, call Customer Support at (630) 505-1890. Verify that the software you are about to install is the most current version of the products.

- Log on to our password-protected Web site to download any applicable patches for this product:

  http://support.infogix.com/

  If you do not have Internet access, contact Customer Support for assistance, as described on .

- If you are using spool monitor in ACR/Summary, make sure your loadlib is APF authorized. If you do not use spool monitor, you will not need APF authorization.

- If you are installing any upgrade instead of an initial installation, see Chapter 7, "Installing an Upgrade."

- If you are upgrading from a release previous to Release 4.0, additional special instructions for upgrading are provided in Chapter 8, "Upgrading from a Pre-Release 4.0 Release."

Global LE Options Table

JCL Update Required if RTEREUS is Set to ON

This step is only required for the very limited number of sites that set Global Option RTEREUS (Force Rent Reuse) to ON in the global LE options table.

Warning:	The IBM-recommended setting for RTEREUS is OFF. However, if your site requirements make it necessary to set global option RTEREUS to ON, you must perform the following procedure to avoid a 4038 abend. For more information, see IBM APAR PQ27319.

Update the sample JCL provided in your site's PROCLIB dataset member LECEEOPT, following the instructions provided in the JCL. Then, submit the job.

Note:	If you are not sure which CEEUOPT module library should be used by this job, consult the system programmer in charge of LE. A suitable default CEEUOPT for most sites is supplied in the Infogix LOADLIB (batch) dataset.

The LECEEOPT JCL stream updates load member UNI0000C to allow it to override your global RTEREUS option. The JCL links in an override CEEUOPT module with RTEREUS set to OFF.

History Database: Managing Shared DASD

If your site uses shared DASD, you need the following information:

ACR/Summary

The ACR/Summary history database allows concurrent updates. Share options are (3,3) on RRDS datasets, which allows multiple readers and multiple writers. Beginning with Release 3.5, the product by default uses Option 1 below.

ACR/Summary sites with shared DASD can choose between the following methods to avoid contention. The option you choose must match across all systems.

Option 1 (Default): Software SYSTEMS Enqueue

Use an enqueue manager such as GRS to cycle the QNAME 'ACRHIST' and RNAME (your ACR history dataset name) across all systems. The enqueue manager must be active across all systems.

Option 2: Hardware Reserve

Set the RESERVE option in SRCELIB(UNICNTL) to lock the volume for the history database when one system is accessing it. To do this, edit member UNICNTL and change the value of the WS-CNTL-RESERVE field from N to Y. Then recompile the member into the LOADLIB.

ACR/Detail

In contrast to ACR/Summary, the ACR/Detail history database does not allow concurrent updates. On ACR/Detail, KSDS share options are (1,3), which allows only 1 reader or 1 writer.

Therefore, the RESERVE option is not needed in ACR/Detail.

To avoid contention and possible data corruption when multiple systems attempt to access the history database, ACR/Detail sites must use an enqueue manager as described under ACR/Summary "Option 1 (Default): Software SYSTEMS Enqueue" above.

Overview of Installation Steps

The steps for installing ACR/Summary or ACR/Detail are outlined in this installation guide. Here is a summary of the steps you will follow:

1. Review the system requirements and information, beginning on page 6.

2. Unload the installation CD or contact Customer Support to arrange a secure FTP download of the software. CD installation requires a binary transfer of the MASTER.XMI file from the PC to your mainframe.

3. Verify that you have installed the latest version of the software by logging on to the Infogix Web site or by contacting Customer Support. Contact information is on page 10.

4. Review the descriptions and naming conventions of the datasets installed for the user interface, batch processing, and installation/ testing, as specified, beginning on page 12.

5. Create and update the control file that will activate your product licensing.

6. Establish your ISPF user interface (online environment).

7. Modify JCL skeletons so the user interface can automatically generate all the JCL required by the products and perform online balancing and/or reconciliation.

8. Test the online environment.

9. Add an ISPF menu, if desired.

10. Perform installation tests.

11. If applicable, do the following:

    ■ DB2 Users. Prepare the DB2 environment so ACR/Summary and/ or ACR/Detail can access the database by using the DB2 plan(s) you will create.

    ■ ACR/Workbench. If you purchased ACR/Workbench for Summary or ACR/Workbench for Detail, install it on user PCs. For instructions, see the *ACR/Summary and ACR/Detail Installation Guide for Windows.*

12. If you are installing any upgrade, see Chapter 7, "Installing an Upgrade."

13. If you are upgrading from a release previous to Release 4.0, additional special instructions for upgrading are provided in Chapter 8, "Upgrading from a Pre-Release 4.0 Release."

Contacting Customer Support

If you need assistance, contact Infogix Customer Support.

Support Phone: +1.630.505.1890

Support Email: support@infogix.com

Support Website: http://support.infogix.com

Fax Number: +1.630.505.1883

Visit our Website: www.infogix.com

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Creating the Installation Datasets

This chapter describes how to unpack the CD for ACR/Detail and ACR/Summary. Most steps are applicable to both products; however, any steps specific to one product will be indicated in this guide. If you are installing an upgrade, go to for additional information.

This chapter contains the following sections:

-
-

Installation Procedures for CD or Download

Media Format

ACR/Detail and ACR/Summary are available on CD and via a download. To arrange a download, contact Customer Support.

Unloading to z/OS

You will need to transfer the files from your PC to your mainframe (either the CD contents or your downloaded products).

The ACR/Summary and ACR/Detail product for z/OS contains a file named **MASTER.XMI**.

1. Allocate space.

    The file uses approximately 700 tracks on a 3390 device, so you may need to override the default for your file transfer program. Allocate Secondary space as 70, 3390 disk tracks. (Similar to SPACE=(TRK,(700,70)) in JCL). If possible, use your file transfer program to allocate this space.

2. Using the file transfer program of your choice (most 3270 emulators use IND$FILE), perform a **binary** transfer (with no translation and no carriage returns) of the MASTER.XMI file from the PC to your mainframe, forcing the following parameters:

    ```
    Logical Recordsize=80, Blocksize=3120, Record Format=FB (aka
    LRECL=80,BLKSIZE=3120,RECFM=FB)
    ```
    You can use the default file name (MASTER.XMI) or override the name with a mainframe dataset name of your choice.

3. Using the file transfer program of your choice, perform a **text** transfer of the receive.jcl file from your download or from the CD to your mainframe, using translation and carriage returns. You can put this in any JCL or Procedure library. This is the JCL to expand the MASTER.XMI file you just uploaded into the different libraries of the product.

4. Edit the receive.jcl file following the instructions at the top to add a job card, replace the high-level qualifier for the MASTER.XMI file, and specify target high-level qualifiers for the product datasets. Submit the job.

5. Rename the files (optional). You can rename any of the files obtained from the CD as necessary.

Contents of the Distribution Media

The Infogix ACR product contains a variety of datasets that ACR/Detail and ACR/Summary use. These datasets fit into three categories: User Interface, Batch Processing, and Installation/Testing.

User Interface

LOADLIB
Partitioned dataset that contains load modules for batch and online programs.

CMDLIB
Partitioned dataset containing TSO CLIST information.

PNLLIB
Partitioned dataset containing ISPF panel definitions.

SKLLIB
Partitioned dataset containing ISPF skeleton definitions and training file information. These are used when generating JCL within the ISPF interface.

MSGLIB
Partitioned dataset containing ISPF message definitions.

HLPLIB

Partitioned dataset containing ISPF help panel definitions.

KEYS

The ISPF key lists used to control PF key processing in the user interface. This read-only dataset should not be modified.

Batch Processing

LOADLIB

Partitioned dataset that contains load modules for batch and online programs that are compiled under Enterprise COBOL.

SRCELIB

Partitioned dataset containing source code for the user exit programs.

COPYLIB

Partitioned dataset containing the copybook members used by the user exit programs.

POSIX.LOADLIB

Partitioned dataset containing load modules for batch programs that are compiled under Enterprise COBOL linked with POSIX ON. Use this library only if you need POSIX ON.

Installation/Testing

DATALIB

Partitioned dataset containing the following:

- The control file contents for your installation
- Sample data for executing the ACR/Summary and ACR/Detail installation verification programs
- The DBRMLIB members for binding DB2 plans
- Sample CLIST and LIBDEF members

PROCLIB

Partitioned dataset containing the following JCL members:

■ BIND—JCL that performs the DB2 Bind.

■ ACRSTEST—JCL that tests the ACR/Summary installation.

■ ACRDTEST—JCL that tests thet ACR/Detail installation.

■ UNI10PR—JCL that creates product licensing Control Report.

■ UNICF50—JCL that updates the licensing control file.

■ VERREL—JCL that verifies the release of the installation.

■ SUMEXPDF—JCL that expands your ACR/Summary definition database for upgrading from a release previous to Release 4.0.

■ SUMEXPHF—JCL that expands your ACR/Summary history database for upgrading from a release previous to Release 4.0.

■ UNICNTL—JCL that creates the product licensing control file.

■ DETEXPDF—JCL that expands your ACR/Detail definition database for upgrading from a release previous to Release 4.0.

■ DETEXPHF—JCL that expands your ACR/Detail history database for upgrading from a release previous to Release 4.0.

■ ACRJCL40—JCL that automates multiple JCL edits for upgrading from a release previous to Release 4.0.

TRNGJCL

Partitioned dataset containing sample JCL and programs for training purposes.

TRNGRPT

Partitioned dataset containing sample reports for training purposes.

TRNGSMF

Partitioned dataset containing sample SMF data.

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Updating Your License

This chapter discusses the tasks related to updating the control file to activate your product licensing. It also explains how to run the TM Aggregate Transaction Report.

This chapter contains the following sections:

Authorizations Required

All production jobs must have read/write access to allow any necessary warning or error messages to be issued. At a minimum, users should have read-only access to the control file. The system administrator should also have write access to support control file changes when necessary.

Creating Your Control File

The control file, used to license ACR/Summary and ACR/Detail software, is a VSAM KSDS file. The following steps describe how to create your control file.

1. Access the UNICNTL member contained in the PROCLIB. This JCL member will create and initialize the control file through an IDCAMS delete/define. The default name will be VVVVVV.UNI.UNICF and is referenced by the UNICNTL symbolic in the JCL. Change VVVVVV to the prefix of your choice. Follow the directions at the top of the JCL member to conform to your site standards.

   The following parameters will need to be modified:

   UUUU = VSAM DASD unit name

   DDDDDD = VSAM DASD volume serial number

   VVVVVV = VSAM dataset name prefix

   XXXXXX = DATALIB prefix

2. Review the UNICNTL member as needed. It contains documentation for SMS.

3. Submit PROCLIB (UNICNTL) with an appropriate job card.

4. Review the output and verify that the return code from both steps is zero.

Updating Your Control File

The control file controls product access in accordance with the terms of your license. There are several situations when you need to update the control file. The most common include:

■ When you install a product for the first time.

■ When you create a new control file for any reason.

> **Note:** If you must create a new control file when upgrading from a previous release, you will be instructed to do so in the installation guide.
>
> You will need to you update your control file when moving from a release prior to Release 4.1 to check the model number of the z/OS box.

■ When the terms of your license have changed.

■ When your license is about to expire as indicated by warning or error messages in your SYSOUT.

■ When you want to run the product on a CPU that is not currently included in your license.

Follow the steps below to update the control file.

1. Print the contents of the control file.

   a. Access the UNI10PR member in your PROCLIB dataset. Depending on your licensing, this member will generate 2 or 3 reports that are required by Customer Support in order to generate control cards and a password to use in updating your control file.

   b. Follow the directions at the top of the UNI10PR JCL to conform to your site standards.

   c. Submit the UNI10PR JCL on each system/LPAR for which you are licensed. This will capture the model ID of each system.

   d. Verify that the return code for all steps is zero.

   e. Review the output and print or save to a file the reports contained in the UNILST, UNIREPT, and UNILSTA (if any) ddnames.

■ The Product Report (ddname UNILST) displays licensing information from the associated control file in a readable format.

■ The CPU Serial # Report (ddname UNIREPT) indicates the CPU on which the reports were generated and will also show up to 16 connected CPUs.

