Advantage™ VISION:Inform® for IMS/DC™ and IMS/TM™

Installation Guide

4.0

Computer Associates®

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Chapter 1

Introduction

Thank you for choosing Advantage™ VISION:Inform® 4.0 for IMS (hereafter referred to as VISION:Inform). Before you install the software, read this chapter for important information.

This book describes how to install VISION:Inform for IMS. Any questions regarding the installation should be directed to Computer Associates® Technical Support. For more information, see Contacting Computer Associates at the end of this chapter.

About this Book

Read this chapter to acquire an understanding of the elements and processes that comprise the installation of VISION:Inform at your site.

Read the subsequent chapters in this book before starting the installation process so that you can have all of the details regarding the installation, customization, and maintenance of VISION:Inform.

Audience

The System Programming Group is usually responsible for software product installation and maintenance because of their SMP/E (System Modification Program Extended) knowledge. This book assumes a working knowledge of the SMP/E Facility and its processes.

A basic standalone SMP/E installation and maintenance approach is presented. For the knowledgeable SMP/E user, there is enough information provided in this book, and the supplied JCL and control statements, to allow integration with any site specific SMP/E standards. For the SMP/E novice, this book and the SMP/E documentation should provide enough of the information and concepts you need to complete the SMP/E installation process.

OS/390 SMP/E Facility

Starting with release 4.0 of VISION:Inform, the installation and maintenance is managed by and under the control of the OS/390® SMP/E facility as provided by IBM. This process differs significantly from previous releases (3.1 and prior) of VISION:Inform.

License Management Program

VISION:Inform uses the Computer Associates License Management Program (LMP), which provides a standardized and automated approach to the tracking of licensed software.

Installation Process

VISION:Inform is delivered on a tape cartridge. An LMP Product key certificate contains your execution key for each CPU licensed at your site. Other identifying information is provided on the external tape cartridge label.

Save all output generated during the installation, along with the system tape, for future reference.

The basic SMP/E setup and installation process is identical for all users. The first file on the system tape contains JCL for a job that transfers all the remaining system tape files to disk data sets. Once the system tape files are transferred to disk, you will have all of the elements that you need to prepare and complete the installation, customizing, and maintenance processes.

System Tape

The VISION:Inform system tape supplied for the OS/390 environment is a standard labeled tape cartridge containing 13 files. The following table shows the order and content of the 13 files on the tape.

File	Description
1	SMP/E control library
2	JCL library
3	Macro library
4	Source library
5	VISION:Inform system load library
6	FINANCE test file
7	Sample definition library
8	Definition Processor panel library
9	Definition Processor message library
10	Definition Processor skeleton library
11	Definition Processor CLIST library
12	VISION:Inform DBRM library
13	VISION:Inform utiility library

Installation Overview

The VISION:Inform installation is divided into the following sections:

- Licensing Requirements
- Coding and Integrating Your Licensing Key
- Load System Tape
- SMP/E Setup and the Basic Installation
- Setups and Customizing

Licensing Requirements

VISION:Inform interfaces with the Computer Associates Licensing System using the CA TNG Framework for OS/390 Common Services CAIRIM and its CA-LMP facility, which is used to track licensed software.

For more information regarding the CA TNG Framework for OS/390 Common Service CAIRIM and its CA-LMP facility, refer to the *Unicenter TNG Framework for OS/390 Reference Guide* and the *Unicenter TNG Framework for OS/390 Installation and Maintenance Guide*.

CA-LMP (License Management Program) is a standardized and automated approach for tracking licensed software. CA-LMP is provided as an integral part of CAIRIM, and is required for VISION:Inform to initialize properly.

If CAIRIM has not already been installed on your system, you must install it before you install and use VISION:Inform. Refer to the Unicenter TNG Framework for OS/390 documentation, included with your installation package, for information about installing CAIRIM.

Note: Once CAIRIM has been installed or maintained at GenLevel 9212 or above, CA-LMP support will be available for all Computer Associates products that support CA-LMP.

Coding and Integrating Your Licensing Key

The first task for the installation of VISION:Inform is to get your Computer Associates Licensing Key information coded and integrated into the CAIRIM CA-LMP facility. This is a standard function for all Computer Associates software products. You must add a record with your VISION:Inform CA-LMP Execution Key information, as provided on the key certificate, to the the KEYS member in the CAIRIM parameter data set, at the OPTLIB DD statement.

The CA-LMP key certificate you received with VISION:Inform contains the following information:

Field	Description
Product Name	The trademarked or registered product name as licensed for the designated site and the CPUs.
Product Code	A two-character code for the VISION:Inform System.
Supplement	The reference number of your license for VISION:Inform, which may be in the format nnnnnn - nnn.
CPU ID	The code identifying the specific CPU on which VISION:Inform

Field	Description
	is to be installed.
Execution Key	An encrypted code required by CA-LMP for VISION:Inform initialization. This is also referred to as the LMP Key.
Expiration Date	The date (ddmmmyy) your license for VISION:Inform expires.
Technical Contact	The name of the technical contact at your site who is responsible for the installation and maintenance of this licensed copy of VISION:Inform. This is the person to whom Computer Associates addresses all CA-LMP correspondence.
MIS Director	The name of the Director of MIS (or the person who performs this function at your site). If a person's name is omitted from the certificate, you should supply the actual certificate when correcting and verifying it.
CPU Location	The address of the building containing the CPU on which VISION:Inform is installed.

You must add the CA-LMP execution key information, as provided on the key certificate, to the CAIRIM parameters to ensure that VISION:Inform initializes properly. To define a CA-LMP execution key to the CAIRIM parameters, modify the KEYS member in the OPTLIB data set.

The parameter structure for member KEYS is:

```
PROD(pp) DATE(ddmmmyy) CPU(tttt-mmmm/ssssss) LMPCODE(kkkkkkkkkkkkkk)
```

where:

pp	The two-character required product code for VISION:Inform for IMS is 2P.
ddmmmyy	The CA-LMP licensing agreement expiration date (for example, 31JAN03).
tttt-mmmm	The CPU type and model (for example, 3090-0600) on which the product is to run; required. If the CPU type and/or model are less than four characters, insert blank spaces for the unused characters.
ssssss	The serial number of the CPU on which the product is to run; required.
kkkkkkkkkkkkkk	The execution key needed to run the product; required. The CA-LMP execution key can be found on the key certificate that was shipped with the product.

Here is an example of the parameter entry for the CA-LMP:

```
PROD(2P) DATE(31JAN03) CPU(3090-0600/315109) LMPCODE(5149K01131R08ES)
```

For more information about defining the CA-LMP execution keys using the CAIRIM parameters, refer to the *Unicenter TNG Framework for OS/390 Installation and Maintenance Guide.*

Load System Tape

File 1 on the system tape is a PDS that contains the JCL (LOADTAPE) for a job that transfers all the system tape files to disk data sets. The only JCL that needs to be prepared by the installer is an IEBCOPY JCL to copy the contents of file 1 to a PDS. This JCL is shown under Copying the First File in the chapter "Installation Instructions" as part of the first step of the installation process.

Once the first system tape file is loaded, you review, tailor, and submit the JCL in member LOADTAPE. This transfers system tape files 2-13 to disk data sets. The main consideration here is the high-level index name assigned to the disk data sets.

The appendix "JCL Samples" contains an alphabetic list of all the JCL members referenced in the installation procedures. A detail list of the delivered JCL members follows the alphabetic list.

Once all the system tape files are copied to disk data sets, all the elements (JCL, control statements, source, load modules, etc.) needed for the VISION:Inform installation process are available to the installer. At this point, you can save the system tape; you only need the disk data sets to complete the installation process.

See the chapter "Installation Instructions" for more information.

SMP/E Setup and the Basic Installation

This portion of the installation process uses the JCL and control statements in the PDS from file 1 on the system tape, INFORM.R40.SMPCNTL. There are jobs that define and allocate the following items:

- SMP/E target and distribution libraries for VISION:Inform
- An SMP/E CSI (Consolidated Software Inventory) library for tracking the activities
- SMP/E work data sets

The SMP/E setup has the following steps:

1. The elements from the indirect libraries, loaded to disk from the VISION:Inform system tape, are stored into the SMP/E work data sets using the RECEIVE operation. These elements include all the latest PTFs and APARs for VISION:Inform.
2. The SMP/E APPLY processing is performed to update the target libraries based on the Modification Control Statements (MCS) and a SMPJCLIN job stream. Essentially, the elements from the SMP/E work data sets are transferred to the target libraries. These elements include all the latest PTFs.

   Note: The APARs are special items and are handled during the Setups and Customizing portion of the installation process.
3. The SMP/E ACCEPT processing is performed to update the distribution libraries based on the Modification Control Statements (MCS) and a SMPJCLIN job stream. The elements from the SMP/E work data sets are transferred to the distribution libraries. This includes all the latest PTFs.

   Note: The APARs are special items and are handled during the Setups and Customizing portion of the installation process.

At this point, the SMP/E setup and the basic installation are complete. The target and distribution libraries are synchronized. The SMP/E concept is to APPLY to the target library and test the update/PTF/APAR. If you are not satisfied with the tests, you can RESTORE the modified target elements to their previous state from the distribution libraries. If the modifications perform as expected, you permanently ACCEPT the modifications into your distribution libraries. There is no direct method for undoing modifications once the ACCEPT processing is run.

See the chapter "Installation Instructions" for more information.

Setups and Customizing

VISION:Inform setup includes defining the product to IMS, allocating and initializing system files, setting up the Definition Processor, and additional optional steps. This process also includes the VISION:Inform IVP (Installation Verification Process), as well as instructions for copying the SMP/E product libraries to working versions of these libraries.

See the chapter "Installation Instructions" for more information.

CD-ROM Contents

- Online documentation
- Adobe® Acrobat® Reader software and Acrobat Help

About the Online Documentation

The CD-ROM contains the documentation for VISION:Inform. The documents, called books, are in Adobe Acrobat Portable Document Format (PDF) and are designed for you to read online using the Acrobat Reader.

Each online document contains a table of contents, index, and cross-references.

Note: You can install the online documentation only on a Windows® system.

Installing Online Documentation and the Acrobat Reader

You can install the online documentation on your local hard drive or on a network server. Alternately, you can access the documentation directly from the CD-ROM.

If you do not have Acrobat Reader installed, you can install it from the CD-ROM.

To install the online documentation, the Acrobat Reader, or both:

1. Close all application programs.
2. Insert the CD-ROM into the CD-ROM drive.
3. Click the Start menu and select Run.
4. In the Run dialog box, type: D:\Books\Setup.exe (where D: is the CD-ROM drive) and click OK.
5. Follow the instructions. Computer Associates recommends that you install the online documentation in the default directory (C:\ProgramFiles\CA\Advantage VISION_Inform 4.0\Books\) or a directory of your choice (for example, C:\Advantage VISION_Inform 4.0\Books\)

Viewing Online Documentation

Regardless of the location of the online documentation (on a local drive, a network server, or CD-ROM), you can view the online documentation using the following methods:

- In Windows, click the Start menu, point to Programs, point to Advantage VISION_Inform 4.0. Double-click the PDF file name.
- In Windows Explorer, point to the Books directory on the hard drive where you installed the online documentation. Double-click the PDF file name.
- In Windows Explorer, point to the Books directory on the CD-ROM drive and double-click the PDF file name.

Using Adobe Acrobat Reader

Use Acrobat Reader to view the online documentation, adjust the size of the page, and perform searches. For more information, use the Acrobat Help menu.

Contacting Total License Care (TLC)

TLC is available Monday-Friday 7 am - 9 pm Eastern Time in North America and 7 am - 7 pm United Kingdom time. Additionally, 24-hour callback service is available for after hours support. Contact TLC for all your licensing requirements.

Be prepared to provide your site ID for product activation.

To activate your product, use one of the following:

Location	Phone	email
North America:	800-338-6720 (toll free) 631-342-5069	help@licensedesk.cai.com
Europe:	00800-1050-1050	euro.tlc@ca.com
If your company or local phone service does not provide international access, please call your local Computer Associates office and have them route you to the above number.		
Australia:	1-800-224-852	
New Zealand:	0-800-224-852	
Asia Pacific:	800-224-852	
Brazil:	55-11-5503-6100	
Japan:	Not available	JPNTLC@ca.com

Contacting Computer Associates

For technical assistance with this product, contact Computer Associates Technical Support on the Internet at esupport.ca.com. Technical support is available 24 hours a day, 7 days a week.

Chapter 2

VISION:Inform Architecture and System Requirements

This book is for the person responsible for installing and supporting VISION:Inform. The information helps you install and support VISION:Inform with a minimum of effort. This book:

- Describes the VISION:Inform architecture, components and requirements. Consult your client software documentation for the capabilities or any restrictions of individual client packages.
- Describes the installation in steps. You can use the checklist, which outlines each step of the installation process, during the installation.
- Describes procedures for verifying that VISION:Inform has been properly installed.
- Provides information for modifying system parameters, diagnosing problems, and reporting problems to Computer Associates.
- Describes problem resolution and reporting procedures.

Conventions

When you are reading this book online, the green underlined text indicates a link to a related section or text. Click on the green underlined text to go to the section or text.

In JCL, menus, and panels, user input is bold underlined text. (When read online using the Acrobat Reader, user input is blue.) Previously entered user input is bold.

Notes and references to other books are in italics.

Architecture

VISION:Inform is the server component of Computer Associates client-server architecture. VISION:Inform consists of a number of components, which are shown in the following figure.

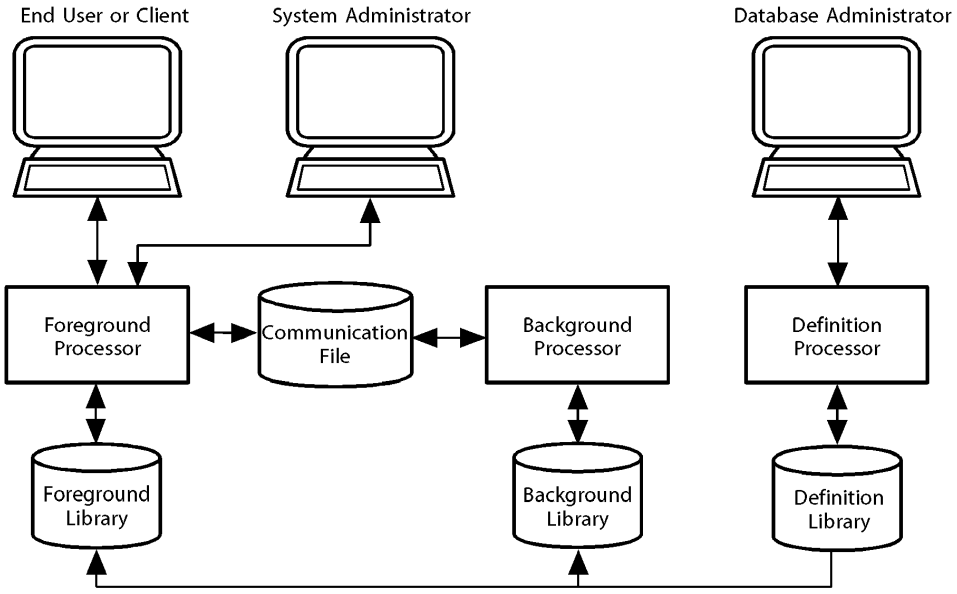

Figure 1. VISION:Inform Architecture

VISION:Inform operates in the host environment and communicates with client software products running on workstations and other remote platforms.

VISION:Inform and the client software products work together to provide workstation users with a cooperative processing facility to access virtually any file or data management system supported on IBM® hosts. With the client software product, workstation users can request VISION:Inform to extract selected subsets of data, optionally summarize them, and download them to the workstation to use with other applications.

This chapter describes the capabilities of the VISION:Inform components.

Foreground Processor

The Foreground Processor provides two major functions.

- Provides the system administrator with facilities to define security constraints and monitor and control resource usage.
- Acts as a communications interface to the workstation, which enforces the security constraints.

To the online environment in which it operates, the Foreground Processor is just another application program. It conforms to the same design constraints and operating considerations of other application programs running in that environment.

- As a user, you can make requests for data, called queries or tasks, to the Foreground Processor through the client software product.
- The system administrator sets up security procedures using the Foreground Processor to interactively check for internal consistency. The Foreground Processor checks the security profile to verify that the user is permitted to access the data requested or to perform the action requested.

Background Processor

The Background Processor operates in the batch processing areas of your operating system. It contains a program that translates submitted client requests for processing, batches them, if possible, with other requests, and then processes them, either individually or in batches.

The Background Processor retrieves the data and manipulates it according to the request's specifications.

When a Background Processor (for a specific processing class and data view) becomes active, it retrieves a submitted query or task from the communication file where the Foreground Processor stored it. The Background Processor processes queries and tasks in the communication file in sequence by class, within the database sequence.

Upon completion of processing, the Background Processor returns output to the communication file. The data remains in the communication file until the client requests delivery through the Foreground Processor.

Definition Processor

The Definition Processor provides a way to develop and maintain your VISION:Inform definitions. VISION:Inform definitions include:

- Table definitions
- Logical data view definitions
- File definitions
- Procedure definitions

The Definition Processor operates in the user-friendly ISPF program development environment. In this interactive environment, you can develop your definitions quickly and easily.

The Definition Processor validates all VISION:Inform definitions and then saves them in the definition library. The definition library is a partitioned data set that holds all of your VISION:Inform source definitions. The Promote process compiles selected definitions from the definition library and catalogs them to the foreground and background libraries.

Foreground Library

The foreground library contains definitions used by the Foreground and Background Processors. It contains all of the definitions and user profiles. The definitions permit the Background Processor to recognize and access databases and files. User profiles provide the system security. VISION:Inform promotes definitions from the definition library to the foreground library using the Promote process.

Background Library

The background library contains all of the definitions used by the Background Processor. VISION:Inform promotes definitions from the definition library to the background library using the Promote process.

Definition Library

The definition library is a standard, open-architecture, partitioned data set used by the Definition Processor. It contains all of your VISION:Inform source definitions. When the definitions are ready to be put into production, they are promoted to the foreground and background libraries using the Promote process.

Utility Library

The utility library contains the definitions needed to run some of the VISION:Inform utilities.

Communication File

The Foreground Processor and the Background Processor use the communication file to transmit information between them. Queries and tasks submitted by the client software are stored in the communication file and, if possible, batched when processed. The communication file provides:

- A means for queries and tasks to be transferred from the workstation to the Background Processor.
- A storage medium for queries and tasks to await processing and extracted data to await delivery.

Work Files

The Foreground Processor uses one internal work file and the Background Processor uses three internal work files.

Log Files

Each Background Processor can optionally build log files every time it is submitted for execution. The log files contain information about the Background Processor, the queries and tasks it executes, the databases it processes, and any problems encountered during processing. This information can be made available online, and in batch if the sequential log file is saved.

The VISION:Inform system administrator defines what information is written to the log files. The VISION:Inform deliverables include a sample file definition for the log files.

System Requirements

VISION:Inform Release 4.0 for IMS operates on IBM or compatible hosts under MVS/ESA™ Version 4.3 and later or any OS/390® or z/OS release with IMS™ Release 3 and later.

You will need the IBM Language Environment® (LE) runtime library.

VISION:Inform supports, without modification, the following terminal types:

- 3277-2 display station
- 3278-2 display station
- 3278-3 display station
- 3278-4 display station
- 3278-5 display station
- 3284 printer
- 3286 printer

Chapter

3

Installation Instructions

This chapter explains how to install VISION:Inform and verify the installation. When you finish, you will have the components shown in the following figure.