■ The Transactional Measurement Report (ddname UNILSTA) will be generated only if the control file has ever included TM (Transactional Measurement) licensing.

Note: If a TM field in the Product Report is blank or has the value of N (No), the TM licensing shown in the Transactional Measurement Report for that product is not currently in effect.

Below are examples of these reports.

Product Report (UNILST)

```
releasenumber              PRODUCT REPORT             COPYRIGHT INFOGIX,INC.
DATE: mmddyy                                            PAGE:          1
TIME: 09:09                                             REPORT:    UNI10PR

FILENAME: userid.UNI.UNICF
CUSTOMER: INFOGIX, INCORPORATED
 PAGE:060  WAIT:0900  RES:Y  I-RET:0000  W-RET:0000  E-RET:4000  UPDATE:002

 PRODUCT  EXP   GRACE AUTH    TYPE TM  MODEL ID     SERIAL NUMBER
 U/ACF   10/273  60  ALL                            111111/2222
                                                    111111/111122222222222233333333333344444444444455555555556666666666
                                                    555555/6666
                                                    777777/8888
                                                    999999/0000
                                                    222222/4444
                                                    222222/1111
                                                    444444/3333
                                                    666666/5555
                                                    888888/7777
                                                    000000/9999
                                                    555555/3333
 VIOLATION:    FIRST DATE    LAST DATE    SERIAL/MODEL/LPAR                        TYPE
               00/000        00/000           /
               00/000        00/000           /
               00/000        00/000           /
               00/000        00/000           /
```

CPU Serial Number Report (UNIREPT)

```
      INFOGIX,INC.  CPU SERIAL # REPORT
CPU NUM: 00, CPUID:  1B00121E7060
CPU NUM: 01, CPUID:  NOT DEFINED
CPU NUM: 02, CPUID:  NOT DEFINED
CPU NUM: 03, CPUID:  NOT DEFINED
-   MANUFACTURER    CPU TYPE      MODEL/SI        MODEL/ND
    IBM             7060          P30
```

Transaction Management Report (UNILSTA)

```
releasenumber TRANSACTIONAL MEASUREMENT REPORT COPYRIGHT INFOGIX, INC.
DATE: mmddyy                                        PAGE:       01
  TIME: 15:20                                       REPORT:   UNI10PRA

  CUSTOMER:     INFOGIX, INCORPORATED
   PAGE:060  WAIT:0900  RES:Y  I-RET:0000  W-RET:0000  E-RET:4000  UPDATE:002


           ------------LICENSE----------------     ---------RUNNING--------
PRODUCT TM  IND             VALUE        GRACE    RESET             VALUE
U/SUM   RULD EXEC           5,000          40     13/135            5,060
           --------VIOLATION PER LICENSE INTERVAL-------
           FIRST   LAST               VALUE     COUNT
           13/135  13/135             5,050         3
           ----VIOLATION PER CHANGE OF LICENSE VALUE----
           FIRST   LAST        MAXIMUM VALUE      TOTAL
           03/010  03/135             5,100        50

           ------------LICENSE----------------     ---------RUNNING--------
PRODUCT TM  IND             VALUE        GRACE    RESET             VALUE
U/SUM   RULM EXEC         150,000          40     03/130           10,000
           --------VIOLATION PER LICENSE INTERVAL-------
           FIRST   LAST               VALUE     COUNT
           00/000  00/000                 0         0
           ----VIOLATION PER CHANGE OF LICENSE VALUE----
           FIRST   LAST        MAXIMUM VALUE      TOTAL
           00/000  00/000                 0         0

           ------------LICENSE----------------     ---------RUNNING--------
PRODUCT TM  IND             VALUE        GRACE    RESET             VALUE
U/SUM   RECD EXEC          100(IN 000S)   20     03/135           90,000
           --------VIOLATION PER LICENSE INTERVAL-------
           FIRST   LAST               VALUE     COUNT
           00/000  00/000                 0         0
           ----VIOLATION PER CHANGE OF LICENSE VALUE----
           FIRST   LAST        MAXIMUM VALUE      TOTAL
           00/000  00/000                 0         0
(Actual report may show information for additional TM types and additional products.)
```

2. Request your control cards and password.

    Using the information in "Contacting Customer Support" on page 10, do the following:

    a. Call Customer Support to advise them that you are updating the control file according to your license agreement. Be ready to provide the reason for the update and the scheduled date.

    b. E-mail or fax the reports generated in the previous step to Customer Support. Mention any special considerations. For example, inform Customer Support if you are upgrading to a new release or upgrading a CPU. You will receive an e-mail or fax containing your control cards and password.

    The following sample shows three control cards and a password:

```
0   0    1    1    2    2    3    3    4    4    5
1...5....0....5....0....5....0....5....0...
USUM  CA 2836 A S
USUM  CE 7600 03150 04150
USUM  CG 8666 03 30
      PW 6947 JQQJQQJQQJ 673720
```

3. Update the control file.

a. After receiving the control card(s) and password from Customer Support, access the UNICF50 member in the installed PROCLIB dataset. Follow the instructions at the top of the JCL.

It is not necessary to type in the control card(s) and password unless this information was sent by fax. Instead, you can paste these into the JCL from the e-mail as shown in the next steps.

b. Press **F8** to scroll down to the bottom of the UNICF50 member. The location for the control card(s) and password starts in the line below //UNICMD DD. In the default UNICF50 member shown below, there is only one line for a control card, followed by the password line, so you may have to insert additional lines if you have multiple control cards replaced.

```
000023 //UNICMD   DD  *
000024 XXXX   XX XXXX XXXXXXXXXX XXXXXXXXXX
000025        XX XXXX XXXXXXXXXX XXXXXX
000026 //*
000027 //
```

> **Note:** The example above shows a default (new) control file. If the control file was updated previously, it will show actual control card(s) and a password. All of the old control cards and the old password need to be replaced.

c. Paste in the new control card(s) and password. Ensure that the first character of each control card is now in position 1 and that the first character of the password is in position 7.

- If this is the first update, ensure that the JCL contains the correct dataset name, as created in .

- If this is not the first update, make sure you deleted all of the old control card(s) as well as the old password.

The following example shows valid placement of three control cards and a password:

```
000023 //UNICMD   DD  *
000026 USUM  CA 2836 A S
000027 USUM  CE 7600 03150 04150
000028 USUM  CG 8666 03 30
000029       PW 6947 JQQJQQJQQJ 673720
000030 //*
000031 //
 ****** *************************** Bottom of Data *********
```

d. Submit the JCL to update the control file with the new licensing information.

4. Verify the update.

   After the job completes, **even if the message log shows a return code of zero (0)**, review the control file Update Report (ddname UNIFAX) in the output listing. Following is an example of this report:

```
          CHANGE ID: 111111222202351003
UNICF:    UNI.REL33.UNICF
          ACCEPTED    USUM  CA 2836 A S
          ACCEPTED    USUM  CE 7600 03150 04150
          ACCEPTED    USUM  CG 8666 03 30
          ACCEPTED          PW 6947 JQQJQQJQQJ 673720
          *******REQUEST PHASE COMPLETE*******
          CHANGED     USUM  CA 6382 A S
          CHANGED     USUM  CE 0067 03150 04150
          CHANGED     USUM  CG 6668 03 30
          UPDATE COMPLETE
```

If the update completed successfully, the report should contain the message **UPDATE COMPLETE**.

If the UNIFAX report showed problems with the update, check the following:

■ Verify that you updated the correct control file. You may have more than one control file at your site. The control file you update should be the one that was used in the UNI10PR JCL.

■ Verify that the new control cards and password were correctly copied into the UNICF50 member. This information must be copied exactly and placed in the correct column positions. Any previous control card or password information should have been removed.

■ Verify that you applied the password within the date range specified. The password works only on the scheduled date or up to 6 days after the scheduled date you gave to Customer Support.

Generating the TM Aggregate Transaction Report

The TM Aggregate Transaction report is an encrypted report that you may be asked to run by your Infogix account executive. The report prints aggregate counts for each transaction type that is being tracked (jobs, input sources, records, and/or rules). After you e-mail the report to the requestor at Infogix, it is decrypted and used for the following purposes:

■ To aid in analyzing your transaction usage.

■ To implement actual transaction usage licensing where you are billed on a "pay as you go" basis.

What Is the Parameter Card?

The following information describes the parameter card that will display at the end of the JCL for the processing options to Print (UNITMPRT) or Print and Reset (UNITMRST) the aggregate transaction counts. The parameter card specifies which products and processing options are being included. Unless you specify a different option in "Generating the TM Report", step 1 on page 22, the report will include all products in the control file that have aggregation counts.

Below is an example that shows the positions and information options at the left end of the parameter card.

```
         1         2         3         4         5         6
1234567890123456789012345678901234567890123456789012345678901234567890
PPPPOPPPPOPPPPOPPPPOPPPPOPPPPOPPPPOPPPPOPPPPOPPPPOPPPPOPPPPOPPPPOPPPPO
```

> **Note:** **PPPPO** is repeated 16 times, because a total of 16 products can be specified in the parameter card to allow TM licensing for additional products in the future. TM licensing is available beginning with ACR/Summary Release 3.1 and ACR/Detail Release 3.1.

The first four characters in the positions **PPPP** are used to specify the product name, as follows:

■ **ALL**, followed by a space, indicates that aggregate counts will be included for each product in the control file for which TM aggregate counts exist. This is the default option.

■ **USUM** indicates that only ACR/Summary aggregate counts will be included.

■ **UDRS** indicates that only ACR/Detail aggregate counts will be included.

> **Note:** The product names in the parameter card must match those in your control file.

The fifth character, in position **O**, is used to specify the processing option, as follows:

■ **P** specifies the Print Only option. This option should be used in UNITMPRT.

■ **R** specifies the Print and Reset option. This option should be used in UNITMRST.

For simplicity, the following defaults are included as parameters for UNITMPRT and UNITMRST in the shipping PROCLIB, respectively:

ALL P
ALL R

> **Note:** There should be one space after **ALL**.

Generating the TM Report

1. Generate the Transaction Management report by executing one of the JCL members included in the PROCLIB when the product was installed. The Infogix representative who requested the report will let you know which of the following options to use:

   ■ UNITMPRT (**Print Only** option). This option prints the report without resetting the aggregate counters for each TM type included.

      OR

   ■ UNITMRST (**Print and Reset** option). This option prints the report and resets the aggregate counters for each TM type included.

   Regardless of the JCL member you use, the results will be written to DDName UNITMRPT.

   If you examine the report file, the contents will be encrypted as in the following example:

```
01USER10.UNI.UNICF                              INFOGIX, INCORPORATED
02CFLNFGHIJABCDEFGHIJABDDEFGHIJABCDEFGHIJBBCDEFGHIJABCDEFGHMJABCDEFGHIJABCDEFHH
02FKMEFGHIJABCDEFGHIJABCDEFGHIJABCDEFGHIJABCDEFGHIJABCDEFGHIJABCDEFGHIJABCDEFGH
```

2. Fax or e-mail the report to the person from Infogix who requested it.

4

Establishing the Online Environment

This chapter discusses the tasks necessary to establish your ISPF user interface. After you complete the required tasks, you will be able to use the installed products.

This chapter contains the following sections:

- ■ "Creating an Online Environment" on page 23
- ■ "Modifying JCL Skeletons" on page 26
- ■ "Testing the Online Environment" on page 28
- ■ "Adding ACR/Summary and ACR/Detail to an ISPF Menu" on page 29

Creating an Online Environment

The Online Environment is initiated from TSO OPTION 6 or the ISPF command line. LIBDEFSE is contained in the DATALIB dataset. To invoke this member as a menu item, read the section "Adding ACR/Summary and ACR/Detail to an ISPF Menu" on page 29.

Important: If you use "wordwrap" with your emulator, you will need to turn it off. For example, the procedure for a Rumba emulator is:

- ■ Select Options from the main menu.
- ■ Select Edit from the Options menu.
- ■ Clear (uncheck) the Wordwrap box.

The wordwrap option will result in unwanted spaces in descriptions that are more than 39 characters long.

---

1. Implement only one of the methods (a, b, or c) described below to allocate the LOADLIB before entering ISPF.

    a. **Linkist method (recommended):** Have the system programmer add the loadlib to the linklist.

    —OR—

    b. **Logon PROC method:** Update your TSO LOGON procedure to add the loadlib as STEPLIB dataset. A System Programmer is usually required to make this change.

    —OR—

c. **CLIST Method:** Do one of the following: 1) Add this line to your site's automatic logon CLIST, or 2) create a CLIST (see sample CLIST below) containing this command that you will execute before entering ISPF, or 3) type this TSO command before entering ISPF:

```
TSOLIB ACTIVATE DATASET ('XXXXXXX.LOADLIB')
```
where *XXXXXXX* is your high-level qualifier.

> **Note:** You must add this line to the CLIST or type the TSO command prior to entering ISPF because the TSOLIB ACTIVATE command will not function once you are in ISPF. The online environment is already in place at that point.

Here is an example CLIST containing the required TSO command:

```
PROC 0
/*
/*   VERY SIMPLE SAMPLE OF A LOGON CLIST, DO *NOT* REPLACE YOUR
/*   LOGON CLIST WITH THIS SAMPLE - YOU WILL NEED TO CUSTOMIZE
/*   THIS MATERIAL TO YOUR SITE STANDARDS
/*
CONTROL NOMSG NOFLUSH
FREE FILE(ISPPROF ISPTABL)
SET &DSNAME = &STR(&SYSUID..ISPF.ISPPROF)
ALLOC DA('&DSNAME') OLD FILE(ISPPROF)
ALLOC DA('&DSNAME') OLD FILE(ISPTABL)
TSOLIB ACTIVATE DATASET('XXXXXXX.LOADLIB')

ISPF
```

2. Set up the LE online environment.

In DATALIB, use the LIBDEFSE member as shown in the sample below.

```
                              PROC 0
                              /*
                              /* ********************************************************************
                              /* *                                                                  *
                              /* *                         LIBDEFSE                                  *
                              /* *                                                                  *
                              /* *  USE THIS MEMBER IF YOU WANT TO GET ACCESS TO INFOGIX PRODUCTS *
                              /* *  VIA TSO OPTION 6 AND YOU HAVE TSO/E INSTALLED.                  *
                              /* *  TO USE THIS MEMBER, AN ISPF ENVIRONMENT MUST HAVE ALREADY       *
                              /* *  BEEN ESTABLISHED.                                              *
                              /* *                                                                  *
                              /* *  1.  XXXXXXX   TO THE DATA SET NAME PREFIX SPECIFIED FOR YOUR  *
                              /* *                     LIBRARIES.                                   *
                              /* *                                                                  *
                              /* ********************************************************************
                              /*
                              CONTROL FLUSH NOLIST NOCONLIST NOSYMLIST NOMSG NOPROMPT
                              /*
                              /*  THE COMMANDS THAT FOLLOW ALLOCATE THE INFOGIX COMMAND LIBRARY
                              /*  AND CONCATENATE IT WITH YOUR SYSPROC CMDLIBS.
                              /*
                              /*  PLEASE NOTE THAT THE 'ALTLIB' COMMAND IS A COMMAND ONLY AVAILABLE
                              /*  UNDER TSO/E.
                              /*
                              ALTLIB ACTIVATE APPLICATION(CLIST)    +
                                    DSNAME('XXXXXXX.CMDLIB')
                              /*
                              ALLOC FI(ISPTABL) DA('XXXXXXX.KEYS')            SHR REUSE
                              /*
                              /*  THE COMMANDS THAT FOLLOW ALLOCATE THE INFOGIX PANEL, HELP,
                              /*  MESSAGE, AND SKELETON LIBRARIES.  THE USER INTERFACE LOAD
                              /*  LIBRARY IS ALSO ALLOCATED.
                              /*
                              ISPEXEC LIBDEF ISPPLIB DATASET ID('XXXXXXX.PNLLIB'           +
                                                                 'XXXXXXX.HLPLIB')
                              ISPEXEC LIBDEF ISPMLIB DATASET ID('XXXXXXX.MSGLIB')
                              ISPEXEC LIBDEF ISPSLIB DATASET ID('XXXXXXX.SKLLIB')
This statement --------->    ISPEXEC LIBDEF ISPLLIB DATASET ID('XXXXXXX.LOADLIB')
referencing LOADLIB          ISPEXEC LIBDEF ISPTLIB DATASET ID('XXXXXXX.KEYS')
is not required if you       /*
used method a (Linklist      ISPEXEC CONTROL ERRORS RETURN
Method) in step 1 above.     /*
                              /*  THE COMMAND THAT FOLLOWS STARTS THE PROCESS THAT WILL ALLOW
                              /*  ACCESS TO THE INFOGIX PRODUCTS THRU THE INFOGIX PRODUCT MENU.
                              /*
                              ISPEXEC SELECT PGM(UNI0000C) NEWAPPL(UNI) PASSLIB
                              /*
                              /*  THE COMMANDS THAT FOLLOW FREE THE INFOGIX PANEL, HELP,
                              /*  MESSAGE, AND SKELETON LIBRARIES.  THE USER INTERFACE LOAD
                              /*  LIBRARY IS ALSO FREED.
                              /*
                              ISPEXEC LIBDEF ISPPLIB
                              ISPEXEC LIBDEF ISPMLIB
                              ISPEXEC LIBDEF ISPSLIB
                              ISPEXEC LIBDEF ISPLLIB
                              ISPEXEC LIBDEF ISPTLIB
This FREE statement --->     FREE FI(ISPTABL)
is not required if you       /*
used method a (Linklist      /*  THE COMMANDS THAT FOLLOW FREE THE INFOGIX COMMAND LIBRARY.
Method) in step 1 above.     /*
                              ALTLIB DEACTIVATE APPLICATION(CLIST)
                              FREE DA('XXXXXXX.CMDLIB')
                              /*
                              ISPEXEC CONTROL DISPLAY REFRESH
                              END
                              ***************************** Bottom of Data ****************************
```

Modify the dataset names to match the names you created during the CD unload process.

This means changing XXXXXXX to the system prefix you have chosen. Other modifications may be needed depending on your ISPF version and standards.

Modifying JCL Skeletons

A major feature of the user interface is the ability to automatically generate all JCL required by the system. This allows non-technical users to easily utilize the products. In order to ensure that JCL and the online environment follow your site's standards, the following members must be modified to include site-dependent information in the JCL statements generated by the ISPF User Interface. This information is also used to pass audit information with Online Save.

Modify the UNICNTL Member Located in SKLLIB

A sample of UNICNTL is shown below.

```
DB2PLAN   UNIDB2
DDB2PLAN  UDXDB2
CNTLDSN   XXXXXXX.UNICF
STEPLIB0  XXXXXXX.LOADLIB
STEPDCF0
STEPLIB1
STEPLIB2
STEPLIB3
STEPLIB4
STEPLIB5
DB2LIB0   DB2.DSNLOAD.TEMP
DB2LIB1   DB2.DSNLOAD.PERM
DB2LIB2
DB2LIB3
DB2LIB4
DB2LIB5
SYSOUT    *
UNIT      SYSALLDA
BLKSIZE   27920
TRACKS    0030
GNDB2JCL  N
COMPRESS  Y
INSGTCF
INSGTRF
```

DB2PLAN. If you intend to access DB2 using ACR/Summary, enter the name of the DB2 plan that will be set up. Refer to Chapter 6, "Preparing the DB2 Environment" for this information. When a user attempts to create DB2 JCL, the appropriate DB2 plan will automatically be inserted into the JCL stream.

DDB2PLAN. If you intend to access DB2 using ACR/Detail, enter the name of the DB2 plan here. Refer to Chapter 6, "Preparing the DB2 Environment" for more information. When a user attempts to create DB2 JCL, the appropriate DB2 plan will automatically be inserted into the JCL stream.

CNTLDSN. This is a required field. Enter the name of the control file that was created in Chapter 3, "Updating Your License."

STEPLIB0. Enter the name you used for LOADLIB when you unloaded the CD. This dataset name will be inserted into every JCL stream to ensure proper system functioning.

STEPDCF0. If you are licensed for ACR/File, put the LOADLIB name here too. This is typically the same dataset name used in STEPLIB0.

STEPLIB1–STEPLIB5. (Optional) These lines are not typically modified when installing ACR/Summary or ACR/Detail because you are working with one installation dataset. However, they are available so you can create additional STEPLIBs for your own purposes, such as for testing patches.

DB2LIB0–DB2LIB5. If you intend to access DB2 using ACR/Detail or ACR/Summary, enter the name of the library where the DB2 system is found. Two sample library names have been placed in the UNICNTL member: DB2 DSNLOAD.TEMP and DB2 DSNLOAD.PERM. You must change these names to reflect your own site specific libraries. Four additional libraries are available for DB2 jobs so you can add datasets, as needed.

SYSOUT. When generating JCL, the sysout class defaults to *. Enter your default class.

UNIT. The default unit is SYSALLDA. Enter your default disk unit, up to eight characters.

BLKSIZE. Enter the default blocksize for temporary partitioned datasets with 80-byte records.

TRACKS. Enter the default number of tracks for the user's ISPF allocation of datasets that is required for setting up the product.

GNDB2JCL. If you intend to access DB2 using ACR/Detail or ACR/Summary, and would like to have the DB2 panels appear each time you generate JCL for balancing/reconciliation, then change this field to a "Y". You can also manually change this flag as needed in the JCL panel. The default is set to "N".

COMPRESS. Enter Y (Yes) to automatically compress your definition library or enter N (No). Yes is recommended.

> **Note:** If you will be using DB2, see Chapter 6, "Preparing the DB2 Environment" for more information.

INSGTCF and **INSGTRF.** If you have Infogix Insight, you can have audit information on ACR/Summary and ACR/Detail definition updates (including the user ID of the person making the change and the date and time of the change) sent to Infogix Insight when the definitions are saved to the definition database online. To do this, edit the INSGTCF and INSGTRF fields as follows:

- ■ For INSGTCF, enter the Infogix Insight configuration file.
- ■ For INSGTRF, enter the Infogix Insight environment file.

Example of INSTGTCF and INSTGTRF Edits:

```
----+----1----+----2----+----3----+----4----+----5----+----
INSGTCF   USERID.INSIGHT.API.INSGTCF
INSGTRF   USERID.ENVFILE
```

Modify the UDS3L00S member located in SKLLIB

By default, this member uses your default LE libraries. Update as needed.

> **Note:** You should only modify this member if you are using or intend to use **ACR/Detail** with Extraction Program Interface (EPI). The EPI turns definitions into a COBOL program for processing data files that contain millions of records. For more information on EPI, see the chapter on the Extraction Program Interface in the ACR/Detail User Guide and work with your Systems Programmer.
>
> DB2 environments do not use EPI, so if you use only DB2, no update is needed.

Testing the Online Environment

This procedure invokes LIBDEFSE as a menu item so you can test your online environment.

> **Note:** This test is required. You must have allocated your LOADLIB using one of the methods described in step 1 on page 23 first.

1. Go to TSO OPTION 6.

2. Execute the LIBDEFSE. A sample command looks like this:

   ```
   EX 'userid.DATALIB(LIBDEFSE)'
   ```
   where *userid* is your user ID.

   The Infogix logo screen should display.

3. Use the F4 key to place the cursor at the top of the screen.

4. With the cursor at Product, press Enter to display a drop-down list of products.

5. Type the number for the product you want to access, and press Enter.

6. When prompts to initialize the product display, the test is successful. Press PF3, then PF5 to exit.

7. Copy the LIBDEFSE CLIST to a library already in your SYSPROC dataset list.

Adding ACR/Summary and ACR/Detail to an ISPF Menu

After you complete the test of the LIBDEFSE CLIST, you may want to add ACR/Summary and ACR/Detail to your ISPF menu.

Note: This is an optional procedure.