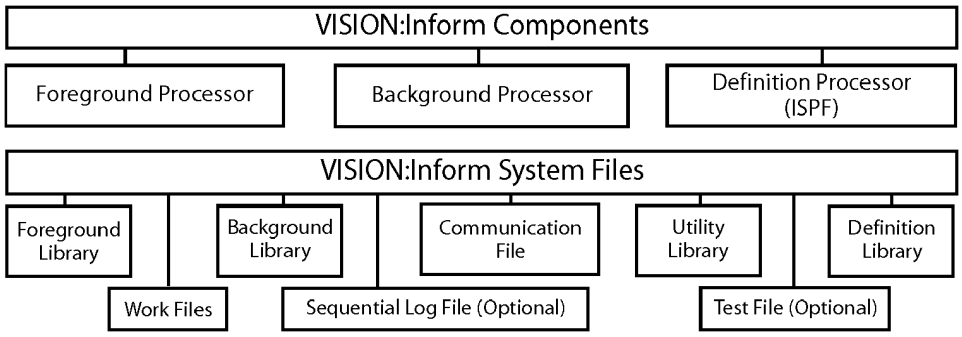

Figure 2: VISION:Inform Components

Important! *Read this entire chapter before you begin the installation.*

This chapter describes using the installation checklist, copying the installation tape files to disk, performing the SMP/E portion of the installation, defining VISION:Inform to IMS, setting up VISION:Inform, setting up the Definition processor, and setting up the file definition conversion utilities.

Using the Installation Checklist

This section provides you with the installation checklist.

- This checklist summarizes the steps involved in the VISION:Inform installation process. Carefully review this checklist and become familiar with each step before proceeding.
- You can use this checklist to document and track your progress as you proceed with the actual VISION:Inform installation.

Note: The green underlined text steps (Step 1, Step 2, …) in the checklist are hypertext links to the section by the same title. When you are reading this document online, click on the green underlined text to go to the text.

VISION:Inform Installation Checklist

VISION:Inform Preparation Activities

_____ Browse the documentation to become familiar with the VISION:Inform components. You will use the following books during the installation process:

_____ *Advantage VISION:Inform for IMS Installation Guide*

_____ *Advantage VISION:Inform Utilities Guide*

_____ *Advantage VISION:Inform Messages and Codes*

Step 1 — Copying the Installation Tape Files

_____ Copy the SMP control library file from tape to disk. See the sections Figure 3. VISION:Inform Installation Tape Files

Copying the First File and Copying the Remaining Files.

_____ Allocate and load remaining disk files using provided JCL (LOADTAPE).

_____ Verify the VISION:Inform data sets. See the section Verifying the VISION:Inform Data Sets.

Step 2 — Performing SMP/E Installation Steps

_____ Tailor and run the eight SMP/E jobs that were supplied.

Step 3 — Defining VISION:Inform to IMS

_____ Create working copies of VISION:Inform installation data sets from target libraries.

_____ Code the APPLCTN and TRANSACT macros for the Foreground and Background Processors, the Batch Simulator, and utilities.

_____ Code the DATABASE macros for FGLIB, INFWORK, and INFCOM.

_____ Add the necessary statements to the IMS/DC control region startup JCL to define the Foreground Processor.

_____ Edit the IMS Data Base Definitions (DBDs) for the foreground library, communication file, and work file.

_____ Execute the DBDGEN.

_____ Edit the IMS Program Specification Blocks (PSBs) for the VISION:Inform programs.

_____ Execute the PSBGEN.

_____ Execute the ACBGEN.

VISION:Inform Installation Checklist

Step 4 — Setting Up VISION:Inform

_____ Assemble and link optional load modules.

_____ For relational support, assemble and link a MARKSQL interface module (DB2CALL, DB2IMS, or DB2TSO).

_____ To use the PROFILE exit routine feature, assemble and link the PROFILE exit routine (PRXASMLK).

_____ To use the INFREPT exit routine, assemble and link the INFREPT exit routine (LSXASMLK).

_____ Customize parameter modules. Optional.

_____ Modify, assemble, and link PARMBLK (PMBASMLK).

_____ Modify, assemble, and link M4PARAMS (M4PASMLK).

_____ Generate MFS control blocks.

_____ Edit the MFS statements.

_____ Compile the MFS for VISION:Inform (MFSUTL).

_____ Transfer load modules to the online load library (TRANSFER).

_____ Allocate and initialize VISION:Inform system files.

_____ Allocate and initialize the foreground library, background library, online work file, and communication file (INIT).

_____ Allocate and initialize work files and sequential log file (ALLOC).

_____ Create utility library (CREATUTL).

_____ Create the installation verification test file, FINANCE (CREATFIN). Optional.

_____ Upgrade from a previous release of VISION:Inform.

_____ Back up the foreground library, background library, and communication file using the previous release's backup utilities. Restore with current release's restore utilities. (CMBACKUP/CMRESTOR - LBBACKUP/LBRESTOR).

VISION:Inform Installation Checklist

Step 5 — Setting Up the Definition Processor

_____ Allocate ISPF data sets.

_____ Specify the Definition Processor list data sets.

_____ Specify the utility list data set.

_____ Pre-allocate the utility data set. Optional.

_____ Specify default processing parameters. Optional.

_____ Specify dynamic allocation parameters for the by-product list data set. Optional.

_____ Set up the Definition Processor start method.

_____ Add a menu option to your ISPF primary option panel.

_____ Use the ISPSTART command.

_____ Perform optional steps:

_____ Preprocess the panel library.

_____ Activate the Library Management Facility (LMF) support.

Step 6 — Setting Up File Definition Conversion Utilities

_____ Set up DB2 file definition access using the DB2 Quick Start Utility. Optional.

_____ Bind the DB2 Quick Start Data Base Request Module (DBRM) into a DB2 plan.

_____ Set up COBOL file definition access using the COBOL Quick Start Utility. Optional.

_____ Set up VISION:Results file definition access using the VISION:Results Quick Start Utility. Optional.

Note: Make the IBM Language Environment (LE) runtime library available to the Definition Processor.

Step 1 — Copying the Installation Tape Files

The first step of the installation process is to copy the installation tape files to disk.

Reviewing the Installation Tape Contents

Each file on the tape has the data set name INFORM.IMS.FILEn, where n is the file number on the tape. Review the files on the installation tape, as shown below.

File	Contents
1	SMP/E control library
2	JCL library
3	Macro library
4	Source library
5	VISION:Inform system load library
6	FINANCE test file
7	Sample definition library
8	Definition Processor panel library
9	Definition Processor message library
10	Definition Processor skeleton library
11	Definition Processor CLIST library
12	VISION:Inform DBRM library
13	VISION:Inform utility library

Figure 3. VISION:Inform Installation Tape Files

Copying the First File

Use the JCL shown below to copy the first file from the tape to a PDS named inform.r40.SMPCNTL.

```
/*********************************************************************
//* THIS JOB WILL LOAD THE FIRST FILE ON THE INSTALLATION TAPE, THE   *
//* SMP CONTROL FILE, FROM TAPE TO DISK. FIRST, ADD JOB AND TAPE SETUP*
//* STATEMENTS, THEN CHANGE ALL lowercase ENTRIES IN THE JOB TO       *
//* APPROPRIATE VALUES FOR YOUR INSTALLATION.                         *
//*********************************************************************
//* DELETE PREVIOUS SMP/E LIBRARY.                                    *
//*********************************************************************
//STEP1  EXEC PGM=IEFBR14
//DELDD    DD DSN=inform.r40.SMPCNTL,DISP=(MOD,DELETE),  <-----
//            UNIT=sysda,SPACE=(TRK,1)                   <-----
//*********************************************************************
//* ALLOCATE NEW SMP/E LIBRARY.                                       *
//*********************************************************************
//STEP2  EXEC PGM=IEBCOPY,REGION=2M
//SYSPRINT DD SYSOUT=*
//SYSUT3   DD UNIT=SYSDA,SPACE=(CYL,(5,5))
//SYSUT4   DD UNIT=SYSDA,SPACE=(CYL,(5,5))
//IN       DD DSN=INFORM.IMS.FILE1,
//            UNIT=tape,                                 <-----
//            DISP=(OLD,KEEP),
//            VOL=(PRIVATE,RETAIN,SER=nnnnnn),           <-----
//            LABEL=(1,SL)
//OUT      DD DSN=inform.r40.SMPCNTL,                    <-----
//            DISP=(,CATLG,DELETE),
//            UNIT=sysda,                                <-----
//            VOL=SER=vvvvvv,                            <-----
//            SPACE=(TRK,(15,5,10)),
//            DCB=(LRECL=80,BLKSIZE=3200,RECFM=FB,DSORG=PO)
//SYSIN DD *
  C I=IN,O=OUT
```

Figure 4. VISION:Inform 4.0 Copy First File JCL

Note: Space requirements are for 3390 devices.

Copying the Remaining Files

After you copy the JCL library, use member LOADTAPE in INFORM.R40.SMPCNTL to copy all of the other files on the tape. For a listing of LOADTAPE, see the appendix "**JCL Samples**."

You complete the remainder of the installation by modifying and submitting the copied JCL members. Each JCL member consists of one or more in-stream procedures followed by one or more executions of the procedures.

1. Add appropriate JOB and tape setup statements.
2. Customize the PROC parameters on the EXEC statements, following the PEND statement.

Verifying the VISION:Inform Data Sets

Note: When you finish the VISION:Inform installation, you can delete INFORM.TEMPFIN and INFORM.TEMPUTL.

The 13 data sets use a total of 680 tracks on a 3390 device. When you finish copying the tape, verify that you created the following data sets.

DSN	No. of 3390 tracks	DCB Information				Tape File No.
INFORM.R40.DBRM	5	(FB	80	3120	DSORG=PO)	12
INFORM.R40.DEFLIB	30	(FB	80	3120	DSORG=PO)	7
INFORM.R40.INFCLIST	25	(FB	80	3120	DSORG=PO)	11
INFORM.R40.INFJCL	15	(FB	80	3120	DSORG=PO)	2
INFORM.R40.INFLOAD	400	(U	0	32760	DSORG=PO)	5
INFORM.R40.INFMAC	10	(FB	80	3120	DSORG=PO)	3
INFORM.R40.INFMSGS	15	(FB	80	3120	DSORG=PO)	9
INFORM.R40.INFPANEL	100	(FB	80	3120	DSORG=PO)	8
INFORM.R40.INFSKELS	5	(FB	80	3120	DSORG=PO)	10
INFORM.R40.INFSRC	50	(FB	80	3120	DSORG=PO)	4
INFORM.R40.SMPCNTL	15	(FB	80	3200	DSORG=PO)	1
INFORM.R40.TEMPFIN	5	(VB	3612	27998	DSORG=PS)	6
INFORM.R40.TEMPUTL	5	(VBS	32768	32760	DSORG=PS)	13
Total	680					

Figure 5. VISION:Inform Installation Data Sets

Step 2 — Performing SMP/E Installation Steps

Perform the SMP/E Portion of the Installation

At this point, you need to run eight job streams to establish and define the SMP/E CSI and zones, and install the basic VISION:Inform. These job streams are located in the PDS data set loaded from File 1 of the installation tape, INFORM.R40.SMPCNTL. The following members contain these eight job streams for the basic VISION:Inform installation.

Member Name	Function of the Job within This Member
SMPJOB01	Allocate the SMP/E CSI, the SMP/E work data sets and all the associated data sets for the distribution and target libraries.
SMPJOB02	Define the SMP/E global, distribution and target zones.
SMPJOB03	Receive the MCS (Modification Control Statements) and SYSMODs into the SMP/E global zone and work data sets.
SMPJOB04	Receive the PTF and APAR SYSMODs into the SMP/E global zone and work data sets.
SMPJOB05	Apply the SYSMODS (modules and elements) to the target libraries.
SMPJOB06	Apply the SYSMODS (APARs/PTFs) to the target libraries.
SMPJOB07	Accept the SYSMODS (modules and elements) to the distribution libraries.
SMPJOB08	Apply the SYSMODS (APARs/PTFs) to the distribution libraries.

The following members are additional members in the INFORM.R40.SMPCNTL PDS data set that are referenced within the above jobs. These are control statements and SYSMODS (PTFs and APARs).

Member Name	Description
MCSHDR	MCS member - the header and copyright information for VISION:Inform.
MCSINF	MCS member – the VISION:Inform component elements.
MCSBLDR	MCS member - the VISION:Builder engine component elements.

MCSCOML	MCS member - the COMLIB component elements.
MCSWKB	MCS member - the VISION:Inform Definition Processor component elements.
MCSSASC	MCS member - the SAS/C Link Lib (runtime) elements.
CDAD400	The JCLIN (IEBCOPYs) for the distribution and target load libraries.
PTFS	The latest SYSMODS (PTFs) for the VISION:Inform system.
APARS	The latest SYSMODS (APARs) for the VISION:Inform system.

SMPJOB01

Tailor and run job SMPJOB01 from the INFORM.R40.SMPCNTL data set. In this job, you allocate all the data sets needed by SMP/E to manage, control and maintain VISION:Inform and its components. This includes the SMP/E CSI, the associated work data sets, and the distribution and target libraries.

Instructions for tailoring this job are contained in JCL comments within the member. To tailor this job, you must:

- Supply a valid "JOB" JCL statement.
- Change the "VOLUMES(VOLSER)" parameter in the STEP1 IDCAMS DEFINE CLUSTER statement to point to a valid VOLSER or VOLSER list for the CSI definition.
- Change the high-level qualifier of all datasets from the default of 'INFORM.' or 'INFORM.R40.' to one that meets your site standards. (Do not change the low-level portion of the DSNs.)
- Change the unit allocation from the default 'UNIT=SYSDA' to whatever is proper for your site standards.

Any existing or previously defined data sets of the same names are deleted before the new data sets are allocated.

The following data sets are allocated. They are shown with the default high-level qualifier.

INFORM.R40.CSI	INFORM.R40.CSI.DATA
INFORM.R40.CSI.INDEX	INFORM.R40.SMPPTS
INFORM.R40.SMPMTS	INFORM.R40.SMPSCDS
INFORM.R40.SMPSTS	INFORM.R40.SMPLOG
INFORM.R40.SMPLOGA	INFORM.R40.DISTRIB.INDLOAD

INFORM.R40.DISTRIB.INDMAC	INFORM.R40.DISTRIB.INDSRC
INFORM.R40.DISTRIB.INDJCL	INFORM.R40.DISTRIB.INDCLIST
INFORM.R40.DISTRIB.INDPANEL	INFORM.R40.DISTRIB.INDMSGS
INFORM.R40.DISTRIB.INDSKELS	INFORM.R40.TARGET.INTLOAD
INFORM.R40.TARGET.INTMAC	INFORM.R40.TARGET.INTSRC
INFORM.R40.TARGET.INTJCL	INFORM.R40.TARGET.INTCLIST
INFORM.R40.TARGET.INTPANEL	INFORM.R40.TARGET.INTMSGS
INFORM.R40.TARGET.INTSKELS	

SMPJOB02

Tailor and run job SMPJOB02 from the INFORM.R40.SMPCNTL data set. In this job, you define the VISION:Inform global, distribution, and target zones in the CSI. This is the information needed by SMP/E to manage, control, and maintain VISION:Inform.

Instructions for tailoring this job are contained in JCL comments within the member. To tailor this job, you must:

- Supply a valid "JOB" JCL statement.
- Change 'INFORM.' or 'INFORM.R40.' to the high-level qualifier value used in the previous job (SMPJOB01). (Do not change the low-level portion of the DSNs.)
- Find the two occurrences of 'IMS.RESLIB', and change the DSN to that of the IMS system residence library.
- Find the two occurrences of 'DB2.SDSNLOAD', and change the DSN to that of the DB2 system load library.

SMPJOB03

Tailor and run job SMPJOB03 from the INFORM.R40.SMPCNTL data set. In this job, you RECEIVE the Modification Control Statements (MCS) and VISION:Inform software system elements (SYSMODS) into the global zone and SMP/E data sets.

Instructions for tailoring this job are contained in JCL comments within the member. To tailor this job, you must:

- Supply a valid "JOB" JCL statement.
- Change 'INFORM.' or 'INFORM.R40.' to the high-level qualifier value used in the previous jobs (SMPJOB01 and SMPJOB02). (Do not change the low-level portion of the DSNs.)

SMPJOB04

Tailor and run job SMPJOB04 from the INFORM.R40.SMPCNTL data set. In this job, you RECEIVE the PTF and APAR SYSMODS into the global zone and SMP/E data sets.

Note: Prior to VISION:Inform Release 4.0, PTFs were known as SMs (System Modifications) or GSMs (General System Modifications). These types of patches apply to all systems and correct or enhance the software system.

Note: Prior to VISION:Inform Release 4.0, APARs were known as RSMs (Restricted System Modifications). These types of patches only apply, if at all, to sites with unique requirements, or they change how the product operates as described in the product documentation.

Instructions for tailoring this job are contained in JCL comments within the member. To tailor this job, you must:

- Supply a valid "JOB" JCL statement.
- Change 'INFORM.' or 'INFORM.R40.' to the high-level qualifier value used in the previous jobs. (Do not change the low-level portion of the DSNs.)

Note: After running SMPJOB04, you should retain the SYSOUT dataset with ddname SMPRPT that the job produces. The SMPRPT listing provides a list of the PTFs and APARs received by SMPJOB04, and is used to create the input in the subsequent jobs SMPJOB06 and SMPJOB08.

SMPJOB05

Tailor and run job SMPJOB05 from the INFORM.R40.SMPCNTL data set. In this job, you APPLY the VISION:Inform software system elements (SYSMODS) into the target libraries.

Instructions for tailoring this job are contained in JCL comments within the member. To tailor this job, you must:

- Supply a valid "JOB" JCL statement.
- Change 'INFORM.' or 'INFORM.R40.' to the high-level qualifier value used in the previous jobs. (Do not change the low-level portion of the DSNs.)

SMPJOB06

Tailor and run job SMPJOB06 from the INFORM.R40.SMPCNTL data set. In this job, you APPLY the VISION:Inform software system PTF SYSMODS into the target libraries.

Instructions for tailoring this job are contained in JCL comments within the member. To tailor this job, you must:

- Supply a valid "JOB" JCL statement.
- Change 'INFORM.' or 'INFORM.R40.' to the high-level qualifier value used in the previous jobs. (Do not change the low-level portion of the DSNs.)
- Change the "APPLY SELECT(NNNNNNN)" to name the APAR/PTF that is to be applied. Change only the 'NNNNNNN' portion of the statement.
- Apply APARS/PTFS one at a time, specifying only one item on each invocation of the procedure.

This job is used in one of two ways:

- During the installation process, to apply the initial PTFs and, optionally, APARS that are delivered with the system.
- After product installation, to apply maintenance to the product when necessary.

When you run this job during product installation, refer to the SMPRPT listing from the SMPJOB04 output. This listing gives you the names of the PTFs that need to be applied in SMPJOB06. Apply each PTF in a separate invocation of the PROC contained in SMPJOB06. All PTFs listed in the SMPRPT output are required; APARs are optional, and usually not needed. If you have questions about the PTFs or APARs, contact Technical Support (see Contacting Computer Associates).

Note: PTFs must be applied in ascending sequence, by the PTF name.

At this point, the target libraries contain the default VISION:Inform software system.