This is a sample of the line you may add to your ISR@PRIM panel as the menu option for ACR/Summary and/or ACR/Detail:

```
U Infogix Invoke ACR/Summary or ACR/Detail
```
where the body section may contain:

```
U,'CMD(%LIBDEFSE)'
```

Note: You can change the LIBDEFSE name to something more descriptive if you prefer. To do so, you must copy the LIBDEFSE CLIST to an existing SYSPROC library and rename it there. If you change the member name, use that name in the command line (shown above) instead.

5

Testing the Installation

This chapter provides the procedures necessary to verify that the installation is successful.

This chapter contains the following sections:

- "Preparing the Installation Test for ACR/Summary" on page 31
- "Executing the Installation Test for ACR/Summary" on page 32
- "Preparing the Installation Test for ACR/Detail" on page 34
- "Executing the Installation Test for ACR/Detail" on page 35
- "Initial Setup of ACR/Summary and ACR/Detail" on page 37

Preparing the Installation Test for ACR/Summary

Modify the UNIUOPT member located in DATALIB

The dataset names of the UNIDF and UNIHF files must be valid VSAM dataset names within your environment.

> **Note:** Make sure the names you specify are unique for testing.

The table below shows the dataset names to modify.

UNIXOPT	NY	
UNIDSN[1]	UNIDF	VVVVVVV.SUM.UNIDF
UNIDSN[1]	UNIHF	VVVVVVV.SUM.UNIHF
UNIOUT[2]	UNIIR	*X
UNIOUT[2]	UNITR	*X
UNIOUT[2]	UNIACR	*X
UNIOUT[2]	UNIRCR2	*X

UNIOUT[2]	UNIACR	*X
UNIOUT[2]	UNIUSR	*X

[1] VVVVVVV represents a unique VSAM dataset name for testing. FFF is the product name code, for example, SUM (for ACR/Summary).

[2] SYSOUT. Classes for the reports are set to X. You may modify these to reflect your environment. To change the SYSOUT class, change the X in column 22 of each UNIOUT card to a valid SYSOUT class at your site. You must retain the leading *. Therefore, to direct SYSOUT to a printer, use **.

Modify the UDFCAMS member located in DATALIB

The dataset name of the UNIDF file must match what you specified in the DATALIB(UNIUOPT) member. Also, modify the VOLUME information so that it reflects your environment.

Modify the UHFCAMS member located in DATALIB

The dataset name of the UNIHF file must match what you specified in the DATALIB(UNIUOPT) member. Also, modify the VOLUME information so that it reflects your environment.

Executing the Installation Test for ACR/Summary

Modify the ACRSTEST member

The JOB card must reflect your environment. Execute the PROCLIB(ACRSTEST) procedure, with the symbolic parameters given the following assignments:

SYSOUT	=	Output class for SYSOUT
LOADLIB	=	XXXXXXX.LOADLIB
DATALIB	=	XXXXXXX.DATALIB
UNICF	=	VVVVVVV.UNI.UNICF
UNIDF	=	VVVVVVV.SUM.UNIDF
UNIHF	=	VVVVVVV.SUM.UNIHF
TSTUNIT	=	WWWW

where:

XXXXXXX	=	LOADLIB dataset name prefix
VVVVVVV	=	VSAM test dataset name prefix
WWWW	=	Test DASD unit name

Submit the JCL

Submit the ACRSTEST JCL to execute the installation test. Successful execution should yield the following reports:

UNIIR. Database Initialization Report

UNITR. Database Update Report

UNIACR. Balancing Control Report from Edit Step

UNIACR. Balancing Control Report from Update Step

UNIRCR. Balancing Recap Report from Update Step

UNIUSR. Balancing User Report

UNISSR2. Summary Spreadsheet Repor*t*

Note: You should receive a return code of 0000, which is valid based on the applied rules.

Note: For samples of these reports, refer to your XXXXXXX.TRNGRPT dataset, where XXXXXXX is the prefix you used when installing the software in "Creating the Installation Datasets" on page 11.

Locate the sample reports in the following TRNGRPT members:

UNIIR = UNIINIT - Database Initialization Report

UNITR = UNIUPDT - Database Update Report

UNIACR = UNITEST1 - Balancing Control Report from Edit Step

UNIACR = UNITEST2 - Balancing Control Report from Update Step

UNIRCR = UNITEST3 - Balancing Recap Report from Update Step

UNIUSR = UNITEST4 - Balancing User Report

UNISSR2 = UNITEST5 - Summary Spreadsheet Report

Preparing the Installation Test for ACR/Detail

Modify the UDSUOPT member located in DATALIB

The dataset names of the UNIDF and UNIHF files must be valid VSAM
dataset names within your environment.

Note: Make sure the names you specify are unique for testing.

The table below shows the dataset names to modify.

UNIDSN[1]	UNIDF	VVVVVVV.DET.UNIDF
UNIDSN[1]	UNIHF	VVVVVVV.DET.UNIHF
UNIOUT[2]	UNIIR	*X
UNIOUT[2]	UNITR	*X
UNIOUT[2]	UNIACR	*X
UNIOUT[2]	UNIRCR	*X
UNIOUT[2]	UNIDER	*X
UNIOUT[2]	UNIDUR	*X
UNIOUT[2]	UNIEXR	*X

[1] VVVVVVV represents a unique VSAM dataset name for testing.

[2] SYSOUT. Classes for the reports are set to X. You may modify these to reflect your
environment. To change the SYSOUT class, change the X in column 22 of each
UNIOUT card to a valid SYSOUT class at your site. You must retain the leading *.
Therefore, to direct SYSOUT to a printer, use **.

Modify the DDFCAMS member located in DATALIB

The dataset name of the UNIDF file must match what you specified in the
DATALIB(UDSUOPT) member. Also, modify the VOLUME information so
that it reflects your environment.

Modify the DHFCAMS member located in DATALIB

The dataset name of the UNIHF file must match what you specified in the
DATALIB(UDSUOPT) member. Also, modify the VOLUME information so
that it reflects your environment.

Modify the UDSINIT member located in DATALIB

The dataset name of the UNIHF and UNIDF files must match what you specified in the DATALIB(UDSUOPT) member.

Executing the Installation Test for ACR/Detail

Modify the ACRDTEST member

The JOB card must reflect your environment. Execute the PROCLIB(ACRDTEST) procedure, with the symbolic parameters given the following assignments:

SYSOUT	=	Output class for SYSOUT
LOADLIB	=	XXXXXXX.LOADLIB
UNICF	=	VVVVVVV.UNI.UNICF
UNIDF	=	VVVVVVV.DET.UNIDF
UNIHF	=	VVVVVVV.DET.UNIHF
DATALIB	=	XXXXXXX.DATALIB
TSTUNIT	=	WWWW

where:

XXXXXXX	=	LOADLIB dataset name prefix
VVVVVVV	=	VSAM test dataset name prefix
WWWW	=	Test DASD unit name

Submit the ACRDTEST JCL

Submit the ACRDTEST JCL to execute the installation test. Successful execution should yield the following reports:

UNIIR. Database Initialization Report

UNITR. Database Update Report

UNIACR. Reconciliation Control Report

UNIDER. Extracted Data Detail Report

UNIACR. Reconciliation Control Report

UNIRCR. Reconciliation Recap Report

UNIDUR. Reconciliation User Report

UNIEXR. Detail Spreadsheet Report (Data Values)

Note: For samples of these reports, refer to your XXXXXXX.TRNGRPT dataset, where XXXXXXX is the prefix information you used when installing the software in "Creating the Installation Datasets" on page 11.

Locate the sample reports in the following TRNGRPT members:

UNIIR = UDSINIT - Database Initialization Report

UNITR = UDSUPDT - Database Update Report

UNIACR = UDSTEST1 - Reconciliation Control Report

UNIDER = UDSTEST2 - Extracted Data Detail Report

UNIACR = UDSTEST3 - Reconciliation Control Report

UNIRCR = UDSTEST4 - Reconciliation Recap Report

UNIDUR = UDSTEST5 - Reconciliation User Report

UNIEXR = UDSTEST6 - Detail Spreadsheet Report (Data Values)

Initial Setup of ACR/Summary and ACR/Detail

The first time you install ACR/Summary or ACR/Detail, you must perform initial setup tasks once installation testing is complete. Initial setup includes initializing the history and definition databases and allocating work, user, and report files. These procedures are described in the user guides for z/OS.

■ *ACR/Summary User Guide for z/OS*

■ *ACR/Detail User Guide for z/OS*

When initializing VSAM files, note the following:

Note:	The definition database is defined with SHARE options (1,3) which means it can only be allocated to one place at a time. You will see contention messages if you submit updates, multiple jobs, or any other processes that also read or update the definition database.
	Please contact Customer Support for any inquiries on SHARE options.

6

Preparing the DB2 Environment

This chapter describes how to establish your DB2 plan in order to use the DB2 interfaces provided with ACR/Summary and ACR/Detail. This is an optional procedure that can be performed at any time.

This chapter contains the following sections:

- "Establishing the DB2 Plan" on page 39
- "Copying the Sample BIND JCL" on page 40
- "Submitting the BIND JCL" on page 41

Establishing the DB2 Plan

If you intend to access DB2 using ACR/Summary or ACR/Detail, the DB2 plan must be created. The DBRM to be bound is found in the DATALIB contained on the distribution CD (see table below). The plan name will need to be provided to all ACR/Summary and ACR/Detail users who wish to use this facility. The DB2 plan information can be entered into the UNICNTL member in the SKLLIB for use in Online JCL generation. See "Modifying JCL Skeletons" on page 26 for more information.

Product	Member (in DATALIB)	Load Library
ACR/Detail	UDXDB2	LOADLIB
ACR/Summary	UNIDB2	LOADLIB

During an initial installation, you must bind the DB2 plan(s) as part of the process. During an upgrade, you must re-bind the DB2 plan(s). The next sections provide a sample of BIND JCL and instructions for submitting it.

Copying the Sample BIND JCL

> **Note:** This is **required** when you are using DB2 with ACR/Summary or ACR/Detail.

If you do not already have a BIND JCL setup, copy the following BIND JCL from the PROCLIB:

```
//JOBCARD
//*
//**********************************************************************
//*   SAMPLE BIND JCL FOR ACR/SUMMARY AND ACR/DETAIL
//*
//*  STEP          DESCRIPTION
//* -------        ----------------------------------
//* BINDSUM        BIND JCL FOR SUMMARY
//* BINDDET        BIND JCL FOR DETAIL AND SUMMARY FREE FORM DB2
//*
//*
//*  NOTE : CHANGE DB2.DSNLOAD TO YOUR DB2 LOADLIB NAME
//*         CHANGE DATALIB TO YOUR DBRMLIB NAME
//*         CHANGE DSN1       TO YOUR DB2 SUBSYSTEM NAME
//*
//**********************************************************************
//BINDSUM  EXEC PGM=IKJEFT01,DYNAMNBR=20
//STEPLIB  DD DSN=DB2.DSNLOAD,DISP=SHR           DB2 DSN LOADLIBS
//DBRMLIB  DD DSN=DATALIB,DISP=SHR
//SYSTSPRT DD SYSOUT=*                           DSN OUTPUT LISTING
//SYSTSIN  DD *
  DSN SYSTEM(DSN1)
  BIND PACKAGE(UNIDB2) MEMBER(UNIDB2) ACT(REP) ISOLATION(CS)
  BIND PLAN(UNIDB2) PKLIST(UNIDB2.UNIDB2) ACT(REP) RETAIN ISOLATION(CS)
    END
//**********************************************************************
//BINDDET  EXEC PGM=IKJEFT01,DYNAMNBR=20
//STEPLIB  DD DSN=DB2.DSNLOAD,DISP=SHR           DB2 DSN LOADLIBS
//DBRMLIB  DD DSN=DATALIB,DISP=SHR
//SYSTSPRT DD SYSOUT=*                           DSN OUTPUT LISTING
//SYSTSIN  DD *
   DSN SYSTEM(DSN1)
  BIND PACKAGE(UDXDB2) MEMBER(UDXDB2) ACT(REP) ISOLATION(CS)
  BIND PLAN(UDXDB2) PKLIST(UDXDB2.UDXDB2) ACT(REP) RETAIN ISOLATION(CS)
    END
//*
```

Submitting the BIND JCL

Use the standard BIND JCL in your environment. We recommend the following DB2 BIND parameters:

ACT(REP)

RETAIN

ISOLATION(CS)

> **Note:** See your DBA for the authority necessary to submit (execute) the BIND.

Submit the modified JCL, which will create two plans for running JCL that uses DB2:

■ UDXDB2. This is used for both of the following:

   ■ ACR/Summary extraction using the DB2 Freeform Editor.

   ■ All ACR/Detail DB2 extraction (using either the DB2 Freeform Editor or the original DB2 Extraction Method.)

■ UNIDB2. This is used for ACR/Summary extraction using the original DB2 Extraction Method.

Submitting the BIND JCL

7

Installing an Upgrade

This chapter provides instructions for upgrading to this release of ACR/Summary and ACR/Detail for z/OS from an earlier release.

It contains the following sections:

- "Installing the Software for This Release" on page 44
- "Updating Your Control File" on page 44
- "Re-binding DB2 Plans" on page 44
- "Changing the Batch Load Library" on page 44
- "Comparing Output Reports" on page 44
- "Reviewing Your Online Environment" on page 45
- "Performing Initial Setup (Optional)" on page 45
- "Sending Definition Audit Information to Infogix Insight" on page 45
- "Upgrading from a Pre-R3.0 Release" on page 46
- "Upgrading from a Pre-R3.2 Release: Free-Form Output File Feature" on page 48
- "Upgrading from a Pre-Release 4.5 Release" on page 49
- "Upgrading from a Pre-Release 4.0 Release" on page 50

> **Note:** **Required Upgrades:** Because you are upgrading to the current release, you must complete the upgrade steps for all releases between your release and the current release.
>
> For example, if you are on Release 2.6, you must complete all instructions in this chapter before the "Upgrading" sections, then complete:
>
> - Upgrading from a Pre-R3.0 Release on page 46
> - Upgrading from a Pre-R3.2 Release: Free-Form Output File Feature on page 48
> - Upgrading from a Pre-Release 4.0 Release on page 50

Before you begin, review the "System Requirements" on page 6 to verify that your environment meets them.

Installing the Software for This Release

Install ACR/Summary and ACR/Detail using the instructions in "Creating the Installation Datasets" on page 11.

Updating Your Control File

If you are updating from a release earlier than Release 4.1, follow the instructions on page 16 in Chapter 3, "Updating Your License" to update your control file. The update is to add the model number of the z/OS box.

Re-binding DB2 Plans

When installing an upgrade, you must re-bind the DB2 plan(s) as part of the process. For instructions, refer to "Establishing the DB2 Plan" on page 39.

Changing the Batch Load Library

Use one of the following methods to specify the new batch load library:

■ Change your existing JCL, manually, to point to the new load library for this release in your STEPLIB.

   or

■ Generate new JCL through the product.

   or

■ Rename your library so that the new release uses the old library names.

Comparing Output Reports

Run test jobs using both the old and new release.

Compare output reports from the previous release with output reports from this release to verify that the results are the same. If the results do not match, contact Customer Support for assistance, as described on page 10.

Reviewing Your Online Environment

Review Chapter 4, "Establishing the Online Environment" on page 23 and make any desired modifications. A typical installation would linklist the LOADLIB and create a CLIST to execute after you enter ISPF. See "Creating an Online Environment" on page 23.

Performing Initial Setup (Optional)

If you are upgrading from a pre-3.0 release, you may want to create a new profile (go through Setup). See "Upgrading from a Pre-Release 4.0 Release" on page 50.

Initial setup was already performed with the first-time installation of the product(s), as introduced on page 37. Initial setup included initializing the history and definition databases and allocating work, user, and report files. These procedures are described in the user guides for z/OS. It is not necessary to perform these steps again. However, you have the option to create new databases and allocate files. If you choose to perform the initial setup, note the following:

Warning:	To avoid overwriting existing data, use new names for the databases or files you create.
	If you initialize history or definition databases using existing names, or if you allocate work files, user files, or report files using existing names, your existing data will be overwritten.

Sending Definition Audit Information to Infogix Insight

If you have Infogix Insight and have already installed the Infogix Visibility API on z/OS, you can have the batch cards and audit information on ACR/Summary and ACR/Detail definition updates (including the ID associated with the change and the date and time of the change) sent to Infogix Insight during online save and batch update.

To implement this in online save, the INSGTCF and INSGTRF variables must be added to UNICNTL as described in "Modify the UNICNTL Member Located in SKLLIB" on page 26.

To implement this in batch update, INSGTCF and INSGTRF must be added to your JCL for UACUPDT and UDSUPDT. This can be done in one of the following ways:

■ Use dynamic allocation as described in the "Setting the User Options chapter" of the user guides for ACR/Summary and ACR/Detail for z/OS.

■ Manually add these files to your JCL for UACUPDT and UDSUPDT.

■ Generate new UACUPDT and UDSUPDT JCL which will now contain these files when processing a batch update.

To send the definition updates to Infogix Insight, the Infogix Insight load library needs to be concatenated before the ACR load libraries. For instructions, see the *Infogix Visibility API for z/OS* guide.

Upgrading from a Pre-R3.0 Release

Setting Up a Separate Profile

If you are upgrading from a release earlier than Release 3.0, follow the recommendation below:

Warning: ISPF profiles are not backward compatible.

If you are upgrading to this release from a release prior to Release 3.0, and you use an existing ISPF profile, that profile will change and will no longer be able to support earlier releases of the software.

To retain access to the earlier release during testing, we recommend that you set up a separate ISPF profile for access to this release.

LOADLIB Allocation

Note: This step is required to establish the online environment because Release 3.0 and above are all dynamic and offer smaller load modules, smaller region sizes, and better overall performance.

Beginning with ACR/Summary and ACR/Detail Release 3.0, in addition to the LIBDEFSE allocation for your online environment, the LOADLIB must be allocated prior to entering ISPF. You can allocate the LOADLIB through one of the methods outlined in "Establishing the Online Environment" on

Updating Job Definitions from a Pre-R3.0 Release

If you use jobs created prior to ACR/Summary or ACR/Detail Release 3.0, you may receive the following warnings regarding two-digit cycle numbers:

Warning:1 `#UPD448W REL CYCLE IS IN OLD 2-DIGIT FORMAT`

To eliminate the warning, complete the steps in the section below.

Restoring Definitions to the Online Work Area

Skip this step if:

■ You are upgrading from Release 3.1 or later.

■ You are upgrading from Release 3.0 and you have already installed ACR/Plus Patch R30V0M0A.

If you are upgrading from a release prior to Release 3.0, complete the following steps:

1. Logon to this release.

2. Back up the online Definition Library via **Run** > **Online**-**Options** > **Backup Definition Library** > **All definitions** > **Copy Option 3**.

3. Allocate a new online Definition Library via **Setup** > **Files** > **Allocate user files**.

4. As needed, restore definitions from your database, allocated in "Performing Initial Setup (Optional)" on page 45, to your online Definition Library. Refer to instructions for the Restore Definition Library utility in the user guides for z/OS.

5. Open the older jobs in the online work area and save them. The jobs will then use three-digit relative cycle values.

6. For information on additional upgrades required, see the note on **Required Upgrades** on page 43.

Upgrading from a Pre-R3.2 Release: Free-Form Output File Feature

A free-form output file format for ACR/Detail was introduced in Release 3.2. If you are moving to this release from a release previous to Release 3.2 and you want to use this feature, you need to upgrade your reconciliation JCL from the prior release or generate new JCL.

■ If you retain your JCL from the prior release, you must manually upgrade your JCL, by adding UNIDAT2 statements in step 1 below.

■ If you generated new JCL as part of changing your batch load library on page 44, the UNIDAT2 statements already exist. To use the new format, skip to step 2 and edit the statements.

Upgrading Your JCL:

1. Edit your existing UDS2000 reconciliation JCL. Add or edit the UNIDAT2 lines, as shown below. Add these statements after the existing UNIDATA statements. If using this feature, put in a valid DSName.

   ```
   000034 //UNIDAT2   DD   DSN=USERID.DET.UNIDAT2
   000035 //                DCB=(RECFM=VB,LRECL=24032,BLKSIZE=0),
   000036 //                DISP=(NEW,CATLG),
   000037 //                UNIT=SYSALLDA,
   000038 //                SPACE=(TRK,(10,10),RLSE)
   ```

2. Choose the new "Freeform output file" from the Write Output File panel and specify the data to output. Instructions are in the *ACR/Detail User Guide for z/OS*.

3. For information on additional upgrades required, see the note on **Required Upgrades** on page 43.

Upgrading from a Pre-Release 4.5 Release

The ability to select data based on a partial driver key was introduced in ACR/Detail for Release 4.5. If you are moving to this release from a release previous to Release 4.5 and you want to use this feature, you need to manually add the driver key work file, UNIWRK5, to the reconciliation JCL.

1. Go to Setup > Create JCL > Reconciliation JCL. Add the driver key work file to your existing reconciliation JCL, as shown below.

```
000088 //UNIWRK5   DD   DSN=&&UNIWRK5,
000089 //                DCB=(RECFM=FB,LRECL=43,BLKSIZE=4085),
000090 //                DISP=(NEW,DELETE),
000091 //                UNIT=SYSALLDA,
000092 //                SPACE=(TRK,(10,10),RLSE)
```

2. From within the new release interface, set the defaults for the new work file. Go to Setup > Files > Specify report file defaults.

```
                  Report File Defaults

 Control report DSName: userid.DET.UNIACR
  Primary space: 0010  Secondary space: 0005  (tracks)


 Recap report DSName:    userid.DET.RECAP
  Primary space: 0010  Secondary space: 0005  (tracks)


 User report DSName:     userid.DET.USERRPT
  Primary space: 0010  Secondary space: 0005  (tracks)


 Free-form report:  .   userid.DET.FREE
  Primary space: 0005  Secondary space: 0001  (tracks)


        Unit: SYSALLDA  Volume: USER01
 Managementclass:_____  Storageclass: _____  Dataclass: _____

 Modify the work file allocations? y  (Y/N)


  F1=Help    F2=Split   F3=Exit    F5=Accept   F9=Swap
```

3. In the **Modify the work file allocations?** field, specify Y.

4. On the Work Files panel, specify the information to set the defaults for the new work file.

```
                    Work Files

Extracted values file:  . . . . userid.DET.UNIWRK
   Primary space: 0005 Secondary space: 0001 (tracks)
Out-of-balance keys file: . . . userid.DET.UNIWRK1
   Primary space: 0010 Secondary space: 0005 (tracks)
Sorted/accumulated values file: userid.DET.UNIWRK2
   Primary space: 0010 Secondary space: 0005 (tracks)
Merged history file:  . . . . . userid.DET.UNIWRK3
   Primary space: 0010 Secondary space: 0005 (tracks)
Merged history by key file: . . userid.DET.UNIWRK4
   Primary space: 0010 Secondary space: 0005 (tracks)
Driver key file:  . . . . . . . userid.DET.UNIWRK5
   Primary space: 0010 Secondary space: 0005 (tracks)


        Unit: SYSALLDA  Volume: USER01
Managementclass:_____ Storageclass: _____ Dataclass: _____


 F1=Help     F2=Split    F3=Exit     F5=Accept    F9=Swap
```

For each work file, the default dataset name begins with your user ID, followed by a period, followed by DET, followed by a period, followed by the default name. We recommend that you use the existing names unless they conflict with your site standards.

Primary space. Optionally, change the number of tracks initially allocated for each dataset.

Secondary space. Optionally, change the number of tracks that will be added incrementally if needed.

Unit. Unit where the data will be stored.

Volume. Volser where the report datasets will be stored.

Managementclass. The Managementclass of the files.

Storageclass. The SMS Storageclass of the files.

Dataclass. The SMS Dataclass of the files.