SMPJOB07

Tailor and run job SMPJOB07 from the INFORM.R40.SMPCNTL data set. In this job, you ACCEPT the VISION:Inform software system elements (SYSMODS) into the distribution libraries.

Instructions for tailoring this job are contained in JCL comments within the member. To tailor this job, you must:

- Supply a valid "JOB" JCL statement.
- Change 'INFORM.' or 'INFORM.R40.' to the high-level qualifier value used in the previous jobs. (Do not change the low-level portion of the DSNs.)

SMPJOB08

Tailor and run job SMPJOB08 from the INFORM.R40.SMPCNTL data set. In this job, you ACCEPT the VISION:Inform APAR/PTF SYSMODS into the distribution libraries.

Instructions for tailoring this job are contained in JCL comments within the member. To tailor this job, you must:

- Supply a valid "JOB" JCL statement.
- Change 'INFORM.' or 'INFORM.R40.' to the high-level qualifier value used in the previous jobs. (Do not change the low-level portion of the DSNs).
- Change the "ACCEPT SELECT(NNNNNNN)" to name the APAR/PTF that is to be accepted. Change only the 'NNNNNNN' portion of the statement.
- Accept APARS/PTFS one at a time, specifying only one item on each invocation of the procedure.

This job is used in one of two ways:

1. During the installation process, to accept the initial PTFs and, optionally, APARS that are delivered with the system.

2. After product installation, to accept maintenance to the product when necessary.

When you run this job during product installation, refer to the list of PTFs that you applied in SMPJOB06, which in turn came from the SMPRPT listing from SMPJOB04. This will be the list of PTFs that you accept in SMPJOB08. All PTFs applied in SMPJOB06 must be accepted with SMPJOB08; APARS are optional. Accept each PTF in a separate invocation of the PROC contained in SMPJOB08.

Note: PTFs must be applied in ascending sequence, by the PTF name.

At this point, both the distribution libraries and the target libraries contain the default VISION:Inform software system.

Step 3 — Defining VISION:Inform to IMS

Create a Working Copy of the Installation Data Sets

At this point in the installation, the SMP/E target and distribution libraries contain identical copies of the VISION:Inform system. The next step is to create the working copies of these libraries and data sets. These working copies will then be used to customize the VISION:Inform system and complete the installation.

There are two steps involved in creating the working libraries:

1. Make a copy of the VISION:Inform load library. Use either job INFCOPY1 or INFCOPY2 from the INFORM.R40.SMPCNTL data set. Both jobs use IEBCOPY to copy the target load library to a working copy. The difference between the two jobs is that INFCOPY1 re-creates the working copy of the load library by deleting and re-allocating it before the target load library is copied. Job INFCOPY2 copies the target load library to an existing load library, with the REPLACE option, and then compresses the working copy of the load library.

   Note: The VISION:Inform load library contains load modules that are link edited with the OVERLAY attribute, and cannot be copied from one library to another using the TSO/ISPF Option 3.3 Copy function. Use INFCOPY1 or INFCOPY2 to copy the load library.

2. Make a copy of the VISION Inform CLIST, JCL, MACLIB, MSGS, PANEL, SKELS, and SRCLIB libraries. Use job INFCOPY3 from the INFORM.R40.SMPCNTL data set, which invokes IEBCOPY to copy the target libraries to working copies of these libraries. This job will delete and re-allocate the libraries to be copied.

When this task is complete, you will have the following files (using the default naming conventions supplied in the JCL):

Library Data Set Name	Description of Contents
INFORM.LOADLIB	The VISION:Inform System Load library
INFORM.JCL	The VISION:Inform System JCL library
INFORM.MACLIB	The VISION:Inform System Macro library
INFORM.SRCLIB	The VISION:Inform System Source library

Library Data Set Name	Description of Contents
INFORM.CLIST	The VISION:Inform Definition Processor CLIST library
INFORM.MSGS	The VISION:Inform Definition Processor Messages library
INFORM.PANELS	The VISION:Inform Definition Processor Panel library
INFORM.SKELS	The VISION:Inform Definition Processor Skeleton library

These are the names by which these libraries will be referred to for the rest of the installation.

To run VISION:Inform in an IMS environment you must make changes and execute an IMSGEN, DBDGEN, PSBGEN, and ACBGEN. You can plan and execute these procedures before unloading the VISION:Inform installation tape or installing VISION:Inform. The subsections that follow describe the requirements for each. Read this section carefully before you decide how to schedule these jobs to meet your installation standards.

IMSGEN Requirements

VISION:Inform operation in an IMS online environment requires IMSGEN changes for the Foreground and Background Processors. If you intend to execute the utility programs in a BMP region, you must also make changes for those programs. This section explains what you need to specify in your IMSGEN. For additional information about the statements used in the following subsections, see the *IBM IMS/ESA Installation Volume 2: System Definition and Tailoring*.

In addition to generating the appropriate parameters to IMS, you must modify the job control for the control and message regions to include VISION:Inform. In the control region startup JCL, you must add DD statements for the communication file, the work file, and the foreground library.

If you install VISION:Inform in its own load library, you must add the library name to the message region library concatenation. The TRANSFER step in the installation moves the online modules to an online library.

Note: You must explicitly specify MODE=SNGL in all VISION:Inform TRANSACT statements to synchronize the Foreground and Background Processors. (MODE=MULT is the default.)

Foreground Processor

The following example shows the IMSGEN statements you should use for the Foreground Processor.

```
APPLCTN     PSB=INFORMOC,                                    x
            PGMTYPE=TP

TRANSACT    CODE=INFORMOC,                                   x
            MSGTYPE=(SNGLSEG,NONRESPONSE),                   x
            MODE=SNGL,                                       x
            INQ=NO
```

Note: To page through VISION:Inform online reports, the terminal used must remain in NONRESPONSE mode, for example MSGTYPE=(SNGLSEG, NONRESPONSE).

- If you modify the PSB name in the APPLCTN macro, make the name agree with the:
  - PSB name you define in the PSB statements.
  - NAME or ALIAS parameters for the load modules in the TRANSFER installation step.
  - TRANSACT CODE parameter.
  - Transaction code listed on MFLD statements in the MFS control statements.
- You must specify the TRANSACT macro MSGTYPE, MODE, and INQ parameters exactly as shown.

Background Processor

This APPLCTN/TRANSACT macro set defines the Background Processor. For the Background Processor, you can include more than one TRANSACT macro to define multiple transaction codes. The example below contains one TRANSACT macro.

- For an explanation of VISION:Inform processing classes, see the *VISION:Inform System Administrator Guide*.
- To execute the Background Processor, see the appendix "**JCL Samples**."

```
APPLCTN     PSB=INFORMBB,                                    x
            PGMTYPE=BATCH

TRANSACT    CODE=INFBMP,                                     x
            MODE=SNGL,                                       x
            INQ=NO
```

When you specify the PSB name in the APPLCTN macro, make the name agree with the:

- PSB name you define in PSB statements
- NAME or ALIAS parameters for the load modules in the TRANSFER installation step.

You can use the same PSB for processing queries in a BMP region or batch region.

If you want to run two or more Background Processors concurrently in BMP regions, you must create uniquely named PSBs (the same VISION:Inform databases can be in all Background Processor PSBs) and additional APPLCTN and TRANSACT macros which reference the newly coded PSB names.

- The TRANID in the Background Processor JCL must agree with the TRANSACT macro (INFBMP above).
- You must specify the TRANSACT macro MODE parameter exactly as shown.

Promote and Backup Utilities

This macro set defines the promote and backup utilities so that you can execute them in a BMP region. The following example shows the IMSGEN statements you should use for this utility program. See the appendix "**JCL Samples**."

```
APPLCTN     PSB=INFUTIL,                                    x
            PGMTYPE=BATCH

TRANSACT    CODE=INFUTIL,                                   x
            MODE=SNGL,                                      x
            INQ=NO
```

When you specify the PSB name in the APPLCTN macro, make the name agree with the:

- PSB names you define in the PSB statements
- NAME or ALIAS parameters for the load modules in the TRANSFER installation step.

You must specify the TRANSACT macro MODE parameter exactly as shown.

Batch Simulator

Use the following macro set to run the Batch Simulator in a BMP (Batch Message Processing) region. See the appendix "**JCL Samples**."

```
APPLCTN     PSB=INFORMSB,                                   x
            PGMTYPE=BATCH

TRANSACT    CODE=BMPOSB,                                    x
            MODE=SNGL,                                      x
            INQ=NO
```

When you specify the PSB name in the APPLCTN macro, make the name agree with the PSB name you define in the PSB statements.

You must specify the TRANSACT macro MODE parameter exactly as shown.

Remote Platform Foreground Processor

The following example shows the IMSGEN statements you should use for the remote platform Foreground Processor. This application supports all remote platforms except VISION:Journey in data compression mode.

```
APPLCTN     PSB=INFORMMC,                                    x
            PGMTYPE=TP

TRANSACT    CODE=INFORMMC,                                   x
            MSGTYPE=SNGLSEG,                                 x
            MODE=SNGL,                                       x
            INQ=NO
```

You must specify the TRANSACT macro MODE parameter exactly as shown.

The following example shows the IMSGEN statements you should use for the remote platform Foreground Processor that supports VISION:Journey in data compression mode.

```
APPLCTN     PSB=INFORMOS,
            PGMTYPE=TP                                       x

TRANSACT    CODE=INFORMOS,                                   x
            EDIT=ULC,                                        x
            MSGTYPE=SNGLSEG,                                 x
            MODE=SNGL,                                       x
            INQ=NO
```

- When you specify the PSB name in the APPLCTN macro, make the name agree with:
  - PSB name you define in the PSB statements.
  - NAME or ALIAS parameters for the load modules in the TRANSFER installation step.
  - TRANSACT CODE parameter.
  - Transaction code listed on MFLD statements in the MFS control statements.
- You must specify the TRANSACT macro EDIT parameter and MODE parameter exactly as shown.

VISION:Inform System Files

In addition to the APPLCTN and TRANSACT macros, you must identify the VISION:Inform system files to IMS. The VISION:Inform files are defined by the following DATABASE macro:

```
DATABASE DBD=(INFCOM,FGLIB,INFWORK)
```

The DBD names you specify must agree with those you define in the DBD statements.

Definition Requirements

To interface VISION:Inform with IMS, you must generate DBD, PSB, and ACB modules. Source statements for these definitions are available in the VISION:Inform Source library (INFORM.SRCLIB) and are provided in the figures that follow. If you prefer to use the samples from the installation tape, see the section Copying the Remaining Files.

The following figure shows the modules you need to generate and the source of the definition statements from the tape.

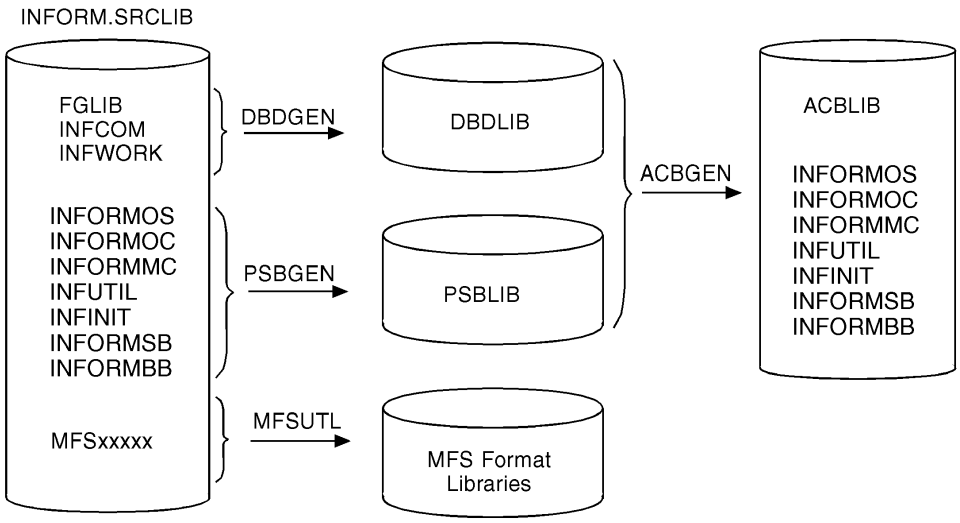

Figure 6. IMS Definition Process

DBDGEN

The VISION:Inform source library, INFORM.SRCLIB, provides DBDs for the communication file (INFCOM), foreground library (FGLIB), and work file (INFWORK). They are shown in the following three figures. JCL to generate the DBDs is available as member DBDGEN in INFORM.JCL, the VISION:Inform JCL library, and is also shown in the appendix "**JCL Samples**."

INFCOM—DBD for Communication File

```
* MEMBER INFCOM
*************************************************************************
* DBD FOR COMMUNICATION FILE                                            *
*************************************************************************
*    THE NAME USED ON THE RMNAME PARAMETER MUST AGREE WITH THAT USED    *
*     AS THE MODULE NAME (NAME STATEMENT) IN THE TRANSFER STEP FOR      *
*     TRANSFERRING THE RANDOMIZING MODULE TO THE IMS.RESLIB DATA SET.   *
*************************************************************************
        DBD NAME=INFCOM,ACCESS=(HDAM,VSAM),RMNAME=(INFRM,1)
        DATASET DD1=INFORMCF,DEVICE=3380
        SEGM  NAME=ADBAMBLK,BYTES=4078,PTR=NT
        FIELD NAME=(ADBAMBNO,SEQ,U),BYTES=4,START=1,TYPE=C
        DBDGEN
        END
```

Figure 7. DBD for the Communication File

FGLIB—DBD for Foreground Library

```
* MEMBER FGLIB
*************************************************************************
* DBD FOR FOREGROUND LIBRARY                                            *
*************************************************************************
*   THE NAME USED ON THE RMNAME PARAMETER MUST AGREE WITH THAT USED     *
*     AS THE MODULE NAME (NAME STATEMENT) IN THE TRANSFER STEP FOR      *
*     TRANSFERRING THE RANDOMIZING MODULE TO THE IMS.RESLIB DATA SET.   *
*************************************************************************
        DBD NAME=FGLIB,ACCESS=(HDAM,VSAM),RMNAME=(INFRM,1)
        DATASET DD1=INFORMLF,DEVICE=3380
        SEGM  NAME=ADBAMBLK,BYTES=4078, PTR=NT
        FIELD NAME=(ADBAMBNO,SEQ,U),BYTES=4,START=1,TYPE=C
        DBDGEN
        END
```

Figure 8. DBD for the Foreground Library

INFWORK—DBD for Work File

```
* MEMBER INFWORK
*************************************************************************
* DBD FOR WORK DATA BASE                                                *
*************************************************************************
        DBD NAME=INFWORK,ACCESS=(HDAM,VSAM),                            *
              RMNAME=(DFSHDC40,2,40,4089)
        DATASET DD1=INFORMWF,DEVICE=3380
        SEGM  NAME=LTERMABL,BYTES=8
        FIELD NAME=(LTKEY,SEQ,U),BYTES=8,START=1,TYPE=C
        SEGM  NAME=MEMORABL,BYTES=(4000,2),PARENT=((LTERMABL,SNGL)),    *
              PTR=T
        DBDGEN
        END
```

Figure 9. DBD for the Work File

You can change some entries in the DBDs to conform to your installation standards. The entries that have an impact on other values in the installation are:

DBD Parameter	Impact
DBD name	The DBD names must agree with those you specified in the IMSGEN and will specify in the PSBs.
DD1 ddname	The ddnames must agree with those used in the INFBATCH, INFSOSB, CMBACKUP, CMRESTOR, CINFBAT, CINFOSB, LIBCOPY, INIT, LBBACKUP, LBRESTOR, MERGDEF, MERGHLP, PROMOTE, TINFBTCH, and TINFSOSB procedures.
RMNAME subparameter	Change the VSAM cluster definitions in the INIT procedure to match the samples generated by the DBDGEN. If you change the name of the randomizing module (INFRM), you must also change the NAME= statement of the transfer step to match. You must use the randomizing module supplied.
work file segment size	The size of the MEMORABL segment of the work file must be the same as the MEMSIZE value you specify in the PARMBLK during the VISION:Inform installation.

PSBGEN

PSBGEN for the Foreground Processor (INFORMOC), Background Processor (INFORMBB), promote and backup utilities (INFUTIL), Batch Simulator (INFORMSB), remote platform Foreground Processors (INFORMMC and INFORMOS), and the initialize and restore utilities (INFINIT, LBRESTOR, CMRESTOR) are provided in the figures that follow. JCL to generate the PSBs is available as member PSBGEN in INFORM.JCL. For a listing of PSBGEN, see the appendix "**JCL Samples**."

The VISION:Inform module names are composed of a six-byte prefix and a 2-byte constant. The prefix can be changed to any six characters you want, but the 2-byte suffix cannot be altered.