Upgrading from a Pre-Release 4.0 Release

If you are upgrading from a release previous to Release 4.0, after you complete the relevant steps in this chapter, you must follow the instructions in

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Upgrading from a Pre-Release 4.0 Release

This chapter provides instructions for upgrading ACR/Summary and ACR/Detail for z/OS from a release previous to Release 4.0. Release 4.0 provides extended internal items, which increase the maximum extractable length for numeric data from 15 to 30 digits, and for text data from 8 to 80 characters. This upgrade expands your definition and history databases to make room for these new items. These procedures are required for moving from a release previous to Release 4.0.

This document contains the following sections:

■ "Upgrading ACR/Summary" on page 51
■ "Upgrading ACR/Detail" on page 60
■ "Conversion Reports" on page 69

Upgrading ACR/Summary

Before you begin, you should know the following:

■ Batch transaction cards created in earlier releases are supported in the new release. Newly generated batch cards will be in the new format.

■ The definition and history databases must be expanded. Expansion JCL is provided.

■ No changes are required to the database names in your existing JCL or online environment.

■ JCL for some output and interim work files generated in previous releases will need to be modified. A program to automatically modify the JCL and PROCs is provided.

■ Customer application programs using the Program Interface Mode will need to be recompiled using the updated ACRAREA copybook.

Task 1: Plan and Schedule your Migration

Plan your migration for when your ACR/Summary files are not in use. Read through the remaining tasks to determine the most convenient time.

If your ACR/Summary implementation generates output files that will be used as inputs to other jobs or ACR/Summary utilities after the upgrade, you will need to manually increase the size of those files before running jobs after the upgrade. An example of this type of file is a History Unload file that you will reload after the upgrade.

Task 2: Run the Expansion JCL for the Databases

JCL is provided to expand the history and definition databases. This JCL renames the original database with the suffix OLD and names the converted database to the original name.

If dual history databases are used in ACR/Summary, both history databases should be expanded.

1. Edit and submit member SUMEXPDF located in the *userid.*PROCLIB. Verify that the return code is 0 before continuing. This job expands your definition database.

> **Note:** The J5 (rule item) record in the definition database will be reformatted in the definition database to accommodate extended items within the values.

2. Edit and submit member SUMEXPHF located in the *userid.*PROCLIB. Verify that the return code is 0 before continuing. This job expands your history database.

3. Review the before and after list history reports generated by the history expansion job to verify that the expanded history database contains the same number of records as the original database.

4. Optional: Browse your history file to verify that the release/version in the control record has changed to 0400.

```
RBA        Len      1...5...10....5...20....5...30....5...40....5...50....5...60
0          9020     .......................0400USR1.SUM.HIST
```

> **Note:** The expansion JCL has renamed your original databases to have a.OLD at the end of the name. If you need to rerun the expansion JCL for any reason, you should modify the names in the JCL or rename the original database before proceeding.

Task 3: Make the JCL Changes

> **Note:** The ACRJCL40 conversion job described here can make some or all of the JCL changes required for support of extended items. Alternatively, you can make the JCL changes manually. The changes are listed in ACR/Summary JCL Conversion Parameter Tables on page 56.

This section is made up of the following subsections:

■ "ACRJCL40 Conversion Job" below

■ "Setting the Flags for the ACRJCL40 Job" on page 54 in the following section

■ "Edit and Submit the ACRJCL40" on page 55

■ "ACR/Summary JCL Conversion Parameter Tables" on page 56

ACRJCL40 Conversion Job

The ACR/Summary and ACR/Detail JCL Conversion Job for Release 4.0 (member ACRJCL40 in your *userid.*PROCLIB) executes the module of the same name, ACRJCL40.

The job creates a backup of your JCL and then processes the RECFM, LRECL, and BLKSIZE statements for ACR/Summary and ACR/Detail jobs in your original JCL or PROCLIB dataset. If you are still using the older format DDnames such as ACRCNTL, these will also be updated to the current DDnames. The processing will be based on the processing mode you choose, as described in the following section, "Setting the Flags for the ACRJCL40 Job" on page 54. The job generates the "Conversion Reports" on page 69.

You need to run ACRJCL40 once for ACR/Summary and ACR/Detail. You must run it for every JCL library you have. You do not need to run it for each product you license. You do not need to run it again if you ran it for ACR/Detail.

Setting the Flags for the ACRJCL40 Job

The ACRJCL40 JCL enables you to set the parameters shown below, which control the processing.

```
//ACRJCL40 EXEC PGM=ACRJCL40,PARM='NNN'
                                      |||
  Set the first parameter to Y        |||
  for Report Only Mode------------>|||
                                      ||
  Set the 2nd parameter to Y for      ||
  Change All mode----------------->||
                                      |
  Set the 3rd parameter to Y to       |
  run the JCL Conversion Summary       |
  Report with Changed Members Only-->|
```

These flags are detailed below.

Default Mode

As shown in the section above, the default mode is as follows:

```
//ACRJCL40 EXEC PGM=ACRJCL40,PARM='NNN'
```

With no flags set to Y, ACRJCL40 makes the JCL edits to the RECFM, LRECL, and BLKSIZE statements shown in the "Automatic Changes Table" on page 56. All DDs in the JCL that have the older DDNames (such as ACRCNTL) will be changed to the new DDNames (such as UNICF).

If you use program interface mode or IDCAMS steps, you will also need to make the changes in the "Manual Changes Table" on page 58.

Report Only Flag

For Report Only mode, set the parameters as follows:

```
//ACRJCL40 EXEC PGM=ACRJCL40,PARM='YYN'
```

With these settings, no changes are made to the JCL, but potential changes are reported.

In Report Only mode, the conversion reports (see "Conversion Reports" on page 69) show potential, rather than actual changes, allowing you to verify that the results you want will be achieved before performing the actual conversion in Change All mode.

For instance, UNIWRK LRECLs for overrides to UDSUTIL jobs may be changed to the LRECL for UDS2000 if the JCL is executing a PROC, meaning the program being executed is not immediately prior to the DD. If the Potential Changes Report shows that this is going to occur, you may want to reconsider using Change All mode.

Change All Flag

Change All mode will be appropriate for some sites but should be used with caution and only after running in Report Only mode.

In this mode, ACRJCL40 will make the changes in the "Automatic Changes Table" on page 56 and also make the changes for JCL overrides, program interface, and DB2 jobs. (The IDCAMS changes shown in the "Manual Changes Table" on page 58 must still be made manually). The ACRJCL40 changes will be as follows:

■ All DDs in the JCL that have the older DDNames (such as ACRCNTL) will be changed to the new DDNames (such as UNICF).

■ The DCB parameters for all program executions for the DDNames listed in the "Automatic Changes Table" on page 56, including JCL overrides, will be changed regardless of the program being executed. (For example, this flag allows customers overriding the User Report and it's DCB information to use the automatic JCL conversion utility to make all needed changes to their JCL.) Values for program interface jobs, DB2 jobs, and other jobs that might be completely non-Infogix related that happen to contain the DD names used in UAC2000 or UDS2000 will be changed.

The typical parameter settings for Change All mode are as follows:

```
//ACRJCL40 EXEC PGM=ACRJCL40,PARM='NYY'
```

Summary Report with Changed Members Only Flag

Set the third parameter to Y if you want the "JCL Conversion Summary Report (DDName ACRSUMM)" described on page 69 to show only the members with changes.

Edit and Submit the ACRJCL40

Edit and run ACRJCL40 as follows:

1. Edit the JCL to specify your existing JCL or PROCLIB database as SYSUT1, which is the YOUR.JCLFILE.

2. Edit the JCL to specify a file name for the backup of your JCL or PROCLIB, and verify that the space parameter on the backup is sufficient for your JCL file that is being revised.

3. Revise the load library names and work file prefixes as requested in the JCL.

4. Set the parameters in the JCL to your desired settings based on the information in "Setting the Flags for the ACRJCL40 Job" above.

5.   Submit the JCL.

ACR/Summary JCL Conversion Parameter Tables

This section contains two tables:

■   "Automatic Changes Table" below

■   "Manual Changes Table" on page 58

The changes shown in both of the tables may be required, as detailed below.

Automatic Changes Table

The changes shown in this table are required for all sites updating to Release 4.0 or higher. These changes can be made automatically by the ACRJCL40 conversion program, or you can make them manually if you prefer.

Utility or Job (Job Name)	DDName (Description)	To modify manually, locate the first line... ...and make the changes shown in bold in the second line
File Interface (UAC2000)	UNIUSR (User Report)	DCB=(RECFM=FBA,LRECL=133,BLKSIZE=133) DCB=(RECFM=**VBA**,LRECL=**255**,BLKSIZE=**0**)
	UNIEXTR (Balancing Extract File)	DCB=(RECFM=FB,LRECL=132,BLKSIZE=1320) DCB=(RECFM=FB,LRECL=**200**,BLKSIZE=**0**)
Direct Input (UAC3000)	UNIEXTR (Balancing Extract File)	DCB=(RECFM=FB,LRECL=132,BLKSIZE=1320) DCB=(RECFM=FB,LRECL=**200**,BLKSIZE=**0**)
	UNISRT (Temporary Sort Space)	DCB=(RECFM=FB,LRECL=1200,BLKSIZE=12000) DCB=(RECFM=FB,LRECL=**9200**,BLKSIZE=**0**
	UNIUSR (User Report)	DCB=(RECFM=FBA,LRECL=133,BLKSIZE=133) DCB=(RECFM=**VBA**,LRECL=**255**,BLKSIZE=**0**)
List Definition Database (SUMDFL)	UNIWRK (Temporary Work Space)	DCB=(RECFM=FB,LRECL=200,BLKSIZE=12000) DCB=(RECFM=FB,LRECL=**350**,BLKSIZE=**0**)
Cross Reference Internal Items (SUMDFX)	UNIWRK (Temporary Work Space)	DCB=(RECFM=FB,LRECL=200,BLKSIZE=2000) DCB=(RECFM=FB,LRECL=**350**,BLKSIZE=**0**)

Utility or Job (Job Name)	DDName (Description)	To modify manually, locate the first line... ...and make the changes shown in bold in the second line
List History Database (SUMHFL)	UNIHFW (Temporary Work Space)	DCB=(RECFM=FB,LRECL=1200,BLKSIZE=12000) DCB=(RECFM=FB,LRECL=**9200**,BLKSIZE=**0**)
Reorganize History (SUMHFR)	UNIHFW (Temporary Work Space)	DCB=(RECFM=FB,LRECL=1200,BLKSIZE=12000) DCB=(RECFM=FB,LRECL=**9200**,BLKSIZE=**0**)
Copy History – Unload Option (SUMHFC)	UNIHFW (Temporary Work Space)	DCB=(RECFM=FB,LRECL=1200,BLKSIZE=12000) DCB=(RECFM=FB,LRECL=**9200**,BLKSIZE=0)
	UNITHFW (Temporary History Transfer Output File)	DCB=(RECFM=FB,LRECL=1200,BLKSIZE=12000) DCB=(RECFM=FB,LRECL=**9200**,BLKSIZE=0)
Create Comma Delimited Text File (SUMHCSV)	UNICSV (Comma Delimited Text File)	DCB=(RECFM=VB,LRECL=1898,BLKSIZE=4096) DCB=(RECFM=VB,LRECL=**10202**,BLKSIZE=**0**)
History Extract (SUMHFX)	UNIHFW (History Extract Utility - Packed Format)	DCB=(RECFM=FB,LRECL=1200,BLKSIZE=12000) DCB=(RECFM=FB,LRECL=**9200**,BLKSIZE=**0**)
	UNIHFW (History Extract Utility, Alternate Format)	DCB=(RECFM=FB,LRECL=2000,BLKSIZE=0) DCB=(RECFM=FB,LRECL=**10000**,BLKSIZE=**0**)
Archive History (SUMFHCA)	UNIARF (Archive History File)	DCB=(RECFM=FB,LRECL=1020,BLKSIZE=10200) DCB=(RECFM=FB,LRECL=**9200**,BLKSIZE=**0**)
	UNISRT (Archive History File)	DCB=(RECFM=FB,LRECL=1200,BLKSIZE=12000) DCB=(RECFM=FB,LRECL=**9200**,BLKSIZE=**0**)
	UNIHFW (Temporary Work Space)	DCB=(RECFM=FB,LRECL=1200,BLKSIZE=12000) DCB=(RECFM=FB,LRECL=**9200**,BLKSIZE=**0**)

Utility or Job (Job Name)	DDName (Description)	To modify manually, locate the first line... ...and make the changes shown in bold in the second line
Restore History (SUMFHCA)	UNIHFW (Temporary Work Space)	DCB=(RECFM=FB,LRECL=1200,BLKSIZE=12000) DCB=(RECFM=FB,LRECL=**9200**,BLKSIZE=**0**)
	UNISRT (Restore History)	DCB=(RECFM=FB,LRECL=1200,BLKSIZE=12000) DCB=(RECFM=FB,LRECL=**9200**,BLKSIZE=**0**)
Print Management Report (SUMHFMR)	UNIHFW (Temporary Work Space)	DCB=(RECFM=FB,LRECL=1200,BLKSIZE=6000) DCB=(RECFM=FB,LRECL=**9200**,BLKSIZE=**0**)

Manual Changes Table

These changes are required if you use program interface mode or IDCAMS steps. If you use "Change All Flag" described on page 55, you need to make only the IDCAMS changes manually.