INFORMOC — PSB for INFORMOC (Foreground Processor)

```
* MEMBER INFORMOC
*************************************************************************
* PSB FOR INFORMOC (FOREGROUND PROCESSOR)                               *
*************************************************************************
        PCB     TYPE=TP,MODIFY=YES
        PCB     TYPE=TP,LTERM=MTOTERM,EXPRESS=YES
*
*       PCB FOR READ-ONLY DIRECT ACCESS TO FOREGROUND LIBRARY
        PCB     TYPE=DB,DBDNAME=FGLIB,PROCOPT=GR,KEYLEN=4
        SENSEG   NAME=ADBAMBLK
*
*       PCB FOR DIRECT ACCESS TO WORK DATABASE
        PDB     TYPE=DB,DBDNAME=INFWORK,PROCOPT=A,KEYLEN=14
        SENSEG   NAME=LTERMABL,PARENT=0
        SENSEG   NAME=MEMORABL,PARENT=LTERMABL
*
*       PCB FOR DIRECT ACCESS TO COMMUNICATION FILE
        PCB     TYPE=DB,DBDNAME=INFCOM,PROCOPT=GR,KEYLEN=4
        SENSEG   NAME=ADBAMBLK
*
*       INSERT THE USER DATABASE PCB'S HERE IF YOU WISH TO QUERY
*       DATABASES USING "IMMEDIATE RESPONSE".
*
        PSBGEN PSBNAME=INFORMOC,LANG=ASSEM
        END
```

Figure 10. PSB for the Foreground Processor

INFORMBB — PSB for INFORMBB (Background Processor)

```
* MEMBER INFORMBB
*************************************************************************
* PSB FOR INFORMBB (BACKGROUND PROCESSOR)                               *
*************************************************************************
        PCB     TYPE=TP,MODIFY=YES
        PCB     TYPE=TP,LTERM=MTOTERM,EXPRESS=YES
*       PCB FOR READ-ONLY DIRECT ACCESS TO FOREGROUND LIBRARY
        PCB     TYPE=DB,DBDNAME=FGLIB,PROCOPT=GO,KEYLEN=4
        SENSEG   NAME=ADBAMBLK
*
*       PCB FOR DIRECT ACCESS TO COMMUNICATION FILE
        PDB     TYPE=DB,DBDNAME=INFCOM,PROCOPT=GR,KEYLEN=4
        SENSEG   NAME=ADBAMBLK
*
*       INSERT THE USER DATABASE PCB'S HERE.
*
        PSBGEN PSBNAME=INFORMBB,LANG=ASSEM,CMPAT=YES
        END
```

Figure 11. PSB for the Background Processor (BMP or Batch)

INFUTIL — PSB for INFCOM/FGLIB

```
* MEMBER INFUTIL
********************************************************************************
* PSB FOR INFCOM/FGLIB FOR PROMOTE AND BACKUP UTILITIES                        *
********************************************************************************
        PCB FOR DIRECT ACCESS TO FOREGROUND LIBRARY
        PCB     TYPE=DB,DBDNAME=FGLIB,PROCOPT=GR,KEYLEN=4
        SENSEG   NAME=ADBAMBLK
*
*       PCB FOR DIRECT ACCESS TO COMMUNICATION FILE
        PDB     TYPE=DB,DBDNAME=INFCOM,PROCOPT=GR,KEYLEN=4
        SENSEG   NAME=ADBAMBLK
*
        PSBGEN PSBNAME=INFUTIL,LANG=ASSEM,CMPAT=YES
        END
```

Figure 12. PSB for the Promote and Backup Utilities

INFORMSB — PSB for Batch Simulator

```
* MEMBER INFORMSB
********************************************************************************
* PSB FOR THE BATCH SIMULATOR                                                  *
********************************************************************************
        PCB FOR DIRECT ACCESS TO FOREGROUND LIBRARY
        PCB     TYPE=DB,DBDNAME=FGLIB,PROCOPT=GR,KEYLEN=4
        SENSEG   NAME=ADBAMBLK
*
*       PCB FOR DIRECT ACCESS TO COMMUNICATION FILE
        PDB     TYPE=DB,DBDNAME=INFCOM,PROCOPT=GR,KEYLEN=4
        SENSEG   NAME=ADBAMBLK
*
*       INSERT THE USER DATABASE PCB'S HERE.
*
        PSBGEN PSBNAME=INFORMSB,LANG=ASSEM,CMPAT=YES
        END
```

Figure 13. PSB for the Batch Simulator

INFORMMC — TP PSB for INFORMMC (Remote Platform Processor)

```
* MEMBER INFORMMC
*************************************************************************
* TP PSB FOR INFORMMC (REMOTE PLATFORM PROCESSOR)                       *
*************************************************************************
        PCB     TYPE=TP,MODIFY=YES
        PCB     TYPE=TP,LTERM=MTOTERM,EXPRESS=YES
*
*       PCB FOR DIRECT ACCESS TO FOREGROUND LIBRARY
        PDB     TYPE=DB,DBDNAME=FGLIB,PROCOPT=GR,KEYLEN=4
        SENSEG   NAME=ADBAMBLK
*
*       PCB FOR ACCESS TO WORK DATABASE
        PCB     TYPE=DB,DBDNAME=INFWORK,PROCOPT=A,KEYLEN=14
        SENSEG NAME=LTERMABL,PARENT=0
        SENSEG NAME=MEMORABL,PARENT=LTERMABL
*
*       PCB FOR DIRECT ACCESS TO COMMUNICATION FILE
        PCB     TYPE=DB,DBDNAME=INFCOM,PROCOPT=GR,KEYYLEN=4
        SENSEG NAME=ADBAMBLK
*
        PSBGEN PSBNAME=INFORMMC,MAXQ=12,LANG=ASSEM
        END
```

Figure 14. PSB for the Remote Platform Foreground Processor

INFORMOS — TP PSB for INFORMOS (Remote Platform Processor - VISION:Journey 2.0B

```
* MEMBER INFORMOS
*************************************************************************
* TP PSB FOR INFORMOS (REMOTE PLATFORM PROCESSOR - JOURNEY 2.0B         *
*************************************************************************
        PCB     TYPE=TP,MODIFY=YES
        PCB     TYPW=TP,LTERM=MTOTERM,EXPRESS=YES
*
*       PCB FOR DIRECT ACCESS TO FOREGROUND LIBRARY
        PDB     TYPE=DB,DBDNAME=FGLIB,PROCOPT=GR,KEYLEN=4
        SENSEG   NAME=ADBAMBLK
*
*       PCB FOR ACCESS TO WORK DATABASE
        PCB     TYPE=DB,DBDNAME=INFWORK,PROCOPT=A,KEYLEN=14
        SENSEG NAME=LTERMABL,PARENT=0
        SENSEG NAME=MEMORABL,PARENT=LTERMABL
*       PCB FOR DIRECT ACCESS TO COMMUNICATION FILE
        PCB     TYPE=DB,DBDNAME=INFCOM,PROCOPT=GR,KEYYLEN=4
        SENSEG NAME=ADBAMBLK
*
        PSBGEN PSBNAME=INFORMOS,MAXQ=12,LANG=ASSEM
        END
```

Figure 15. PSB for the Remote Platform Foreground Processor Supporting VISION:Journey for Windows Release 2.0B

INFINIT — PSB for FGLIB, INFCOM, and INFWORK

```
* MEMBER INFINIT
*************************************************************************
* PSB FOR FBLIG/INFCOM/INFWORK FOR INITIALIZE AND RESTORE UTILITIES      *
*************************************************************************
*       PCB FOR DIRECT ACCESS TO FOREGROUND LIBRARY
        PCB     TYPE=DB,DBDNAME=FBLIB,PROCOPT=GR,KEYLEN=4
        SENSEG   NAME=ADBAMBLK
*
*       PCB FOR DIRECT ACCESS TO COMMUNICATION FILE
        PCB     TYPE=DB,DBDNAME=INFCOM,PROCOPT=GR,KEYLEN=4
        SENSEG NAME=ADBAMBLK
*
*       PCB FOR SEQUENTIAL OUTPUT TO FOREGROUND LIBRARY
        PCB     TYPE=DB,DBDNAME=FGLIB,PROCOPT=L,KEYKEN=4
        SENSEG NAME=ADBAMBLK
*
*       PCB FOR SEQUENTIAL OUTPUT TO COMMUNICATION FILE
        PCB     TYPE=DB,DBDNAME=INFCOM,PROCOPT=L,KEYLEN=4
        SENSEG NAME=ADBAMBLK
*
*       PCB FOR SEQUENTIAL OUTPUT TO WORK DATABASE
        PCB     TYPE=DB,DBDNAME=INFWORK,PROCOPT=L,KEYLEN=14
        SENSEG NAME=LTERMABL,PARENT=0
        PSBGEN PSBNAME=INFINIT,LANG=ASSEM,CMPAT=YES
        END
```

Figure 16. PSB for the Initialize and Restore Utilities

You can change some entries in the PSBs to conform to your installation standards. Those entries that have an impact on other values in the installation are:

PSB Parameter	Impact
PSB name	The PSB names must agree with those you specified in the IMSGEN and will specify in the ACB. The names must also be consistent with the module names. Module names can be modified in the TRANSFER step.
LTERM	The LTERM in the TP PCBs should be the name of your master terminal (MTO).
DBD name	The DBD names for the foreground library, communication file, and work file must match those you created with the DBDGEN.

Do not change the specified order of the PCBs for the foreground library, work file, and communication file.

You will need to add PCBs for your user databases. For all user databases, add PCBs, with PROCOPT=GOP, after the PCB for the communication file. For Immediate Response, also add PCBs for each database, with PROCOPT=GOP and POS=M, after the PCB for the communication file in the Foreground Processor.

ACBGEN

After you generate the DBDs and PSBs, you must generate the ACB. JCL to generate the ACB is available as member ACBGEN in INFORM.JCL from the installation tape. For a listing of ACBGEN, see the appendix "**JCL Samples**."

The following control statements appear in the ACBGEN:

```
BUILD PSB=(INFORMOC,INFORMBB,INFUTIL,INFORMSB,INFINIT)
BUILD PSB=INFORMMC
BUILD PSB=INFORMOS
```

The INFORMMC and INFORMOS PSBs are for remote platform support.

Step 4 — Setting Up VISION:Inform

Step 4 of the installation process involves setting up VISION:Inform, which consists of the following:

- Assembling and Linking Optional VISION:Inform Load Modules.
- Customizing Parameters in the PARMBLK and M4PARAMS Modules.
- Generating MFS Control Blocks.
- Transferring Load Modules to the Online Load Library (Required)
- Allocating and Initializing VISION:Inform System Files (Required).

Assembling and Linking Optional VISION:Inform Load Modules

Link all optional VISION:Inform load modules into the load library (INFORM.LOADLIB) that you copied from the VISION:Inform target load library.

Assembling and Linking MARKSQL (optional)

The MARKSQL module contains the SQL statements used by VISION:Inform to access the tables of your DB2 databases. This module must go through the DB2 application program preparation process described in your *IBM DB2 Application Programming and SQL Guide*.

The MARKSQL module is in member DB2MOD in INFORM.SRCLIB.

The MARKSQL module that comes with the product effectively generates source statements that become the plan required by DB2.

- In the module, the parameter &MAX controls the number of statements in MARKSQL.
- The number of statements in the plan limits the number of tables that can be accessed per file definition by the Background Processor.

Sample JCL to install MARKSQL is in INFORM.JCL members DB2CALL, DB2IMS, and DB2TSO. For listings of DB2CALL, DB2IMS, and DB2TSO, see the appendix "**JCL Samples**."

Memory Optimized Processing

If you use memory optimized processing (MOSAIC) on a segment (table), then three statements from MARKSQL are consumed instead of one. This results in lowering the number of tables available when processing the file definition. For example, if n is the number of non-memory optimized segments (tables) and m is the number of memory optimized segments, then the plan requires that &MAX > n +3m. (See the next section, Specifying the Number of Tables.)

Note: Memory optimize processing is discussed in the Files Panel section of the *Definition Processor Reference Guide*.

Specifying the Number of Tables

The MARKSQL module (as supplied) provides VISION:Inform with the capability of using up to 50 individual tables. You can change a parameter within the MARKSQL module to access more than 50 tables (increase the parameter value) or to reduce storage requirements (reduce the parameter value). To change the parameter, change the value in the following statement that appears after the introductory comments of the DB2MOD member:

```
&MAX SETA 50   MAXIMUM NUMBER OF SQL STATEMENTS PER APPL
```

Binding the Application Plans

After you preprocess, compile, and link edit the required MARKSQL modules, you need to bind the application plans generated by the DB2 preprocessor.

- You can initiate the BIND function by using DB2I (DB2 Interactive) or by using the DSN command processor running in either foreground or background.
- The Background Processor does not require repeatable read (RR) isolation.
- Specify cursor stability (CS) isolation when binding application plans to provide greater access concurrency to your DB2 tables.

Using BIND REPLACE

If you need to make any changes, you must repeat this entire process. Use a BIND REPLACE, not REBIND, when you perform a new bind. See the *IBM DATABASE2 Application Programming and SQL Guide* for the environment you are working with for additional information on the bind process.

Assembling and Linking PROFILE Exit Routine (Optional)

If you use the PROFILE exit feature, assemble your routine and replace the default PROFILE exit routine shipped with the VISION:Inform system. For details, see the appendix "**Writing Exit Routines**."

Use the JCL member PRXASMLK from INFORM.JCL to assemble and link your PROFILE exit routine. For a listing of PRXASMLK, see the appendix "**JCL Samples**."

Assembling and Linking INFREPT Exit Routine (Optional)

If you use the INFREPT exit feature, assemble your routine and replace the default INFREPT exit routine shipped with VISION:Inform. For details, see the appendix "**Writing Exit Routines**."

Use JCL member LSXASMLK from INFORM.JCL to assemble and link your INFREPT exit routine. For a listing of LSXASMLK, see the appendix "**JCL Samples**."

Customizing Parameters in the PARMBLK and M4PARAMS Modules

You can modify parameters in the PARMBLK and M4PARAMS modules.

PARMBLK Parameter Module

If you make changes to the PARMBLK module, assemble and link the changed PARMBLK module for use by VISION:Inform.

Make changes to the PARMBLK module using a text editor to alter the PARMBLK module in INFORM.SRCLIB. You can find a copy of this module and additional information about PARMBLK in the chapter "**Modifying VISION:Inform**."

The PMBASMLK job compiles and links PARMBLK. The JCL is in member PMBASMLK of INFORM.JCL. For a listing of PMBASMLK, see the appendix "**JCL Samples**."

Increasing the Foreground Library and Communication File Size

You can increase the size of either the foreground library or communication file after installation by altering the definition of the file size in the QFILE macro of PARMBLK, following the instructions for making the new definition active in the system in the chapter "**Modifying VISION:Inform**." Changing only the allocation of space to a file will not result in the extra space being used.

M4PARAMS Parameter Module

If you make changes to the M4PARAMS source, you must assemble and link the modified M4PARAMS source to create a new module for use by VISION:Inform.

You can make changes to the M4PARAMS source using a text editor to alter the M4PARAMS module in INFORM.SRCLIB. A copy of this module and additional information about M4PARAMS are in the chapter "**Modifying VISION:Inform**."

The M4PASMLK job compiles and links M4PARAMS. The JCL is in member M4PASMLK of INFORM.JCL. For a listing of M4PASMLK, see the appendix "**JCL Samples**."

Generating MFS Control Blocks

VISION:Inform communicates with terminals and 3270 printers through the IMS Message Format Services. The control statements used to generate the MFS control blocks needed by VISION:Inform are supplied in the members of INFORM.SRCLIB beginning with MFS.

If your are renaming the VISION:Inform programs in the TRANSFER job, you must also change all MFS source members.

You can change some control statements to conform to your installation standards. When you make changes, follow these guidelines:

- Change all occurrences of the prefix "INFORM" in all MFS modules to the six-character prefix to be used in the TRANSFER step. (If you use a global change command to change the text, be careful to only change occurrences that are in all capital letters.)
- Change all occurrences of the string "INX" to your chosen three-character string for format name changes. (If you use a global change command to change the text, be careful to only change occurrences that are in all capital letters.)
- The transaction code (INFORMOC, INFORMMC, or INFORMOS by default) listed on MFLD statements must agree with the TRANSACT CODE entry in the IMSGEN.

If you need support for print devices other than those listed in VISION:Inform System Requirements, you must modify the control statements. LTERM macros specified in the PARMBLK that use UPRINT device type require special changes in the MFS control block. UPRINT devices use the member MFSP. Modify the control statements of MFSP accordingly. See the *IBM IMS/ESA Application Programming: Transaction Manager* for more information.

After you make the modification you need, use the MFSUTL member of INFORM.JCL to generate the MFS control blocks. The procedure may result in a condition code of 4 with the following message for steps 9 and 11:

```
DFS1125I for ASVLIN01 and LINE01
```

These messages are normal and acceptable; they do not indicate a problem. For a listing of MFSUTL, see the appendix "**JCL Samples**."

When this step is complete, all the definitions necessary to interface VISION:Inform with IMS/DC have been generated.

MFS Formats for Starting VISION:Inform

To start VISION:Inform, you must be connected to an IMS terminal, and enter the output format name of the MFS for the platform to which you want to connect. The three available platforms, and the corresponding MFS maps (which reside in the installation PDS INFORM.SRCLIB) to use for connection are shown below.

Platform	Connection MFS
3270	MFSLGON
VISION:Journey without compression	MFSMICR
VISION:Journey with compression	MFSAPI

Figure 17. Platforms and MFS for Connection

To find the proper MFS output FORMAT name to use for connection, edit the proper connection MFS and find the first occurrence of the TYPE=OUTPUT MSG statement for the terminal model with which you will connect. The following table shows the default output FORMAT names to use for the various platforms and terminal models. If you made changes to these statements as described earlier, then you must use the changed names and not the defaults.

Platform	3270 Model	FORMAT Name
3270	2	INX202
3270	3	INX203
3270	4	INX204
3270	5	INX205
VISION:Journey without compression	2	INFORMZ2
VISION:Journey without compression	3	INFORMZ3
VISION:Journey without compression	4	INFORMZ4
VISION:Journey without compression	5	INFORMZ5
VISION:Journey with compression	2	INFORMS2
VISION:Journey with compression	3	INFORMS3
VISION:Journey with compression	4	INFORMS4
VISION:Journey with compression	5	INFORMS5

Figure 18. Platforms and Connection FORMATS

Transferring Load Modules to the Online Load Library (Required)

You must run the TRANSFER job to copy online programs from the installation load library to an IMS online load library in order to prepare them for execution in a message region.

If you have multiple copies of VISION:Inform with different versions of PARMBLK, make sure you transfer the correct version of PARMBLK when you run this job.

During the transfer step, you can also rename the online modules to conform to your naming standards.

Renaming Modules with the TRANSFER Job

The TRANSFER job can also rename the modules based on the selected prefix.

Note: If the default prefix of INFORM is changed, similar changes must be made to the MFS source.

The VISION:Inform online module names are composed of a 6-byte prefix and a 2-byte suffix. You can change the prefix to any 6-byte character string, but do not change the 2-byte suffix.

Note: Do not rename the modules in the installation load library, because the system cannot be maintained if this is done.

VISION:Inform automatically constructs the names of the modules by copying the first six bytes from the name of the entry module into a list it maintains of all modules in the system. The 2-byte suffix uniquely identifies the modules of the system.

The TRANSFER job accepts a parameter up to 6 bytes in length. It replaces the first n bytes up to 6 of the standard name with the characters you specify and then creates IEBCOPY statements to copy all needed modules to another library changing the names to the new names. The default base name (first six characters) of the modules in the installation library is INFORM.

Use the JCL member TRANSFER in INFORM.JCL to transfer load modules. For a listing of TRANSFER, see the appendix "**JCL Samples**."

Note: The output of the LKED2 step may result in a condition code of 4 with the following messages:

```
IEW2646W, IEW2651W, and IEW2660W
```

These messages are normal and acceptable.

Allocating and Initializing VISION:Inform System Files (Required)

This part of the installation allocates and initializes the required files for execution of VISION:Inform. If you are upgrading from a previous release of VISION:Inform, see the section Upgrading from a Previous Release of VISION:Inform. All of these jobs (INIT, ALLOC, CREATUTIL, and CREATFIN) are members in the INFORM.JCL library.

INIT JCL —Initializing VISION:Inform Files

The INIT JCL allocates and initializes four of the VISION:Inform files. This JCL contains four instream procedures: one for the foreground library, one for the background library, one for the online work file, and one for the communication file. The JCL contains sample cluster definitions for each of the files using the IDCAMS utility.

The dataset names and ddnames used for the foreground library, work file, and communications file must be the same names used in the DBDGEN and IMSGEN.

For a listing of INIT, see the appendix "JCL Samples."

ALLOC JCL — Allocating Log and Work Files for the Background Processor

The ALLOC JCL initializes a sequential log file and three work files. VISION:Inform attempts to continue running despite encountering situations, such as IMS PSB problems, JCL problems, insufficient storage for particular queries or tasks, and so on. To inform you of problems encountered and current activity, the Background Processor uses a sequential log file and an online log in the communication file. You have the option of using either of these files or both of them.

The Background Processor also requires three work files (M4REPO, M4SORT, and M4REPI), which you must pre-allocate.

For a listing of ALLOC, see the appendix "JCL Samples."

Running ALLOC

Run the ALLOC job using a different and unique USER data set name prefix for each different Background Processor job (different CONTROL NAME) that you set up to handle concurrent query processing requirements at your installation.

Setting M4REPI Block Size

Set the block size for M4REPI:

- To be the same as M4REPO
- To match the M4REPO block size in M4PARAMS.

These files are set by the ALLOC sample JCL. You must set the M4REPI LRECL at that point.

CREATUTL JCL — Creating the Utility Library

The CREATUTL JCL restores the utility library to its execution format so VISION:Inform can use it. The utility library is a background library containing definitions used by several VISION:Inform utilities, such as the Promote Process Utility and the Glossary Utility. This is a required step of the installation.

The LOADTAPE JCL copied this library from the installation tape to a temporary disk file.