Utility or Job (Job Name)	DDName (Description)	To modify manually, locate the first line... ...and make the changes shown in bold in the second line
Program Interface (UAC1000)	UNIEXTR (Balancing Extract File)	DCB=(RECFM=FB,LRECL=132,BLKSIZE=1320) DCB=(RECFM=FB,LRECL=**200**,BLKSIZE=**0**)
	UNIUSR (User Report)	DCB=(RECFM=FBA,LRECL=133,BLKSIZE=133) DCB=(RECFM=**VBA**,LRECL=**255**,BLKSIZE=**0**)
SUMINIT (IDCAMS)[1]	Definition File Initialization	RECORDSIZE(128 128) RECORDSIZE(**255 255**)
	History File Initialization	RECORDSIZE(1020 1020) RECORDSIZE(**9020 9020**)
SUMHFR (IDCAMS)[1]	Reorganize History	RECORDSIZE(1020 1020) RECORDSIZE(**9020 9020**)
SUMHFCA (IDCAMS)[1]	Restore History	RECORDSIZE(1020 1020) RECORDSIZE(**9020 9020**)

[1]The IDCAMS changes must always be made manually.

Task 4: Recompile User Exit Programs and Programs that Use Program Interface Mode as Necessary

For programs that use Program Interface Mode, modify the compile step as follows:

■ The step should point to the new release COPY library which contains a modified version of the ACRAREA member. This is usually the SRCELIB DD statement in the compile step.

■ The step should use the ARITH(EXTEND) compile option to support the new 30-digit numbers and the DYNAM compile option to ensure that you always link in with the most current UAC1000 mode.

Recompile any user exit programs or application programs that you have modified using the newly revised copybooks in COPYLIB.

Task 5: Review Impact of File Size Change

After the new release is fully implemented, the following output files will use the new file sizes. If your site uses these files for non-ACR processing, you will need to assess the impact and make changes as necessary.

■ History extract output file (SUMHFX)

■ Balancing extract file (UNIEXTR)

■ User Report (UNIUSR)

Task 6: Regenerate Direct Input Files If Necessary

Direct input data files for the Direct Input Program(UAC3000) generated in prior releases are not compatible with the new release. If you will be using these files, regenerate them in the user interface. Select Window > Direct Input Data. For more details, see the *ACR/Summary User Guide for z/OS.*

Task 7: Regenerate Update History Utility Control Cards If Necessary

Utility control cards from the Update History utility (SUMHFU) generated in prior releases are not compatible with the new release.

If you will be using these cards, regenerate them through the user interface. Select **Setup** > **Database utilities** > **Database update utilities** > **Update History**. For more details, see the *ACR/Summary User Guide for z/OS.*

Task 8: Test Your Changes

Use your site's standard procedure for testing new releases.

Upgrading ACR/Detail

Before you begin, you should know the following:

- Batch transaction cards created in prior releases are supported in the new release. Newly generated batch cards will be in the new format.

- The definition and history databases must be expanded. Expansion JCL is provided.

- No changes are required to the database names in your existing JCL or online environment.

- JCL for some output and interim work files generated in previous releases will need to be modified. A program to automatically modifiy the JCL and PROCs is provided.

- If you currently use the Extraction Program Interface will need to be recompiled.

- Any file definition that references the control record in the history database needs to be edited.

Task 1: Plan and Schedule your Migration

Plan your migration for when your ACR/Detail files are not in use. Read through the remaining tasks to find out what is required and when would be the most convenient time.

If your ACR/Detail implementation generates output files that will be used as input files to other jobs or ACR/Detail utilities after the upgrade, you will need to manually increase the size of those files before running jobs after the upgrade. For example, if you use multiple days of UNIDATA file as input to another job, the length of this file is changing and you will want to adjust your existing files to match.

Task 2: Run the Expansion JCL for the Databases

JCL is provided to expand the history and definition databases. This JCL renames the original database with the suffix OLD and names the converted database to the original name.

1. Edit and submit DETEXPHF and DETEXPDF members located in the PROCLIB. Verify that the return code is 0 before continuing. The DETEXPHF member expands your ACR/Detail history database. The DETEXPDF member expands your ACR/Detail definition database.

2. Review the before and after List History reports to verify that the expanded history database contains the same number of records as the original database.

3. Optional: Browse your history file to verify that the release/version in the control record has changed to 0400.

   Release 4.0 includes an internal change to the control record. If you have the ability to browse a VSAM record, you can verify that the expansion JCL performed the expansion successfully by checking this control record.

   Verify that the number in position 55 is 0400, as shown below.

```
RBA        Len        1...5...<0====5===20====5===30====5===40====5===50===>5...
0          263        .......*.................................................0400
```

> **Note:** The expansion JCL has renamed your original database to have a.OLD at the end of the name. If you need to rerun the expansion JCL for any reason, you should modify the names in the JCL or rename the original database before proceeding.

Task 3: Make the JCL Changes

> **Note:** The ACRJCL40 conversion job described here can make some or all of the JCL changes required for support of Release 4.0 or higher. Alternatively, you can make the JCL changes manually. The changes are listed in ACR/Detail JCL Conversion Parameter Tables on page 64.

JCL Conversion Member ACRJCL40

This section is made up of the following subsections:

∎ "ACRJCL40 Conversion Job" below

∎ "Setting the Flags for the ACRJCL40 Job" on page 62

- "Edit and Submit the ACRJCL40" on page 64
- "ACR/Detail JCL Conversion Parameter Tables" on page 64

ACRJCL40 Conversion Job

The ACR/Summary and ACR/Detail JCL Conversion Job for Release 4.0 (member ACRJCL40 in your *userid.*PROCLIB) executes the module of the same name, ACRJCL40.

The job creates a backup of your JCL and then processes the RECFM, LRECL, and BLKSIZE statements for ACR/Summary and ACR/Detail jobs in your original JCL or PROCLIB dataset. If you are still using the older format DDnames such as ACRCNTL, these will also be updated to the current DDnames. The processing will be based on the processing mode you choose, as described in the following section, "Setting the Flags for the ACRJCL40 Job". The job generates the "Conversion Reports" on page 69.

You need to run ACRJCL40 once for ACR/Summary and ACR/Detail. You must run it for every JCL library you have. You do not need to run it for each product you license. If you have already run this step with ACR/Summary, you do not need to rerun it for ACR/Detail.

Setting the Flags for the ACRJCL40 Job

The ACRJCL40 JCL enables you to set the parameters shown below, which control the processing.

```
//ACRJCL40 EXEC PGM=ACRJCL40,PARM='NNN'
                                      |||
 Set the first parameter to Y      ||||
 for Report Only Mode------------>|||
                                      ||
 Set the 2nd parameter to Y for    ||
 Change All mode----------------->|
                                     |
 Set the 3rd parameter to Y to     |
 run the JCL Conversion Summary     |
 Report with Changed Members Only-->|
```

These flags are detailed below.

Default Mode

As shown in the section above, the default mode is as follows:

```
//ACRJCL40 EXEC PGM=ACRJCL40,PARM='NNN'
```

With no flags set to Y, ACRJCL40 makes the JCL edits to the RECFM, LRECL, and BLKSIZE statements shown in the "Automatic Changes Table" on page 65. All DDs in the JCL that have the older DDNames (such as ACRCNTL) will be changed to the new DDNames (such as UNICF).

If you use 1) the Extraction Program Interface (EPI) that is not using UDPTEST or 2) IDCAMS steps, you will also need to make the changes in the "Manual Changes Table" on page 67.

Report Only Flag

For Report Only mode, set the parameters as follows:

```
//ACRJCL40 EXEC PGM=ACRJCL40,PARM='YYN'
```

With these settings, no changes are made to the JCL, but potential changes are reported.

In Report Only mode, the conversion reports (see "Conversion Reports" on page 69) show potential, rather than actual changes, allowing you to verify that the results you want will be achieved before performing the actual conversion in Change All mode.

For instance, UNIWRK LRECLs for overrides to UDSUTIL jobs may be changed to the LRECL for UDS2000 if the JCL is executing a PROC, meaning the program being executed is not immediately prior to the DD. If the Potential Changes Report shows that this is going to occur, you may want to reconsider using Change All mode.

Change All Flag

Change All mode will be appropriate for some sites but should be used with caution and only after running in Report Only mode.

In this mode, ACRJCL40 will make the changes in the "Automatic Changes Table" on page 65 and also make the changes for EPI that uses UDPTEST, JCL overrides, and DB2 jobs. (The IDCAMS changes shown in the "Manual Changes Table" on page 67 must still be made manually). The changes will be as follows:

■ All DDs in the JCL that have the older DDNames (such as ACRCNTL) will be changed to the new DDNames (such as UNICF).

■ The DCB parameters for all program executions for the DDNames listed in the "Automatic Changes Table" on page 65, including JCL overrides, will be changed regardless of the program being executed. (For example, this flag allows customers overriding the User Report and it's DCB information to use the automatic JCL conversion utility to make all needed changes to their JCL.) Values for EPI jobs, DB2 jobs, and other jobs that might be completely non-Infogix related that happen to contain the DD names used in UAC2000 or UDS2000 will be changed.

The typical parameter settings for Change All mode are as follows:

```
//ACRJCL40 EXEC PGM=ACRJCL40,PARM='NYY'
```

Summary Report with Changed Members Only Flag

Set the third parameter to Y if you want the "JCL Conversion Summary Report (DDName ACRSUMM)" described on page 69 to show only the members with changes.

Edit and Submit the ACRJCL40

Edit and run ACRJCL40 as follows:

1. Edit the JCL to specify your existing JCL or PROCLIB database as SYSUT1, which is the YOUR.JCLFILE.

2. Edit the JCL to specify a file name for the backup of your JCL or PROCLIB, and verify that the space parameter on the backup is sufficient for your JCL file that is being revised.

3. Revise the load library names and work file prefixes as requested in the JCL.

4. Set the parameters in the JCL to your desired settings based on the information in "Setting the Flags for the ACRJCL40 Job" above.

5. Submit the JCL.

ACR/Detail JCL Conversion Parameter Tables

This section contains two tables:

■ "Automatic Changes Table" below

■ "Manual Changes Table" on page 67

The JCL changes shown in both of the tables may be required, as detailed below.

Automatic Changes Table

The changes shown in this table are required for all sites updating to Release 4.0 or higher. These changes can be made automatically by the ACRJCL40 conversion program, or you can make them manually if you prefer.