For listings of CREATUTL and LOADTAPE, see the appendix "JCL Samples."

CREATFIN JCL — Creating the FINANCE Test File

The CREATFIN JCL loads the supplied FINANCE test file from the temporary backup disk file copied from the installation tape in the LOADTAPE job. You use this VSAM file to verify the installation, as well as train new users. You create this test file using the IDCAMS utility to define and move the data from tape to a VSAM cluster. For a listing of CREATFIN, see the appendix "**JCL Samples**."

Upgrading from a Previous Release of VISION:Inform

Note: For releases prior to Answer/DB Release 4.5, see the *Getting Started Guide.*

If you are upgrading from a previous release of VISION:Inform, you do not need to run the INIT job as described in the section INIT JCL —Initializing VISION:Inform Files. You should still run the step that initializes the VISION:Inform online work file.

To use the information from your previous release's foreground library, communication file, and background library, back up the previous release's files and restore them into system files for the new release. The *Getting Started Guide* describes this process.

Foreground Library and Communication File

For the foreground library and communication file, you upgrade from a previous release by backing up the foreground library and communication file using the previous release's backup utilities to create the backup files. Then, you restore these libraries using the new release's restore utilities with the backup files from the previous release as input.

For additional information on the Library Backup Utility and Library Restore Utility, see the *VISION:Inform Utilities Guide* for your environment.

Background Library

This step is mandatory if you are upgrading from a release of VISION:Inform prior to Release 3.1. If you are upgrading from VISION:Inform Release 3.1, you can back up and restore your previous release background library using the library backup and restore utilities.

For additional information on the Library Backup Utility and Library Restore Utility, see the *Advantage VISION:Inform Utilities Guide* for your environment.

Step 5 — Setting Up the Definition Processor

Allocating ISPF Data Sets

The Definition Processor runs as an application under your normal ISPF session. This enables the product to take advantage of the many services available under ISPF. As a result, you must make the installed Definition Processor libraries available to the ISPF environment before you use the Definition Processor.

One way to make these libraries available to ISPF is to add these libraries to your existing ISPF library allocations. You can find these allocations in your TSO logon procedure or your ISPF startup CLIST. Check with the appropriate systems person at your installation to confirm the method used to allocate ISPF data sets.

Apply the following rules whenever you concatenate data sets:

- If libraries of unequal record length are to be concatenated, then the record formats must all be variable.
- If libraries of unequal block size are to be concatenated, then the library with the largest block size must be first in the concatenation.

The following list shows the required ISPF ddnames and the Definition Processor data sets that should be associated with them. All Definition Processor data set names shown are the supplied installation names shown earlier in this book. Change these names to reflect the names actually used during the installation process.

The appendix "**Definition Processor Startup CLIST**" contains a sample ISPF startup CLIST that shows how you can make the proper Definition Processor library allocations.

After you determine how your existing ISPF libraries are allocated, you can allocate the necessary Definition Processor libraries by simply concatenating them to your existing ISPF library allocations. We recommend that you allocate your Definition Processor libraries at the front of each concatenation sequence.

ISPF ddname: SYSPROC — VISION:Inform data set name: INFORM.CLIST

Note that the Definition Processor CLIST library comes with the installation tape as a fixed block data set with a record length of 80 and a block size of 3120. This format may not adhere to your installation's standards for CLIST libraries. If your installation prefers a variable blocked format, you can copy the contents of this library to a different CLIST library of the proper format for your installation.

ISPF ddname: ISPLLIB — VISION:Inform data set name: INFORM.LOADLIB

ISPLLIB functions as a task library. It is searched before the STEPLIB allocations, system link libraries, or the system link pack area.

The ISPLLIB library must also specify the IBM Language Environment (formerly LE/370) runtime library if it is not available from the system link library or link pack area. Concatenate this runtime library with the other ISPLLIB libraries.

Note: Make the IBM Language Environment (LE) runtime library available to the Definition Processor.

ISPF ddname: ISPPLIB — VISION:Inform data set name: INFORM.PANELS

If you have chosen to preprocess your Definition Processor panel library, you should concatenate your preprocessed panel library, rather than your panel source library, to this ddname. Preprocessing your panel library is an optional installation step discussed in the section Applying Optional Installation Steps.

ISPF ddname: ISPMLIB — VISION:Inform data set name: INFORM.MSGS

ISPF uses this ddname to locate the text of all informational and diagnostic messages issued by the Definition Processor.

ISPF ddname: ISPSLIB — VISION:Inform data set name: INFORM.SKELS

The ISPSLIB ddname specifies the location of ISPF skeletons used by the Definition Processor.

If the IBM Language Environment (LE) runtime library is not available in the system link library or the link pack area, you must modify one of the members in the INFORM.SKELS data set before using the Definition Processor.

- Change the PDS member M9JKPROM to specify the IBM Language Environment (LE) runtime library.
- Initially, find the IBM.LANGUAGE.ENVR.RUNLIB string. It will appear as a comment as follows:

  ```
  //* DD DSN=IBM.LANGUAGE.ENVR.RUNLIB, DISP=SHR
  ```

  Uncomment the statement (it is then concatenated to the JOBLIB DD statement). Change the data set name to your library containing the IBM Language Environment (LE) runtime library.

ISPF ddname: DEFTLIB — VISION:Inform data set name: INFORM.DEFTLIB

Note: This is not a delivered data set.

This ISPF Dialog data set is used to save information between panels and sessions with the Definition Processor Import dialog. Pre-allocate the data set with the following characteristics:

Data set name	INFORM.DEFTLIB
DDNAME	DEFTLIB
DSORG	PO
RECFM	FB
LRECL	80
BLKSIZE	multiple of 80
SPACE	(TRK, (5,2,2))

After allocating the ISPF Dialog data set, add this data set to the ISPF startup CLIST allocations, as follows:

```
ALLOC  F (DEFTLIB) DA('inform.deftlib') SHR
```

You must use the ddname DEFTLIB. You may need to add this ddname to any FREE commands within your startup CLIST.

Additional Information Concerning Load Libraries

Rather than being allocated to ISPLLIB, you can make the INFORM.LOADLIB load library available to ISPF through the use of a STEPLIB allocation or system link library allocations.

Using the LIBDEF Service

Some installations take advantage of the ISPF LIBDEF service to dynamically modify the ISPF library concatenations based on the ISPF application you will be running.

You can use the LIBDEF service to allocate your Definition Processor CLIST, panel, message, and skeleton libraries.

Do not use this feature to allocate load libraries. The Definition Processor relies on system services to find load modules. System services do not recognize allocations done through the ISPF LIBDEF service. The Definition Processor will not function properly if LIBDEF is used for ISPLLIB allocations.

For more information on the LIBDEF service, see the *IBM ISPF Services Guide*.

Using the Definition Processor List Data Sets

The Definition Processor uses two different types of list data sets, the utility list data set and the by-product list data set.

Utility list data set

The utility list data set (which corresponds to the ISPF list data set in purpose and function) holds output created by the Definition Processor utilities document option.

You can pre-allocate this list data set prior to starting the Definition Processor session, but pre-allocation is not required. If the Definition Processor finds that this list data set has not been pre-allocated, it will dynamically allocate it with a disposition of "new" when the data set is needed.

- If you pre-allocate this data set, it must have the following characteristics:

DDNAME:	M9LIST
DSORG:	PS or SYSOUT
RECFM:	FBA
LRECL:	133
BLKSIZE:	any multiple of 133

- If you pre-allocate this data set, the Definition Processor will not attempt termination processing at the end of the Definition Processor session.

  If the Definition Processor allocates this data set, a Process List Data Set panel displays during the Definition Processor termination processing. This panel functions in the same manner as the ISPF Process List Data Set panel.

- Specifying Default Processing Parameters

  You can set up default processing parameters for this data set using the Definition Processor parameters list data set option.

- M9LIST Naming Convention

  If the M9LIST data set is dynamically allocated by the Definition Processor, the naming convention used (where n=number) is:

  ```
  &SYSPREF.(&SYSUID.)M9TEMPn.LIST
  ```

  The &SYSUID qualifier is only used if it differs from the &SYSPREF system prefix.

The By-product List Data Sets

The Definition Processor also uses a second type of list data set. These are referred to as the by-product list data sets.

Note: Do not pre-allocate these data sets.

A Definition Processor session can use up to four by-product list data sets.

- The Definition Processor automatically allocates these list data sets when needed to ddnames of M9LST1, M9LST2, M9LST3, and M9LST4. M9LST3, and M9LST4 are only required when a 3290 terminal is in use.
- The Definition Processor uses these data sets to temporarily store output that you do not specifically request, but is generated as a result of some action you take. For instance, when you validate a definition, the results of the validation are written to one of the M9LSTn list data sets. If problems occur, browse this data set.

The Definition Processor allocates and deletes these data sets as necessary. These data sets are allocated as permanent data sets.

Controlling the Dynamic Allocation Parameters

You can control some of the dynamic allocation parameters by modifying panel M9DATPMI in your Definition Processor panel library.

Use this panel to specify unit and space allocations for the by-product data sets. Just prior to dynamically allocating any of these data sets, the Definition Processor retrieves and uses the allocation information from the appropriate panel variables.

Remember, the units specified on these panels must be known to TSO and must be eligible to contain permanent data sets.

M9LIST Naming Convention

The naming convention, used by the Definition Processor for the M9LSTn data sets (where n=number), is:

```
&SYSPREF.(& SYSUID.)M9TEMPn.LSTn
```

The &SYSUID qualifier is used only if it differs from the &SYSPREF system prefix.

Specifying the Definition Processor Start Method

You can start the Definition Processor in one of the following ways:

- Add a Definition Processor selection option to an ISPF menu panel. With this method, users start the Definition Processor by selecting the Definition Processor menu option from the corresponding ISPF menu panel.
- Create a command procedure that allocates the appropriate ISPF data sets and then uses the ISPSTART command to directly invoke the Definition Processor. With this method, users start the Definition Processor directly, without having to go through an ISPF menu panel, by simply executing the command procedure. Users normally execute the command procedure in a TSO environment.
- Local customization process.

The first two methods are described in more detail in the following sections. Before starting the Definition Processor, establish a proper ISPF environment and allocate the appropriate Definition Processor data sets to the appropriate ISPF ddnames.

Adding A Menu Option

The appendix, "**Starting the Definition Processor**," contains a sample menu panel that shows how to add the Definition Processor option to an ISPF primary option menu panel with the following entries:

1. Add the following option to the user-displayed section of the menu panel:

   %DP+DEFPROC - Invoke the Definition Processor

2. Add the following command to the)INIT section of the menu panel:

   &M9PRODCT='Workbench'

3. Add the following command to the)PROC section of the menu panel:

   DP,'PGM(M9BOOT) PARM(PMM4) NOCHECK'

4. Add the following variable assignment to the menu panel)PROC section:

   ```
   &GVNXTSEL=.TRAIL
   ```

   This variable assignment sets a Definition Processor internal variable, GVNXTSEL, to contain any trailing command options that you specify.

   These trailing command options can then be retrieved, validated, and processed by Definition Processor. If you do not add this variable assignment to the menu panel, trailing command options will not be processed by Definition Processor.

Using the ISPSTART Command

You can also start the Definition Processor directly from TSO using the ISPSTART command. You can write a CLIST to allocate the appropriate ISPF data sets and execute the ISPSTART command. The format for the ISPSTART command is:

```
ISPSTART PGM(M9BOOT) PARM(PMM4)
```

The variable assignment for GVNXTSEL is not used when you start the Definition Processor directly from the ISPSTART command (trailing command options are not an issue).

For a sample CLIST, see the appendix "**Definition Processor Startup CLIST**."

Applying Optional Installation Steps

Applying optional installation steps involves preprocessing the panel library and using the Library Management Facility.

Preprocessing the Panel Library

ISPF includes a panel preprocessing utility called ISPPREP. Use this utility to convert the Definition Processor panels into an encoded format which significantly improves panel display performance. A preprocessed panel library takes up to 20 percent less space than an unprocessed panel library.

Once you preprocess a panel and it is in an encoded display format, it cannot be modified. To change a preprocessed panel, modify the original panel source member and rerun ISPPREP for that panel.

If you want to preprocess your Definition Processor panels, allocate a second panel library to hold the preprocessed panels. Leave your original panel source library unchanged.

Not all panels can be preprocessed. There are restrictions that prevent ISPPREP from successfully preprocessing certain panels. As a result, ISPPREP automatically bypasses these panels. Copy these remaining panels to the preprocessed panel library after the preprocess job, to complete the processing of all panels.

To preprocess your panel library, follow these steps:

1. Allocate a new panel library.

   Allocate a new preprocessed panel library. Use the same characteristics as your installed Definition Processor panel library, except:

   - Reduce the space allocation to 80 primary tracks.
   - Reduce the directory blocks to 80 unless the SAVE STATISTICS option is set to YES, in which case, you must set the directory blocks to 250.

2. Run the preprocess utility.

   To run the preprocess utility, go into ISPF and select the TSO command option from the primary menu.

   - Enter the command ISPPREP on the TSO command line to display a preprocess utility panel.
   - Specify the panel input data set (unprocessed) for all members.
   - Specify the panel output data set (processed) where the processed panels will be stored.
   - If directory blocks were set to allow the 'Save statistics' option, then select the 'Save statistics for members' option.
   - Fill in the appropriate information to convert all panels and press Enter.

   Informational messages appear during processing to tell you how many panels have been processed.

   The ISPPREP utility recognizes the ten panels that cannot be preprocessed (encoded) and automatically skips them.

   - When this preprocess completes, view or print your ISPF log. It will contain informational messages from the conversion process. The only error messages that should appear pertain to the panels that could not be preprocessed.

3. Copy the unprocessed panels.

   After the conversion process is complete, use the ISPF copy utility (option 3.3) to copy the unprocessed panels listed below from your Definition Processor panel source library to your new preprocessed panel library.

   The expected unprocessed panels are:

$$COPYRT	M9HCAPBR	M9HCAPDA	M9HCAPED
M9HCAPPF	M9HCAPSF	M9HCAPSS	M9SVAPBR
M9SVAPPM	M9TBAPTB	M9TBAPTP	

   Once the copy completes, the preprocessed panel library contains all of the Definition Processor panels.

4. Concatenate the new preprocessed panel to ISPPLIB first.

   Concatenate this library to the ISPF ddname ISPPLIB first, so that ISPF uses the encoded Definition Processor panels rather than the source versions.

   You can remove the Definition Processor panel source library from the ISPPLIB concatenations, but do not delete this library.

Modifying Panels After Preprocessing

To change a Definition Processor panel, edit it in the panel source format library. After you modify the panel, replace it in the preprocessed panel library by running the panel through the ISPPREP utility.

Using Library Management Facility (LMF) Support

If your installation uses the Library Management Facility (LMF), you can apply a Definition Processor APAR (formerly RSM) that causes the Definition Processor to place an LMF lock on any members being edited from an LMF controlled definition library.

For more information, see **Contacting Computer Associates**.

Step 6 — Setting Up File Definition Conversion Utilities

The VISION:Inform Quick Start utilities provide an automated process to assist in converting external file definitions to the VISION:Inform format. After the automated part of the conversion process, you might need to further tailor the file definition.

Some additional setup activity will be required if you plan to use one or more of the following three of the five VISION:Inform Quick Start utilities:

- DB2 Quick Start Utility.
- COBOL Quick Start Utility.
- VISION:Results Quick Start Utility.

If you do not run any of the Quick Start file definition converters during installation, you can run them later using the Definition Processor menu Import option.

Setting up the DB2 Quick Start Utility (Optional)

Before you can use the DB2 Quick Start Utility to generate VISION:Inform file definitions from existing DB2 table definitions, first bind the supplied DB2 Quick Start Utility database request module (DBRM) into a DB2 plan.

When binding the DB2 Quick Start plan, specify the following information:

- DBRM Module: DB2QDBRM.
- DBRM Library: Your installed VISION:Inform DBRM library (INFORM.R40.DBRM).
- Table Qualifier: The DB2 SYSCOLUMNS table qualifier.

All other bind parameters can be set based on your installation's processing standards.

The following figures show sample BIND panels (from the online DB2 interactive CLIST) for creating the DB2 Quick Start plan.

After you bind the DB2 quick start plan, the sample JCL to execute the DB2 Quick Start Utility is provided in the INFORM.JCL member DB2QS. The utility is also available interactively under the Definition Processor IMPORT function.

- For a listing of DB2QS, see the appendix "**JCL Samples**."
- For more information on the DB2 Quick Start Utility, see *VISION:Inform Utilities Guide* for your environment.

```
                              BIND PLAN
COMMAND ===>

Enter DBRM data set name(s):
 1  MEMBER ......... ===> DB2QDBRM
 2  PASSWORD ....... ===>
 3  LIBRARY ........ ===> 'INFORM.R40.DBRM'
 4  ADDITIONAL DBRMS? ......... ===> NO        (YES to include more DBRMs)

Enter options as desired:
 5  PLAN NAME ................. ===> DB2QS     (Required to create a plan)
 6  CHANGE CURRENT DEFAULTS? .. ===> YES       (NO or YES)
 7  ENABLE/DISABLE CONNECTIONS? ===> NO        (NO or YES)
 8  INCLUDE PACKAGE LIST?...... ===> NO        (NO or YES)
 9  OWNER OF PLAN (AUTHID)..... ===>           (Leave blank for your primaryID)
10  QUALIFIER ................. ===> SYSIBM    (For tables, views, and aliases)
11  CACHESIZE ................. ===>           (Blank, or value 0-4096)
12  ACTION ON PLAN ............ ===> REPLACE   (REPLACE or ADD)
13  RETAIN EXECUTION AUTHORITY. ===> YES       (YES to retain user list)
14  CURRENT SERVER ............ ===>                    (Location name)
15  INCLUDE PATH?.............. ===> NO        (NO or YES)


PRESS:  ENTER to process    END to save and exit   HELP for more information
```

Figure 19. Create the DB2 Quick Start Plan

```
DEFAULTS FOR BIND PLAN
COMMAND ===>

Change default options as necessary:

 1  ISOLATION LEVEL ......... ===> CS         (RR, RS, CS, or UR)
 2  VALIDATION TIME ......... ===> RUN        (RUN or BIND)
 3  RESOURCE RELEASE TIME ... ===> COMMIT     (COMMIT or DEALLOCATE)
 4  EXPLAIN PATH SELECTION .. ===> NO         (NO or YES)
 5  DATA CURRENCY ........... ===> NO         (NO or YES)
 6  PARALLEL DEGREE ......... ===> 1          (1 OR ANY)
 7  RESOURCE ACQUISITION TIME ===> USE        (USE or ALLOCATE)
 8  REOPTIMIZE FOR INPUT VARS ===> NO         (NO or YES)
 9  DEFER PREPARE ............===> NO         (NO or YES)
10  KEEP DYN SQL PAST COMMIT..===> NO         (NO or YES)
11  DBPROTOCOL................===>            (Blank, DRDA or PRIVATE)
12  OPTIMIZATION HINT.........===>            (Blank or 'hint-id')
13  DYNAMIC RULES.............===> RUN        (RUN or BIND)
14  SQLRULES..................===> DB2        (DB2 or STD)
15  DISCONNECT................===> EXPLICIT   (EXPLICIT, AUTOMATIC, or
CONDITIONAL)


PRESS:  ENTER to process    END to save and exit     HELP for more information
```

Figure 20. Setting Bind Parameters

Setting up the COBOL Quick Start Routines (Optional)

To use the COBOL Quick Start Utility to convert definitions that are stored in a CA-Librarian® or CA-Panvalet® library, link edit the appropriate interface routine with the COBOL Quick Start Utility. This is accomplished by running one of the supplied JCL procedures in the INFORM.JCL library.

Link Edit CA-Librarian Support

The PDS member LINKLIB in the INFORM.JCL library contains the job necessary to link edit the support for accessing COBOL copybooks stored in a CA-Librarian master file with the COBOL Quick Start Utility. The following figure shows the LINKLIB JCL procedure. Modify the procedure variables as appropriate and run the job to activate this interface. You can ignore the return code of 4 and the warning message IEW2454W.

```
//* MEMBER LINKLIB                                                        00010000
//*********************************************************************  00020000
//* LINK LIBRARIAN INTERFACE MODULES WITH COBOL QUICK START UTILITY. *  00030000
//*********************************************************************  00040000
//LINKL   PROC LOADLIB=,                                                 00050000
//            LIBLOAD=                                                   00060001
//LINKL  EXEC PGM=IEWL,REGION=512K,PARM='LIST,MAP,LET,XREF,NCAL'         00070001
//SYSLIB   DD DISP=SHR,DSN=&LIBLOAD                                      00080004
//SYSPRINT DD SYSOUT=*                                                   00090001
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                               00100001
//LIBSYS   DD DISP=SHR,DSN=&LIBLOAD                                      00110001
//LLIB     DD DISP=SHR,DSN=&LOADLIB                                      00120001
//SYSLMOD  DD DISP=SHR,DSN=&LOADLIB                                      00130001
//       PEND                                                            00140001
//*********************************************************************  00150000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.          *  00160001
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                         *  00170001
//*                                                                  *  00180000
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.               *  00190001
//*    LIBLOAD - THE LIBRARIAN SYSTEM LOAD LIBRARY.                  *  00200000
//*********************************************************************  00210000
//LINK   EXEC LINKL,                                                     00220000
//            LOADLIB='INFORM.LOADLIB',                                  00230001
//            LIBLOAD='LBRARIAN.SYSTEM.LOADLIB'                          00240000
//LINKL.SYSLIN DD *                                                      00250000
  INCLUDE LIBSYS(FAIRCLS)                                              00260002
  INCLUDE LIBSYS(FAIROPN)                                              00270002
  INCLUDE LIBSYS(FAIRREC)                                              00280002
  INCLUDE LIBSYS(FAIRMOD)                                              00290002
  INCLUDE LIBSYS(FAIRERR)                                              00300002
  INCLUDE LIBSYS(FAIRLOC)                                              00310002
  INCLUDE LIBSYS(FAIRNTE)                                              00320002
  INCLUDE LIBSYS(FAIRPNT)                                              00330002
  INCLUDE LIBSYS(FAIRSEC)                                              00350002
  INCLUDE LLIB(COMLIBL)                                                00360002
    ENTRY COMLIBL                                                      00370002
    NAME COMLIBL(R)                                                    00380002
```

Figure 21. LINKLIB JCL — Link Edit the CA-Librarian Interface Modules with the COBOL Quick Start Utility

Link Edit CA-Panvalet Support

The PDS member LINKPAN in the INFORM.JCL library contains the job necessary to link edit support for accessing COBOL copybooks stored in a CA-Panvalet library with the COBOL Quick Start Utility.

The figure below shows the LINKPAN JCL procedure. Modify the procedure variables as appropriate and run the job to activate this interface.

```
//* MEMBER LINKPAN                                                        00010000
//*************************************************************************00020000
//* LINK PANVALET INTERFACE MODULES WITH COBOL QUICK START UTILITY.  *    00030000
//*************************************************************************00040000
//LINKP   PROC LOADLIB=,                                                  00050000
//            PANLOAD=                                                    00060001
//LINKP  EXEC PGM=IEWL,REGION=512K,PARM='LIST,MAP,LET,XREF,NCAL'          00070001
//SYSLIB   DD DISP=SHR,DSN=&PANLOAD                                       00080004
//SYSPRINT DD SYSOUT=*                                                    00090001
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                                00100001
//LIBSYS   DD DISP=SHR,DSN=&PANLOAD                                       00110001
//LLIB     DD DISP=SHR,DSN=&LOADLIB                                       00120001
//SYSLMOD  DD DISP=SHR,DSN=&LOADLIB                                       00130001
//       PEND                                                             00140001
//*************************************************************************00150000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.          *    00160001
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                         *    00170001
//*                                                                  *    00180000
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.               *    00190001
//*    PANLOAD - THE PANVALET SYSTEM LOAD LIBRARY.                   *    00200000
//*************************************************************************00210000
//LINK   EXEC LINKP,                                                      00220000
//            LOADLIB='INFORM.LOADLIB',                                   00230001
//            PANLOAD='PANVALET.SYSTEM.LOADLIB'                           00240000
//LINKP.SYSLIN DD *                                                       00250000
  INCLUDE LIBSYS(PAM)                                                     00260000
  INCLUDE LLIB(COMLIBP)                                                   00270002
    ENTRY COMLIBP                                                         00280002
    NAME COMLIBP(R)                                                       00290003
```

Figure 22. LINKPAN JCL — Link edit the CA-Panvalet Interface Modules with the COBOL Quick Start Utility

Setting up the VISION:Results Quick Start Utility (Optional)

To use the VISION:Results Quick Start Utility to convert definitions that are stored in a CA-Librarian or CA-Panvalet library, link edit the appropriate interface routine with the VISION:Results Quick Start Utility. Do this link edit by running one of the supplied JCL procedures in the INFORM.JCL library.

Link Edit CA-Librarian Support

The PDS member LINKLIBR in the INFORM.JCL library contains the job to link edits the support for accessing VISION:Results file definitions stored in a CA-Librarian master file with the VISION:Results Quick Start Utility.

The following figure shows the LINKLIBR JCL procedure. Modify the procedure variables as appropriate and run the job to activate this interface. You can ignore the return code of 4 and the warning message IEW2454W.

```
//* MEMBER LINKLIBR                                                    00010000
//*********************************************************************  00020000
//* LINK LIBRARIAN INTERFACE MODULES WITH RESULTS QUICK START.       *  00030000
//*********************************************************************  00040000
//LBLNK  PROC LOADLIB=,                                                 00050000
//            LIBLOAD=                                                  00060000
//LINK   EXEC PGM=IEWL,REGION=1M,PARM='LIST,MAP,LET,NCAL'               00070000
//SYSLIB   DD DISP=SHR,DSN=&LIBLOAD                                     00080002
//SYSPRINT DD SYSOUT=*                                                  00090000
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                              00100000
//LIBSYS   DD DISP=SHR,DSN=&LIBLOAD                                     00110000
//SYSLMOD  DD DISP=SHR,DSN=&LOADLIB                                     00120000
//       PEND                                                           00130000
//*********************************************************************  00140000
//* BEFORE SUBMITTING THIS JCL, YOU MUST SPECIFY THE FOLLOWING       *  00150000
//* INFORMATION:                                                     *  00160000
//*                                                                  *  00170000
//*   LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                *  00180000
//*   LIBLOAD - THE CA-LIBRARIAN SYSTEM LOAD LIBRARY.                *  00190000
//*********************************************************************  00200000
//LIBLINK EXEC LBLNK,                                                   00210000
//             LOADLIB='INFORM.LOADLIB',                                00220000
//             LIBLOAD='LIBRARN.SYSTEM.LOADLIB'                         00230000
//LINK.SYSLIN  DD *                                                     00240000
  INCLUDE LIBSYS(FAIRCLS)                                               00250000
  INCLUDE LIBSYS(FAIROPN)                                               00260000
  INCLUDE LIBSYS(FAIRREC)                                               00270000
  INCLUDE LIBSYS(FAIRMOD)                                               00280000
  INCLUDE LIBSYS(FAIRERR)                                               00290000
  INCLUDE LIBSYS(FAIRLOC)                                               00300000
  INCLUDE LIBSYS(FAIRNTE)                                               00310000
  INCLUDE LIBSYS(FAIRPNT)                                               00320000
  INCLUDE LIBSYS(FAIRSEC)                                               00340000
  INCLUDE SYSLMOD(DYL280LX)                                             00350000
    ENTRY DYL280L                                                       00360000
    NAME DYL280L(R)                                                     00370000
```

Figure 23. LINKLIBR JCL — Link Edit the CA-Librarian Interface with the VISION:Results Quick Start Utility

Link Edit CA-Panvalet Support

The PDS member LINKPANR in the INFORM.JCL library contains the job necessary to link edit the support for accessing VISION:Results file definitions stored in a CA-Panvalet library with the VISION:Results Quick Start Utility.

The following figure shows the JCL procedure. Modify the procedure variables as appropriate and run the job to activate this interface.

```
//* MEMBER LINKPANR                                                      00010000
//*********************************************************************  00020000
//* LINK PANVALET INTERFACE MODULES WITH RESULTS QUICK START.        *  00030000
//*********************************************************************  00040000
//PNLNK  PROC LOADLIB=,                                                  00050000
//            PANLOAD=                                                   00060000
//LINK   EXEC PGM=IEWL,REGION=1M,PARM='LIST,MAP,LET,NCAL'                00070000
//SYSLIB   DD DISP=SHR,DSN=&PANLOAD                                      00080001
//SYSPRINT DD SYSOUT=*                                                   00090000
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                               00100000
//LIBSYS   DD DISP=SHR,DSN=&PANLOAD                                      00110000
//SYSLMOD  DD DISP=SHR,DSN=&LOADLIB                                      00120000
//       PEND                                                            00130000
//*********************************************************************  00140000
//* BEFORE SUBMITTING THIS JCL, YOU MUST SPECIFY THE FOLLOWING       *  00150000
//* INFORMATION:                                                     *  00160000
//*                                                                  *  00170000
//*   LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                *  00180000
//*   PANLOAD - THE CA-PANVALET SYSTEM LOAD LIBRARY.                 *  00190000
//*********************************************************************  00200000
//PANLINK EXEC PNLNK,                                                    00210000
//             LOADLIB='INFORM.LOADLIB',                                 00220000
//             PANLOAD='PANVALET.SYSTEM.LOADLIB'                         00230000
//LINK.SYSLIN  DD *                                                      00240000
  INCLUDE LIBSYS(PAM)                                                   00250000
  INCLUDE SYSLMOD(DYL280PX)                                             00260000
  ENTRY DYL280P                                                         00270000
  NAME DYL280P(R)                                                       00280000
```

Figure 24. LINKPANR JCL — Link Edit the CA-Panvalet Interface with the VISION:Results Quick Start Utility

Chapter 4

Installation Verification Process (IVP)

The Installation Verification Process (IVP) verifies that you successfully installed VISION:Inform.

- The IVP verifies that the various main functions are properly installed.
- The IVP is not a full system test since it does not exercise the entire system.
- The IVP requires you to install the FINANCE file.

When the IVP is complete, you will know:

- The Foreground Processor is working.
- The Batch Simulator is working.
- The Background Processor is working.
- The Promote process is working.
- The Definition Processor is working.
- The background and foreground communications work.

Entering the IVP Text

The text you enter for the IVP is provided for you. The IVP phases are grouped logically by function.

- The online services are shown as panels (screen prints).
- The batch portions show all modifications you need to make.

Copies of JCL

As this IVP is not intended to be a part of the installation, we recommend that you copy any JCL members that need to be updated to new members prior to modification.

Remote Platforms

Remote platforms do not have the platform steps listed here. These must be performed by someone who is proficient in their use. These steps are noted in the outline and in the various phases.

IVP Phases

The following outlines the phases of the IVP:

1. Phase 1 — Promoting the Sample Definitions.
   a. Log on to ISPF.
   b. Start the Definition Processor.
   c. Promote the sample definitions.
   d. Return to the Definition Processor Main Menu.
2. Phase 2 — Creating a Logical Data View.
   a. Create FINIVP logical data view.
   b. Add required alias.
   c. Validate FINIVP logical data view.
   d. Save FINIVP logical data view to the definition library.
   e. Promote the logical data view.
   f. Exit the Definition Processor.
3. Phase 3 — Performing System Administration Functions.
   a. Log on to the VISION:Inform SYSTEM user ID.
   b. Select Option 2 (Administration Facilities) from the Computer Associates - Main Menu (also known as the Main Menu).
   c. Edit the SYSTEM profile and add FINANCE and FINIVP INCLUDE statements.
   d. Save the profile.
   e. Log off VISION:Inform so that the profile changes can take effect.
4. Phase 4 — Running the Background Processor.
   a. Prepare Background Processor control statements.
   b. Add DB JCL for the FINANCE file.
   c. Add DB JCL for FIN1 (FINANCE) file.
   d. Add JCL to print the log file to the end of the Background Processor JCL.
   e. Pre-allocate the reports data set or change it to a SYSOUT data set.
   f. Submit the Background Processor JCL.
5. Phase 5 — Verifying Promoted Definitions.
   a. Log on to VISION:Inform.
   b. Verification.
      1) Select Option 6 (Standard Query Processing) from the Main Menu.
      2) Invoke Full Screen Editor to create new query.
      3) Retrieve glossary information for FINIVP.

6. Phase 6 — Creating a Query for 3270 Platforms.

   a. Enter the query.
   b Validate the query.
   c. Save the query.
   d. Submit the query.
   e. Return to the Main Menu.
   f. Log off.

7. Phase 7 — Creating a Query for Remote Platforms.

   a. Update or add a script for the user to connect from the remote platform to VISION:Inform.
   b. Retrieve glossary for FINIVP.
   c. Define a task or query.
   d. Order a task for FINIVP.
   e. Deliver data when task or query completes.
   f. Disconnect the remote platform.
   g. Return to VISION:Inform.
      1) Log on using SYSTEM profile.
      2) Select Option 1 (Operation Facilities) from the Main Menu.
      3) Terminate the Background Processor.
      4) Return to the Main Menu.
   h. Log off.
   i. This phase completes the IVP for remote platforms.

8. Phase 8 — Viewing and Cleaning Up for 3270 Platforms.

   a. Log on using SYSTEM user ID.
   b. Check status of Background Processor.
      1) Select Option 1 (Operation Facilities) from the Main Menu.
      2) Enter PSTATUS command.
   c. Report verification steps.
      1) Enter QSTATUS command to find query status.
      2) Enter VIEW command to view the report.
   d. Purge the report and terminate the Background Processor.
      1) Enter PURGE command to purge the report.
      2) Enter TERM command to terminate the Background Processor.
      3) Return to the Main Menu.
   e. Delete the saved query.
      1) Select Option 6 (Standard Query Processing) from the Main Menu.
      2) Place a D next to query name.
      3) System requests verification.
      4) Verify the delete.
      5) Return to the Main Menu.
   f. Log off.
   g. This step completes the IVP for the 3270 platforms.

The sections that follow describe each phase in detail. To verify the installation, perform the functions as described with each panel.

Menu and Panel Conventions

- The text uses the term 'Command line' to refer to the field after:

  `COMMAND ===>` (top of panel)

  `Command ===>` (near bottom of panel)

  `OPTION ===>` (top of panel)

- In the menus and panels, user input is **bold underlined** text. Previously entered user input is **bold** text.
- The phrase "Use the End command (PF3) ..." means to "Enter 'end' and press Enter or press the PF3 key ..."
- The term "data view" is seen in the product as "data view," "dataview", "DataView", and "Dataview."
- The term "logical data view" is in the product as "logical data view", "LOGICAL DATA VIEW," and "LDV."
- By default, ISPF messages appear in the message line below the Command line. If the default has been changed at your installation, these messages may appear in a message box at the bottom of the panel.

Long and Short Panel Names

Panels with long names can be referred to by shorter names. The alphabetized list shows panel names and their associated short names.

Long Name	Short Name
Computer Associates - DataView pop-up panel	DataView pop-up panel
Computer Associates - Detail pop-up panel	Fields Detail pop-up panel
Computer Associates - Fields pop-up panel	Fields pop-up panel
Computer Associates - Editor panel	Full Screen Editor
Computer Associates - Logon	Logon
Computer Associates - Main Menu	Main Menu
Computer Associates - Source Processing panel	Source Processing
Computer Associates - Submit panel	Submit panel
DEFINITION LIBRARY SPECIFICATION panel	Definition panel
GLOBAL VALIDATION PROCESSING panel	Validation panel
LOGICAL DATA VIEW DEFINITION menu	LDV menu
LOGICAL DATA VIEW DEFINITION panel	LDV Definition panel
LDV SEGMENT AND FIELD ALIASES panel	LDV Segment and Aliases panel
MAINTAINING the Background and Foreground Libraries panel	Promote panel
PROMOTE JCL Build - JOB Information	JOB Information panel
PROMOTE JCL Build - IMS JOB Information	IMS JOB Information panel
PROMOTE JCL Build - Generate the Job Stream	Generate JOB Stream panel
SAVE PROCESSING	Save Processing panel
SELECT Definition Library Items panel	Select Items panel
Untitled (Promote JCL Message)	Promote JCL Message panel
VISION:Inform DEFINITION PROCESSOR FACILITY menu	Definition Processor menu
VISION:Workbench™ for ISPF Selection Menu	Selection Menu

Phase 1 — Promoting the Sample Definitions

This phase verifies the correct installation of the Definition Processor and promotes the sample definitions delivered with VISION:Inform. Begin by logging onto ISPF.

Starting the Definition Processor

Note: In the menus and panels, **bold underlined** text areas indicate user input.

Start the VISION:Inform Definition Processor, based upon the manner in which it was installed, to display the VISION:Workbench for ISPF Selection Menu (Selection Menu) as shown in Panel 1.

```
SELMENU --------- VISION:Workbench for ISPF Selection Menu -----------
OPTION  ===> 3

             VISION:Workbench Release 6.0

  1 - BL (M4) Workbench for VISION:Builder 14.0

  2 - TR (M5) Workbench for VISION:Transact 7.5

  3 - IN (DA) Workbench for VISION:Inform 4.0 (Definition Processor)

  T - Introduction To VISION:Workbench for ISPF

  X - Exit the VISION:Workbench
```

Figure 25. Panel 1 — Selection Menu

Enter a '3' in the Command area, as shown in blue text. Press Enter to display the next panel, which is the VISION:Inform DEFINITION PROCESSOR FACILITY (also known as the Definition Processor menu).

When the Definition Processor menu initially appears, the Command area is empty, that is, the area to the right of OPTION ===> field is blank.

```
PRIMMENU ----------- VISION:Inform DEFINITION PROCESSOR FACILITY --------------
OPTION ===> 31

              10  PARAMETERS - Specify Session Parameters

              19  IMPORT     - Import File Definitions from External Sources

              20  TABLE      - Create Table Definitions
              21  FILE       - Create File Definitions
              22  LDV        - Create Logical Data View Definitions
              23  PROCEDURE  - Create Procedures


              30  DISPLAY    - Review Definitions in Background Library
              31  PROMOTE    - Maintain Background and Foreground Libraries


              99  Requests   - Create Requests

               T  TUTORIAL   - View Definition Processor Tutorial
               X  EXIT       - Exit Definition Processor


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```

Figure 26. Panel 2 — Definition Processor Menu

Enter '31' in the Command area, as shown in Panel 2, above.

Press Enter to display the MAINTAINING the Background and Foreground Libraries panel (also known as the Promote panel).

The data entry areas, shown in Panel 3, are initially empty.