Utility or Job (Job Name)	DDName (Description)	To modify manually, locate the first line... ...and make the changes shown in bold in the second line
History Extract (DETDHFE)	UNIDHFE (History Extract, Standard Forma)	DCB=(RECFM=VB,LRECL=8243,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16243**,BLKSIZE=**0**)
	UNIDHFE (History Extract, Alternate Format)	DCB=(RECFM=VB,LRECL=18103,BLKSIZE=0) DCB=(RECFM=VB,LRECL=**26206**,BLKSIZE=**0**)
Execution EPI test facility (UDPTEST)	UNIDUR (User Report)	DCB=(RECFM=FBA,LRECL=133,BLKSIZE=133) DCB=(RECFM=**VBA**,LRECL=**255**,BLKSIZE=**0**)
	UNIDATA (Reconciliation Output File)	DCB=(RECFM=VB,LRECL=8243,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16243**,BLKSIZE=**0**)
	UNIDAT2 (Reconciliation Freeform Output File)	DCB=(RECFM=VB,LRECL=14929,BLKSIZE=0) DCB=(RECFM=VB,LRECL=**24032**,BLKSIZE=**0**)
	UNIWRK (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16218**,BLKSIZE=**0**)
	UNIWRK1 (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16218**,BLKSIZE=**0**)
	UNIWRK2 (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16218**,BLKSIZE=**0**)
	UNIWRK3 (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8259,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16259**,BLKSIZE=**0**)

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Utility or Job (Job Name)	DDName (Description)	To modify manually, locate the first line... ...and make the changes shown in bold in the second line
List Definition Database (DETDDFL)	UNIWRK (Temporary Work Space)	DCB=(RECFM=FB,LRECL=200,BLKSIZE=2000) DCB=(RECFM=FB,LRECL=**350**,BLKSIZE=**0**)
History Update (DETDHFU)	UNIWRK1 (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8259,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16259**,BLKSIZE=**0**)
Reorganize History (DETDHFR)	UNIWRK3 (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8259,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16259**,BLKSIZE=**0**)
Copy history – Unload Option (DETDHFC)	UNIHFW (History Transfer Output File)	DCB=(RECFM=VB,LRECL=8459,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16459**,BLKSIZE=**0**)
Reconciliation (UDS2000 and UDPTEST)	UNIDUR (User Report)	DCB=(RECFM=FBA,LRECL=133,BLKSIZE=133) DCB=(RECFM=**VBA**,LRECL=**255**,BLKSIZE=**0**)
	UNIDATA (Reconciliation Output File)	DCB=(RECFM=VB,LRECL=8243,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16243**,BLKSIZE=**0**)
	UNIDAT2 (Reconciliation Freeform Output File)	DCB=(RECFM=VB,LRECL=14929,BLKSIZE=0) DCB=(RECFM=VB,LRECL=**24032**,BLKSIZE=**0**)
	UNIWRK (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16218**,BLKSIZE=**0**)
	UNIWRK1 (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16218**,BLKSIZE=**0**)
	UNIWRK2 (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16218**,BLKSIZE=**0**)
	UNIWRK3 (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8259,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16259**,BLKSIZE=**0**)

Manual Changes Table

These changes are required if you use 1) the Extraction Program Interface (EPI) that do not use UDPTEST or 2) IDCAMS steps. If you use "Change All Flag" described on page 63, you need to make only the IDCAMS changes manually.

Utility or Job (Job Name)	DDName (Description)	To modify manually, locate the first line... ...and make the changes shown in bold in the second line
Expand History (DETEXPD)	Infile [1]	RECORDSIZE(AHFAHS 8255) RECORDSIZE(AHFAHS **16255**) BUFFERSPACE(8255) **Optimize bufferspace for your implementation with your VSAM file admin or eliminate the parameter and let the system select the optimal blocksize.**
	DD02	DCB=(RECFM=VB,LRECL=8259,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16259**,BLKSIZE=**0**)
DETINIT (IDCAMS) [1]	Definition File Initialization	RECORDSIZE(128 128) RECORDSIZE(**255 255**)
	History File Initialization [1]	RECORDSIZE(AHFAHS 8255) RECORDSIZE(AHFAHS **16255**) BUFFERSPACE(8255) **Optimize bufferspace for your implementation with your VSAM file admin or eliminate the parameter and let the system select the optimal blocksize.**
Extraction Program Interface (EPI) [2]	UNIDUR (User Report)	DCB=(RECFM=FBA,LRECL=133,BLKSIZE=133) DCB=(RECFM=**VBA**,LRECL=**255**,BLKSIZE=**0**)
	UNIDATA (Reconciliation Output File)	DCB=(RECFM=VB,LRECL=8243,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16243**,BLKSIZE=**0)**
	UNIDAT2 (Reconciliation Freeform Output File)	DCB=(RECFM=VB,LRECL=14929,BLKSIZE=0) DCB=(RECFM=VB,LRECL=**24032**,BLKSIZE=**0)**
	UNIWRK (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16218**,BLKSIZE=**0)**

Utility or Job (Job Name)	DDName (Description)	To modify manually, locate the first line... ...and make the changes shown in bold in the second line
	UNIWRK1 (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16218**,BLKSIZE=**0)**
	UNIWRK2 (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16218**,BLKSIZE=**0)**
	UNIWRK3 (Temporary Work Space)	DCB=(RECFM=VB,LRECL=8259,BLKSIZE=23476) DCB=(RECFM=VB,LRECL=**16259**,BLKSIZE=**0)**

1 The IDCAMS changes must always be made manually.
2 Make Extraction Interface Program changes to any EPI jobs that do not use UDPTEST.

Task 4: Recompile Programs as Necessary

1. Through the new release user interface, recompile all Extraction Program Interface programs. For instructions, see the *ACR/Detail User Guide for z/OS.*.

   Note: Your compiler options must support 31-digit numbers, which is the ARITH(EXTEND) compiler option.

2. Recompile any customer application program or user exit program that uses the copybooks in COPYLIB.

Task 5: Edit File Definitions That Reference the Control Record

The control record in the ACR/Detail History Database (*yourusername*.DET.HIST) has been modified to accommodate the expanded internal items. The control record is the first record of the database and does not contain any key information, job information, or historical values. This record contains initialization information only.

Any file definitions that reference this record must be modified because of the following changes to the control record:

■ The history update date has been relocated from position 103 through 106 to position 190 through 193.

■ The history update time has been relocated from position 107 through 110 to position 194 to 197.

Task 6: Review Impact of File Size Change

After the new release is fully implemented, the output files will use the new format. If your site uses these files for non-ACR processing, you will need to assess the impact and make changes as necessary.

■ History extract output file (UNIDHFE)

■ Reconciliation output file (UNIDATA)

■ Reconciliation freeform output file (UNIDAT2)

■ User Report (UNIDUR)

Task 7: Regenerate History Update Control Cards, If Necessary

Utility control cards from the Update History utility (UDSHFU) generated in releases previous to 4.0 are not compatible with the new release.

If you will be using these cards, regenerate them through the user interface. Select **Setup** > **Database utilities** > **Database update utilities** > **Update History**. For more details, see the *ACR/Detail User Guide for z/OS.*

Task 8: Test Your Changes

Use your site's standard procedure for testing new releases.

Conversion Reports

JCL Conversion Member ACRJCL40 generates two conversion reports.

JCL Conversion Summary Report (DDName ACRSUMM)

This report summarizes the processing performed by ACRJCL40. More information is provided after the report sample.

Note: ■ **Heading:** If you ran ACRJCL40 in Report Only mode, the second line of the title will be Potential Changes as shown below. Otherwise this title wording will be Changes Completed.

■ **Changed members only:** If you set the Summary Report with Changed Members Only Flag to Y, this report will show only the members with changes.

Conversion Reports

```
JCL40 releasenumber                              COPYRIGHT INFOGIX, INC. yyyy
DATE: yy/mm/dd  ACRJCL40 - JCL CONVERSION SUMMARY REPORT   REPORT ID:ACRJCL40 PAGE 1
TIME: 09:06:21              POTENTIAL CHANGES
- MEMBER    INPUT STATEMENTS   MODIFICATIONS
--------    ----------------   -------------
AMYTEST1               82            6
ANNJOB1               86            6
DETDB2                98            6
DETDDFL               47            1
DETDFB                40            0
DETDHFD               32            0
DETDHFDR              33            0
DETDHFL               55            1
DETDHFR               55            1
DETINIT              102            0
DETUPDT               49            0
DET2000               84            6
JANFORD1              82            6
MANDAYS1              82            6
MULTILVL              87            6
PAMGRIM1              85            6
PAMGRIM2              88            6
PAMGRIM3              88            6
SYLJOB1               96            6
TONYTSE1              85            6
--------    ----------------   -------------
 TOTALS:            1,456           75
TOTAL NBR OF MBRS PROCESSED:      20
TOTAL NBR OF MBRS MODIFIED:       15
```

The report shows the following for each member of your JCL Library:

■ The type of changes reported, actual or potential. This information is shown in the heading.

■ The name of the member.

■ The number of input statements processed.

■ The number of modifications made or identified.

The report also shows the following totals for all members:

■ Total number of input statements processed.

■ Total number of modifications made or identified.

■ Total number of members processed.

■ Total number of members modified or identified for modification.

JCL Conversion Detailed Report (DDName ACRDRPT)

This report provides a detailed before-and-after picture of the actual or potential changes to DDnames and DCB information performed by ACRJCL40. An excerpt from a sample report is shown below. Note the following regarding this excerpt:

■ **Title and Column Heading:** When running ACRJCL40 in Report Only mode, this report shows potential changes, so the second title line and the third column heading will both be Potential Changes as shown below. Otherwise the report shows actual changes, and the title wording and colum heading will be Changes Completed and Changed Values, respectively.

■ **Space limitations in the example:** In the report excerpt below, the LRECL and BLKSIZE information at the right end of each line is not displayed because of insufficient space.

■ **Change All mode:** When running ACRJCL40 in Change All mode, this report includes the changes shown for programs other than Infogix modules such as IKJEFT01 shown here.

```
JCL40 releasenumber                                                   COPYRIGHT INFOGIX, INC.
DATE: yy/mm/dd              ACRJCL40 JCL CONVERSION DETAILED REPORT      REPORT ID: ACRJCL40    PAGE 1
TIME: 12:27:14                             POTENTIAL CHANGES
MEMBER    PROGRAM  POTENTIAL CHANGES

-------- -------- ----------------------------------------------------------------------------------
AMYTEST1 UDS2000  UNIDUR  CHANGED // DCB=(RECFM=FBA,LRECL=133,BLKSIZE=133)    TO //   DCB=(RECFM=VBA,
AMYTEST1 UDS2000  UNIDATA CHANGED // DCB=(RECFM=VB,LRECL=8243,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
AMYTEST1 UDS2000  UNIWRK  CHANGED // DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
AMYTEST1 UDS2000  UNIWRK1 CHANGED // DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
AMYTEST1 UDS2000  UNIWRK2 CHANGED // DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
AMYTEST1 UDS2000  UNIWRK3 CHANGED // DCB=(RECFM=VB,LRECL=8259,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
ANNJOB1  UDS2000  UNIDUR  CHANGED // DCB=(RECFM=FBA,LRECL=133,BLKSIZE=133)    TO //   DCB=(RECFM=VBA,
ANNJOB1  UDS2000  UNIDATA CHANGED // DCB=(RECFM=VB,LRECL=8243,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
ANNJOB1  UDS2000  UNIWRK  CHANGED // DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
ANNJOB1  UDS2000  UNIWRK1 CHANGED // DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
ANNJOB1  UDS2000  UNIWRK2 CHANGED // DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
ANNJOB1  UDS2000  UNIWRK3 CHANGED // DCB=(RECFM=VB,LRECL=8259,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
DETDB2   IKJEFT01 UNIDUR  CHANGED // DCB=(RECFM=FBA,LRECL=133,BLKSIZE=133)    TO //   DCB=(RECFM=VBA,
DETDB2   IKJEFT01 UNIDATA CHANGED // DCB=(RECFM=VB,LRECL=8243,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
DETDB2   IKJEFT01 UNIWRK  CHANGED // DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
DETDB2   IKJEFT01 UNIWRK1 CHANGED // DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
DETDB2   IKJEFT01 UNIWRK2 CHANGED // DCB=(RECFM=VB,LRECL=8216,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
DETDB2   IKJEFT01 UNIWRK3 CHANGED // DCB=(RECFM=VB,LRECL=8259,BLKSIZE=23476), TO //   DCB=(RECFM=VB,
```

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