```
M9JK20   --------- MAINTAINING the Background and Foreground Libraries --------

COMMAND ===>

 PROMOTE  - Enter the Data Set Names and Parameters needed for Building
            a JCL Job Stream that will be Run to Promote Definitions:

From DEFINITION Library   ===> 'INFORM.DEFLIB'

To   BACKGROUND Library   ===> 'INFORM.BGLIB'
And  FOREGROUND Library   ===> 'INFORM.FGLIB'
For  ONLINE Environment   ===> IMS

General Run Parameters  for the Promote

Run Type          ===> REAL    TEST or REAL Promote Run
Promote to FG Lib ===> ALL     ALL BG Lib Items, SELECT Items, or NONE
Print Glossaries  ===> YES     NO or YES - for every promoted definition
Condense BG LIB   ===> YES     NO or YES - compress unused space
Procedures to BG  ===> YES     NO or YES - promote associated procedures

 Use  ENTER  to process information and continue to Items selection panel
                                                    or to JCL Build panel
 Use  END    to save the information and exit
 Use  CANCEL to exit without save
```

Figure 27. Panel 3 — Promote Panel

Enter the definition, background, and foreground library names (as assigned during installation in INFORM.JCL, member INIT), as well as the parameters for the Promote process. User input is shown in **bold underlined** text in Panel 3. Enter IMS for the online environment.

Press Enter to display the SELECT Definition Library Items panel (also known as the Select Items panel).

The Select Items panel appears.

```
 M9JK21   -- 'INFORM.DEFLIB' ------------------------------------------------
 COMMAND ===>

  SELECT Definition Library Items - Use P to Promote and D to Delete
       Specific Item Glossary - Use X (by location), Y (by name), N (none)

 Use ENTER  to process selection entries
 Use END    to complete the JCL Job Stream Build
 Use CANCEL to exit to the previous display

 SEL/GLS  NAME     TYP VV.MM  CREATED     CHANGED     SIZE  INIT   MOD   ID
************************** BOTTOM OF DATA ********************************




.-------------------------------------------------------------------------.
| >>>>>   Press the  ENTER KEY  to Build  the Item Selection List.  <<<<<   |
| >>>>>   Press the  END   KEY  to Bypass the Item Selection List.  <<<<<   |
| >>>>>                                                             <<<<<   |
| This panel is used to Select the Items that will be Promoted from the     |
| Definition Library to the Background Library or to specify which items are |
| to be deleted from the Background and Foreground Libraries.               |
'-------------------------------------------------------------------------'
```

Figure 28. Panel 4 — Select Items Panel

Press Enter to build and display the list of members in the definition library.

The Select Items panel redisplays.

```
 M9JK21   -- 'INFORM.DEFLIB' -------------------------------  ROW 1 TO 4 OF 4
 COMMAND ===>

  SELECT Definition Library Items - Use P to Promote and D to Delete
           Specific Item Glossary - Use X (by location), Y (by name), N (none)

 Use ENTER  to process selection entries
 Use END    to complete the JCL Job Stream Build
 Use CANCEL to exit to the previous display

 SEL/GLS  NAME     TYP VV.MM  CREATED     CHANGED     SIZE  INIT   MOD    ID
  '   '   ACCOUNT   T  01.01 92/08/18 92/08/18 15:35     5     5     0 ISPLAG1
  '   '   FINANCE   F  01.12 89/05/05 92/09/11 12:30   169   108     0 ISPGOA2
  '   '   LOGFD     F  01.06 89/05/04 92/09/02 17:31   182   154     0 ISPLAG1
  '   '   QUARTER   T  01.01 92/08/18 92/08/18 15:35     5     5     0 ISPLAG1
 ****************************** BOTTOM OF DATA ********************************
```

Figure 29. Panel 5 — Select Items Panel with Build and Display of Members

A list of the items in the VISION:Inform installation definition library appears. These are the definitions for the FINANCE test database (ACCOUNT, FINANCE, and QUARTER), and for the VISION:Inform Background Processor sequential log file (LOGFD).

```
M9JK21   -- 'INFORM.DEFLIB' --------------------------------  ROW 1 TO 4 OF 4
COMMAND ===>

 SELECT Definition Library Items - Use P to Promote and D to Delete
          Specific Item Glossary - Use X (by location), Y (by name), N (none)

Use ENTER  to process selection entries
Use END    to complete the JCL Job Stream Build
Use CANCEL to exit to the previous display

SEL/GLS  NAME     TYP VV.MM  CREATED     CHANGED     SIZE  INIT   MOD    ID
 p   '   ACCOUNT   T  01.01 92/08/18 92/08/18 15:35     5     5     0 ISPLAG1
 p   '   FINANCE   F  01.12 89/05/05 92/09/11 12:30   169   108     0 ISPGOA2
 p   '   LOGFD     F  01.06 89/05/04 92/09/02 17:31   182   154     0 ISPLAG1
 p   '   QUARTER   T  01.01 92/08/18 92/08/18 15:35     5     5     0 ISPLAG1
****************************** BOTTOM OF DATA ********************************
```

Figure 30. Panel 6 — Select Items Panel with Items to Promote

In Panel 6, type a 'p' in the SEL column next to each of the definitions to be promoted.

When you finish marking definitions to be promoted, press Enter.

The panel redisplays with a message below the Command line.

```
M9JK21   -- 'INFORM.DEFLIB' -------------------------------  ROW 4 TO 4 OF 4
COMMAND ===>
Item selections processed. Enter a command or more selections.
  SELECT Definition Library Items - Use P to Promote and D to Delete
         Specific Item Glossary - Use X (by location), Y (by name), N (none)

Use ENTER  to process selection entries
Use END    to complete the JCL Job Stream Build
Use CANCEL to exit to the previous display

SEL/GLS  NAME     TYP VV.MM  CREATED     CHANGED     SIZE  INIT   MOD    ID
 P   '   QUARTER   T  01.01 92/08/18 92/08/18 15:35     5     5     0 ISPLAG1
****************************** BOTTOM OF DATA ********************************
```

Figure 31. Panel 7 — Select Items Panel with Items Selections Processed Message

Note: The phrase "Use the End command (PF3) ..." means to "Enter 'end' and press Enter or press the PF3 key ..."

The message ('Item selections processed. Enter a command or more selections.'), appears when the items to be promoted have been selected and are ready to process.

Use the End command (PF3) to continue the Promote process and display the PROMOTE JCL Build — JOB Information panel (also known as the JOB Information panel).

Panel 8 shows the JOB Information panel.

```
M9JK22   -------------- PROMOTE JCL Build - JOB Information ------------------
COMMAND ===>

                Provide the JOB Control Information for the Promote JCL
JOB Statement
  ===> //         JOB(
  ===> //*
  ===> //*

JOBLIBs - Enter the VISION:Inform  Program Libraries
 LOAD  Library  ===> 'INFORM.LOADLIB'
 CLIST Library  ===> 'INFORM.CLIST'

OUTPUT Destination Information
 Promote Run Log          ===> SYSOUT=*
 Glossary Listings        ===> SYSOUT=*
 Foreground Promote Log   ===> SYSOUT=*
 Temporary Library Space  ===> 0300  (Tracks)


 Use  ENTER  to complete the JCL Job Stream Build

 Use  END    to save the information and exit
 Use  CANCEL to exit without save
```

Figure 32. Panel 8 — JOB Information Panel

In the JOB Information panel:

1. Modify the JOB statement to conform to your installation's standards.
2. Specify the VISION:Inform LOAD and CLIST libraries.
3. Modify the OUTPUT Destination Information section of the panel, at this time, if necessary.
4. Press Enter to display the next panel.

Panel 9 shows the PROMOTE JCL Build - IMS JOB Information panel (also known as the IMS JOB Information panel).

```
M9JK22X  ------------ PROMOTE JCL Build - IMS JOB Information -----------------
COMMAND ===>

              Provide the IMS JOB Control Information for the Promote JCL

 IMS Run Type         ===> DLI       ( BMP or DLI )

 Utility PSB Name     ===> INFUTIL

 Utility Tran Code    ===> INFUTIL   ( Required for BMP Run Type     )

 Online Module Prefix ===> INFORM    ( Six-character Transfer Prefix )

 IMS Res Library      ===> 'IMSESA.RESLIB'

Data Base Libraries - Required for DLI Run Type

 PSB Library          ===> 'INFORM.PSBLIB'
 DBD Library          ===> 'INFORM.DBDLIB'

 Use  ENTER  to complete the JCL Job Stream Build

 Use  END    to save the information and exit
 Use  CANCEL to exit without save
```

Figure 33. Panel 9 — IMS JOB Information Panel

In the IMS JOB Information panel:

1. Specify the IMS run type for batch DLI (DLI) or Batch Message Processing (BMP).
2. Specify the VISION:Inform Utility PSB Name and Tran Code.
3. Specify the VISION:Inform Online Module Prefix used in the TRANSFER installation step.
4. Specify the data set name of the IMS system resident load library.
5. Specify the data set names of the PSB and DBD libraries.
6. Press Enter to display the next panel.

The PROMOTE JCL Build — Generate the JOB Stream panel (also known as the Generate JOB Stream panel) appears. The **bold underlined** text areas are initially empty.

```
M9JK23  ---------- PROMOTE JCL Build - Generate the Job Stream -----------
COMMAND ===>


        The Promote Job Stream JCL will be generated and placed in the
        following Data Set and Member ready for you to Submit and Run.
        The generated JCL will be displayed for you in EDIT mode.

JCL Library for the Promote Job Stream

 Data Set Name  ===> 'INFORM.JCL'

 Member Name    ===> PROMOTE (replaces existing member)

 Use  ENTER  to generate the Promote Job Stream JCL


 Use  END    to save the information and exit
 Use  CANCEL to exit without save
```

Figure 34. Panel 10 — Generate JOB Stream Panel

Enter the name of the JCL library where you want to save the generated Promote JCL. You can supply a different member name as well.

Press Enter to generate the job stream JCL.

The next panel displays a message.

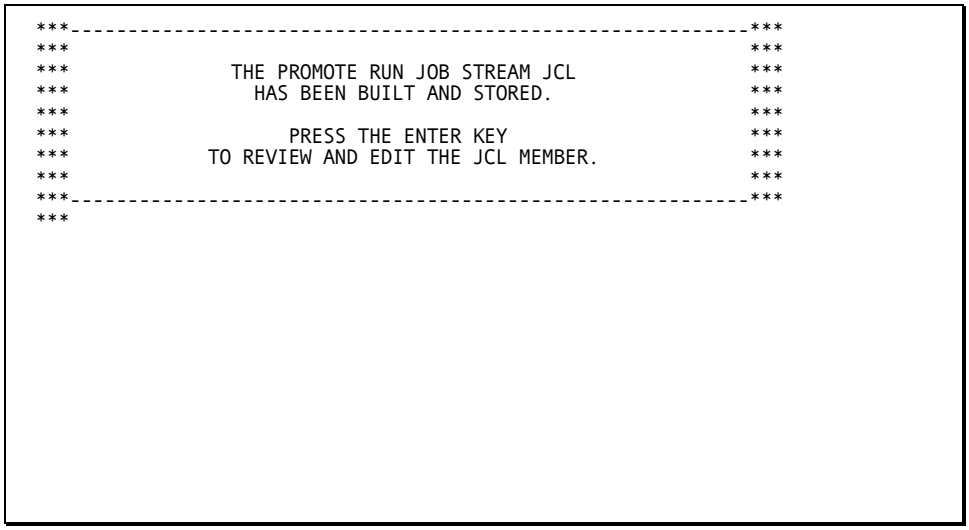

Figure 35. Panel 11 — Promote JCL Generated Messages

The message indicates that the Promote JCL has been built and saved.

Press Enter to display the Promote JCL in an ISPF Edit session, as shown in the next panel.

Initially, the Command area is empty in the ISPF Edit session. The Command area is the area to the right of COMMAND ===> in Panel 12.

```
EDIT          INFORM.JCL(PROMOTE) - 01.00                Columns 00001 00072
Command ===> submit                                        Scroll ===> PAGE
****** ***************************** Top of Data ******************************
000001 //JOBNAME  JOB (Accounting Information)
000002 //*
000003 //*
000004 //*
000005 //*                                          INFORM LOADLIB
000006 //JOBLIB   DD  DSN=INFORM.LOADLIB,DISP=SHR
000007 //*                                          IMS RESIDENCE LIBRARY
000008 //         DD  DSN=IMSESA.RESLIB,DISP=SHR
000009 //*                                          IBM LANGUAGE ENVIRON LIB
000010 //*
000011 //*        DD  DSN=IBM.LANGUAGE.ENVR.RUNLIB,DISP=SHR
000012 //*
000013 //*
000014 //*  THE PRIMARY PROMOTE STEP FOR CICS AND IMS ENVIRONMENTS
000015 //*
000016 //*                                          TSO ENVIRONMENT PROGRAM
000017 //PROMOTE EXEC PGM=IKJEFT01,REGION=3072K
000018 //*
000019 //*                                          INFORM CLIST LIBRARY
```

Figure 36. Panel 12 — ISPF Edit Session with Promote JCL

Type 'submit' in the Command area to complete the Promote process.

Press Enter to submit the job.

After the job submits, use the End command (PF3) to return to the Promote panel.

After the submit, and on return to the Promote panel, a message ('Promote Dialog completed.') appears below the Command area:

```
M9JK20   --------- MAINTAINING the Background and Foreground Libraries --------
COMMAND ===> end
Promote Dialog completed.
 PROMOTE  - Enter the Data Set Names and Parameters needed for Building
            a JCL Job Stream that will be Run to Promote Definitions:

From DEFINITION Library   ===> 'INFORM.DEFLIB'

To   BACKGROUND Library   ===> 'INFORM.BGLIB'
And  FOREGROUND Library   ===> 'INFORM.FGLIB'
for  ONLINE Environment   ===> IMS

General Run Parameters  for the Promote

Run Type          ===> REAL    TEST or REAL Promote Run
Promote to FG Lib ===> ALL     ALL BG Lib Items, SELECT Items, or NONE
Print Glossaries  ===> YES     NO or YES - for every promoted definition
Condense BG LIB   ===> YES     NO or YES - compress unused space
Procedures to BG  ===> YES     NO or YES - promote associated procedures

 Use  ENTER  to process information and continue to Items selection panel
                                                    or to JCL Build panel
 Use  END    to save the information and exit
 Use  CANCEL to exit without save
```

Figure 37. Panel 13 — Promote Panel with Promote Dialog Completed Message

Use the End command (PF3) to return to the Definition Processor menu.

The Definition Processor menu appears.

```
OPTION ===>

               10  PARAMETERS - Specify Session Parameters

               19  IMPORT     - Import File Definitions from External Sources

               20  TABLE      - Create Table Definitions
               21  FILE       - Create File Definitions
               22  LDV        - Create Logical Data View Definitions
               23  PROCEDURE  - Create Procedures


               30  DISPLAY    - Review Definitions in Background Library
               31  PROMOTE    - Maintain Background and Foreground Libraries


               99  Requests   - Create Requests

                T  TUTORIAL   - View Definition Processor Tutorial
                X  EXIT       - Exit Definition Processor


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```

Figure 38. Panel 14 — Definition Processor Menu

Check the job output queue and verify that the Promote job has completed successfully. When the job completes, you are ready to move on the next phase of the IVP.

Phase 2 — Creating a Logical Data View

Note: In the menus and panels, **bold underlined** text indicates user input.

This phase builds a new logical data view definition, using the sample FINANCE file definition. This phase picks up where the previous phase left off, in the Definition Processor menu.

```
OPTION ===> 22

               10  PARAMETERS - Specify Session Parameters

               19  IMPORT     - Import File Definitions from External Sources

               20  TABLE      - Create Table Definitions
               21  FILE       - Create File Definitions
               22  LDV        - Create Logical Data View Definitions
               23  PROCEDURE  - Create Procedures


               30  DISPLAY    - Review Definitions in Background Library
               31  PROMOTE    - Maintain Background and Foreground Libraries


               99  Requests   - Create Requests

                T  TUTORIAL   - View Definition Processor Tutorial
                X  EXIT       - Exit Definition Processor


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```

Figure 39. Panel 1 — Definition Processor Menu

This is the panel that appears at the completion of Phase 1 — Promoting the Sample Definitions of the IVP.

To build a logical data view definition, type '22' in the Command area, as shown in Panel 1.

Press Enter to display the DEFINITION LIBRARY SPECIFICATION panel (also known as the Definition panel).

When the Definition panel appears, the **bold underlined** text area is initially empty.

```
LDV ----------------- DEFINITION LIBRARY SPECIFICATION ------------------------
COMMAND ===>


ISPF DEFINITION LIBRARY:
   Project  ===>
   Group    ===>           ===>           ===>           ===>
   Type     ===>
   Def Name ===>              (leave blank to view member selection list)


OTHER DEFINITION LIBRARY:
   Library Name  ===> 'INFORM.DEFLIB'
   Volume Serial ===>           (if not cataloged)


Library Password ===>           (if password protected)
```

Figure 40. Panel 2 — Definition Panel

Enter your definition library data set name in either the ISPF DEFINITION LIBRARY field or the OTHER DEFINITION LIBRARY field, as shown in Panel 2.

Press Enter to display the Member Selection panel, as shown in Panel 3, below.

When the Member Selection panel appears, the Command area is initially empty.

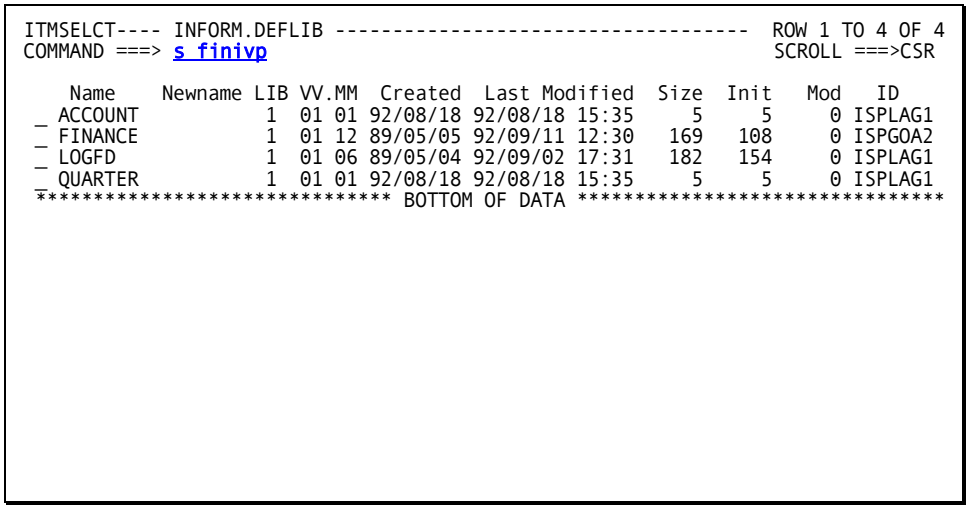

Figure 41. Panel 3 — Member Selection Panel

To create a logical data view called, FINIVP, type 's finivp' in the Command area, as shown above.

Press Enter to display the next panel, the LOGICAL DATA VIEW DEFINITION menu (also known as the LDV menu).

The LDV menu appears, as shown in Panel 4. The Command area is initially empty.

```
LDVMENU ----- INFORM.DEFLIB(FINIVP) ------------------------------------------
OPTION ===> 2

                     LOGICAL DATA VIEW DEFINITION: FINIVP

            1   COMMENTS   - Document Logical Dataview

            2   FILES      - Specify Files To Be Logically Joined

            3   PROCEDURES - Specify Procedures (and/or requests) To Be Invoked
```

Figure 42. Panel 4 — LDV Menu

To specify the files from which to create the logical data view, select the FILES option by typing '2' in the Command area, as shown in Panel 4.

Press Enter to display the LOGICAL DATA VIEW DEFINITION panel (also known as the LDV Definition panel).

The LDV Definition panel appears.

```
LDVFILES ----- INFORM.DEFLIB(FINIVP) ----------------------------- ROW 1 OF 12
COMMAND ===>                                                  SCROLL ===> CSR

                    LOGICAL DATA VIEW DEFINITION: FINIVP

    DBM Storage (IMS) ===> _____          DB2 Sub-System Id ===> ________
    DB2 Plan Name     ===> ________       DB2 SQL Id        ===> ________
    Updater Id        ===> ___________    Expiration Date   ===> __/__/__

Line  File Def   File       File    Synchronize With   Password  Optimize +Where
Cmd     Name     Usage     DDname  File - Field Name  Auth Id    Memory?  Stmt?
''''  finance_  dbfile0_  finance_   _     ________   ________      _       _
''''  finance_  dbfile1_  fin1____   0     profno__   ________      _       _
''''  ________  ________  ________   _     ________   ________      _       _
''''  ________  ________  ________   _     ________   ________      _       _
''''  ________  ________  ________   _     ________   ________      _       _
''''  ________  ________  ________   _     ________   ________      _       _
''''  ________  ________  ________   _     ________   ________      _       _
''''  ________  ________  ________   _     ________   ________      _       _
''''  ________  ________  ________   _     ________   ________      _       _
''''  ________  ________  ________   _     ________   ________      _       _
''''  ________  ________  ________   _     ________   ________      _       _
''''  ________  ________  ________   _     ________   ________      _       _
******************************** BOTTOM OF DATA ********************************
```

Figure 43. Panel 5 — LDV Definition Panel

Type the data, as shown in the **bold underlined** text areas above, exactly as seen. The Updater Id and Expiration Date fields are optional.

When you finish, press Enter to redisplay the panel.

When the panel redisplays, the entries appear in uppercase, as shown in Panel 6. The Line Cmd column to the left of the File Def Name column is initially empty.

```
LDVFILES ----- INFORM.DEFLIB(FINIVP) ---------------------------- ROW 1 OF 12
COMMAND ===>                                                    SCROLL ===> CSR

                    LOGICAL DATA VIEW DEFINITION: FINIVP

    DBM Storage (IMS) ===> _____          DB2 Sub-System Id ===> ________
    DB2 Plan Name     ===> ________       DB2 SQL Id        ===> ________
    Updater Id        ===> ____________   Expiration Date   ===> __ / __ / __

Line  File Def   File       File   Synchronize With   Password  Optimize +Where
Cmd     Name     Usage     DDname  File - Field Name  Auth Id    Memory?  Stmt?
''''  FINANCE   DBFILE0   FINANCE                                  _       _
s'''  FINANCE   DBFILE1   FIN1       0     PROFNO     ________      _       _
'''' ________  ________  ________   _     ________   ________      _       _
'''' ________  ________  ________   _     ________   ________      _       _
'''' ________  ________  ________   _     ________   ________      _       _
'''' ________  ________  ________   _     ________   ________      _       _
'''' ________  ________  ________   _     ________   ________      _       _
'''' ________  ________  ________   _     ________   ________      _       _
'''' ________  ________  ________   _     ________   ________      _       _
'''' ________  ________  ________   _     ________   ________      _       _
'''' ________  ________  ________   _     ________   ________      _       _
'''' ________  ________  ________   _     ________   ________      _       _
******************************** BOTTOM OF DATA ********************************
```

Figure 44. Panel 6 — LDV Panel with Selected Item

Type an 's' in the Line Cmd field next to the second FINANCE line, as shown in the **bold** text area in Panel 6.

Press Enter to display the LDV SEGMENT AND FIELD ALIASES panel (also known as the LDV Segment and Aliases panel), as shown in Panel 7.

When the LDV Segment and Aliases panel appears, the **bold** text areas are initially empty.

```
LDVALI ----- INFORM.DEFLIB(FINIVP) ------------------------------ ROW 1 OF 16
COMMAND ===>                                                    SCROLL ===> CSR
                  LDV SEGMENT AND FIELD ALIASES                 LDV    : FINLDV
                                                                FILE   : FINANCE
                                                                USAGE: : DBFILE1

Line        Segment or Field        Segment         Field
Cmd              Name                Alias          Alias
''''          profgrp_              ________       ivpgrp__
''''          ________              ________       ________
''''          ________              ________       ________
''''          ________              ________       ________
''''          ________              ________       ________
''''          ________              ________       ________
''''          ________              ________       ________
''''          ________              ________       ________
''''          ________              ________       ________
''''          ________              ________       ________
''''          ________              ________       ________
''''          ________              ________       ________
''''          ________              ________       ________
''''          ________              ________       ________
''''          ________              ________       ________
''''          ________              ________       ________
******************************* BOTTOM OF DATA ********************************
```

Figure 45. Panel 7 — LDV Segment and Field Aliases Panel

Type ‘profgrp’ in the Segment or Field Name column, as shown above.

Type ‘ivpgrp’ in the Field Alias column, as shown above.

Press Enter to redisplay the panel.

The panel redisplays with your entries in uppercase.

```
LDVALI ----- INFORM.DEFLIB(FINIVP) ------------------------------ ROW 1 OF 16
COMMAND ===>                                                    SCROLL ===> CSR
                  LDV SEGMENT AND FIELD ALIASES                 LDV    : FINLDV
                                                                FILE   : FINANCE
                                                                USAGE: : DBFILE1
Line        Segment or Field        Segment         Field
Cmd              Name                Alias          Alias
''''            PROFGRP                            IVPGRP
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ________
''''            ________            ________       ********
******************************** BOTTOM OF DATA ********************************
```

Figure 46. Panel 8 — LDV Segment and Aliases Panel

Verify your entries.

Use the End command (PF3) to return to the LDV Definition panel.

The LDV Definition panel appears.

```
LDVFILES ----- INFORM.DEFLIB(FINIVP) ---------------------------- ROW 1 OF 12
COMMAND ===>                                                  SCROLL ===> CSR

                     LOGICAL DATA VIEW DEFINITION: FINIVP

    DBM Storage (IMS) ===> _____          DB2 Sub-System Id ===> ________
    DB2 Plan Name     ===> ________       DB2 SQL Id        ===> ________
    Updater Id        ===> ____________   Expiration Date   ===> __ / __ / __

Line  File Def   File       File   Synchronize With   Password  Optimize +Where
Cmd     Name     Usage     DDname  File - Field Name  Auth Id    Memory?  Stmt?
''''  FINANCE   DBFILE0   FINANCE                    ________      _       _
''''  FINANCE   DBFILE1   FIN1       0     PROFNO    ________      _       _
''''  ________  ________  ________   _     ________  ________      _       _
''''  ________  ________  ________   _     ________  ________      _       _
''''  ________  ________  ________   _     ________  ________      _       _
''''  ________  ________  ________   _     ________  ________      _       _
''''  ________  ________  ________   _     ________  ________      _       _
''''  ________  ________  ________   _     ________  ________      _       _
''''  ________  ________  ________   _     ________  ________      _       _
''''  ________  ________  ________   _     ________  ________      _       _
''''  ________  ________  ________   _     ________  ________      _       _
''''  ________  ________  ________   _     ________  ________      _       _
******************************** BOTTOM OF DATA ********************************
```

Figure 47. Panel 9 — LDV Definition Panel

Use the End command (PF3) again to return to the LDV menu.

The LDV menu appears.

```
LDVMENU ----- INFORM.DEFLIB(FINIVP) ------------------------------------------
OPTION ===>

                     LOGICAL DATA VIEW DEFINITION: FINIVP

            1   COMMENTS   - Document Logical Dataview

            2   FILES      - Specify Files To Be Logically Joined

            3   PROCEDURES - Specify Procedures (and/or requests) To Be Invoked
```

Figure 48. Panel 10 — LDV Definition Menu

Use the End command (PF3) twice to go to the GLOBAL VALIDATION PROCESSING panel (also known as the Validation panel).

The Validation panel appears.

```
VALIDATE ----------------- GLOBAL VALIDATION PROCESSING ---------------------
COMMAND ===>


   To perform a Global Validation of the definition before saving, enter
   the name of your VISION:Inform Background Processing Library and press
   enter.

   Background Library  ===> 'INFORM.BGLIB'


   NOTE:  Procedures are only validated for statement syntax.
          Field names are not validated until the procedure is promoted.









   Press ENTER  To Validate  The Definition
   Enter END    To By-Pass   Validation And Proceed To Save Processing
   Enter CANCEL To Terminate Edit Without Saving The Definition
```

Figure 49. Panel 11 — Validation Panel

Type the name of your background library, as shown in Panel 11.

Press Enter to validate the logical data view and to display the SAVE PROCESSING panel.

The SAVE PROCESSING panel (also known as the Save Processing panel) appears.

```
SAVE ------------------------- SAVE PROCESSING ----------------------------
COMMAND ===>
VALIDATION SUCCESSFULLY COMPLETED. PRESS ENTER TO SAVE THE DEFINITION.
ISPF DEFINITION LIBRARY:
   Project  ===>
   Group    ===>
   Type     ===>
   Def Name ===>


OTHER DEFINITION LIBRARY:
   Library Name  ===> 'INFORM.DEFLIB(FINIVP)'
   Volume Serial ===>           (if not cataloged)


Library Password ===>           (if password protected)


 Press ENTER  To Save The Definition
```

Figure 50. Panel 12 —SAVE PROCESSING Panel with Validation Successfully Completed Message

Note the successful validation message ('VALIDATION SUCCESSFULLY COMPLETED, PRESS ENTER TO SAVE THE DEFINITION') below the Command line. This is the only acceptable message.

Press Enter to save the definition and return to the Member Selection panel.

The Member Selection panel appears.

```
ITMSELCT---- INFORM.DEFLIB ---------------------------------  ROW 1 TO 5 OF 5
COMMAND ===>                                                 SCROLL ===> CSR
LDV FINIVP SAVED TO INFORM.DEFLIB
   Name    Newname LIB VV.MM  Created  Last Modified  Size  Init   Mod   ID
_ ACCOUNT           1  01 01 92/08/18 92/08/18 15:35     5     5     0 ISPLAG1
_ FINANCE           1  01 12 89/05/05 92/09/11 12:30   169   108     0 ISPGOA2
_ FINIVP            1  01 00 97/12/19 97/12/19 15:49     6     6     0 ISPGOA2
_ LOGFD             1  01 06 89/05/04 92/09/02 17:31   182   154     0 ISPLAG1
_ QUARTER           1  01 01 92/08/18 92/08/18 15:35     5     5     0 ISPLAG1
****************************** BOTTOM OF DATA ********************************
```

Figure 51. Panel 13 — Member Selection Panel

The message ('LDV FINIVP SAVED TO INFORM.DEFLIB') below the Command line confirms the successful save of the FINIVP logical data view definition.

Use the End command (PF3) to return to the DEFINITION LIBRARY SPECIFICATION panel (also known as the Definition panel).

The Definition panel appears.

```
LDV ---------------- DEFINITION LIBRARY SPECIFICATION -------------------------
COMMAND ===>


ISPF DEFINITION LIBRARY:
   Project  ===>
   Group    ===>           ===>           ===>           ===>
   Type     ===>
   Def Name ===>              (leave blank to view member selection list)


OTHER DEFINITION LIBRARY:
   Library Name  ===> 'INFORM.DEFLIB(FINIVP)'
   Volume Serial ===>           (if not cataloged)


Library Password ===>           (if password protected)
```

Figure 52. Panel 14 — Definition Panel

Use the End command (PF3) to return to the Main Menu.

The Definition Processor menu appears, as shown in Panel 15.

```
PRIMMENU ----------- VISION:Inform DEFINITION PROCESSOR FACILITY --------------
OPTION ===> 31

              10  PARAMETERS - Specify Session Parameters

              19  IMPORT     - Import File Definitions from External Sources

              20  TABLE      - Create Table Definitions
              21  FILE       - Create File Definitions
              22  LDV        - Create Logical Data View Definitions
              23  PROCEDURE  - Create Procedures


              30  DISPLAY    - Review Definitions in Background Library
              31  PROMOTE    - Maintain Background and Foreground Libraries


              99  Requests   - Create Requests

               T  TUTORIAL   - View Definition Processor Tutorial
               X  EXIT       - Exit Definition Processor


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```

Figure 53. Panel 15 — Definition Processor Menu

To promote the logical data view, type '31' in the Command area of the Definition Processor menu.

Press Enter to display the MAINTAINING the Background and Foreground Libraries panel (also known as the Promote panel).

Note: Previously entered user entries are **bold** text.

The Promote panel appears.

```
M9JK20   --------- MAINTAINING the Background and Foreground Libraries --------
COMMAND ===>

 PROMOTE  - Enter the Data Set Names and Parameters needed for Building
            a JCL Job Stream that will be Run to Promote Definitions:

From DEFINITION Library   ===> 'INFORM.DEFLIB'

To   BACKGROUND Library   ===> 'INFORM.BGLIB'
And  FOREGROUND Library   ===> 'INFORM.FGLIB'
For  ONLINE Environment   ===> IMS


General Run Parameters  for the Promote

Run Type          ===> REAL    TEST or REAL Promote Run
Promote to FG Lib ===> ALL     ALL BG Lib Items, SELECT Items, or NONE
Print Glossaries  ===> YES     NO or YES - for every promoted definition
Condense BGLIB    ===> YES     NO or YES - compress unused space
Procedures to BG  ===> YES     NO or YES - promote associated procedures


 Use  ENTER  to process information and continue to Items selection panel
                                                  or to JCL Build panel
 Use  END    to save the information and exit
 Use  CANCEL to exit without save
```

Figure 54. Panel 16 — Promote Panel

The definition, background and foreground library names, as well as the parameters for the Promote, are already filled in from the work performed in Phase 1 of the IVP.

Verify the entries in the Promote panel.

From the Promote panel, press Enter to display the Select Items panel.

The Select Items panel appears.

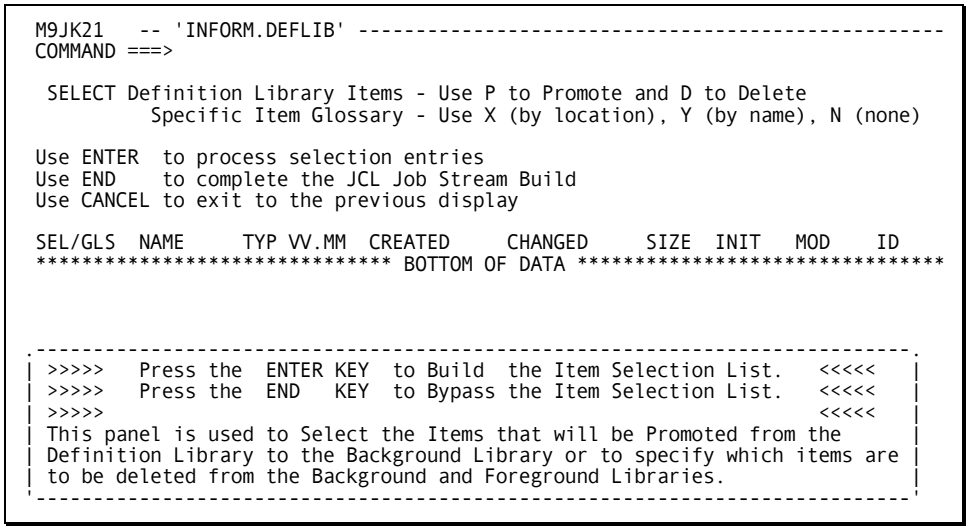

Figure 55. Panel 17 — Select Items Panel

Press Enter to display the list of members in the definition library.

The list of members in the definition library appears. Initially, the SEL/GLS column in Panel 18 is at default value.

```
M9JK21   -- 'INFORM.DEFLIB' --------------------------------  ROW 1 TO 5 OF 5
COMMAND ===>

 SELECT Definition Library Items - Use P to Promote and D to Delete
          Specific Item Glossary - Use X (by location), Y (by name), N (none)

Use ENTER  to process selection entries
Use END    to complete the JCL Job Stream Build
Use CANCEL to exit to the previous display

SEL/GLS  NAME     TYP VV.MM  CREATED     CHANGED     SIZE  INIT   MOD    ID
 '   '   ACCOUNT   T  01.01 92/08/18 92/08/18 15:35     5     5     0 ISPLAG1
 '   '   FINANCE   F  01.12 89/05/05 92/09/11 12:30   169   108     0 ISPGOA2
 p   '   FINIVP    D  01 00 97/12/19 97/12/19 15:49     6     6     0 ISPGOA2
 '   '   LOGFD     F  01.06 89/05/04 92/09/02 17:31   182   154     0 ISPLAG1
 '   '   QUARTER   T  01.01 92/08/18 92/08/18 15:35     5     5     0 ISPLAG1
****************************** BOTTOM OF DATA ********************************
```

Figure 56 Panel 18 — Select Items Panel

Type a 'p' in the SEL column, next to the FINIVP definition, as shown on Panel 18.

Press Enter to process the selection of the new logical data view and begin the Promote process.

Note the message (‘Item selections processed. Enter a command or more selections.’) below the Command line indicating the ‘P’ selection was processed.

```
M9JK21   -- 'INFORM.DEFLIB' --------------------------------  ROW 3 TO 5 OF 5
COMMAND ===>
Items selections processed. Enter a command or more selections.
 SELECT Definition Library Items - Use P to Promote and D to Delete
          Specific Item Glossary - Use X (by location), Y (by name), N (none)

Use ENTER  to process selection entries
Use END    to complete the JCL Job Stream Build
Use CANCEL to exit to the previous display

SEL/GLS  NAME     TYP VV.MM  CREATED     CHANGED     SIZE  INIT   MOD    ID
 P   '   FINIVP    D  01.02 97/12/17 97/12/17 08:42     6     7     0 ISPDFV1
 '   '   LOGFD     F  01.06 89/05/04 92/09/02 17:31   182   154     0 ISPLAG1
 '   '   QUARTER   T  01.01 92/08/18 92/08/18 15:35     5     5     0 ISPLAG1
****************************** BOTTOM OF DATA ********************************
```

Figure 57. Panel 19 — Select Items Panel

In the Select Items panel, use the End command (PF3) to begin the building of the Promote JCL.

The JOB Information panel appears.

```
M9JK22   -------------- PROMOTE JCL Build - JOB Information -------------------
COMMAND ===>

                Provide the JOB Control Information for the Promote JCL
JOB Statement
  ===> //JOBNAME   JOB (Accounting information),MSGCLASS=X
  ===> //*
  ===> //*

JOBLIBs - Enter the VISION:Inform  Program Libraries
 LOAD  Library  ===> 'INFORM.LOADLIB'
 CLIST Library  ===> 'INFORM.CLIST'

OUTPUT Destination Information
 Promote Run Log          ===> SYSOUT=*
 Glossary Listings        ===> SYSOUT=*
 Foreground Promote Log   ===> SYSOUT=*
 Temporary Library Space  ===> 0300  (Tracks)


 Use  ENTER  to complete the JCL Job Stream Build

 Use  END    to save the information and exit
 Use  CANCEL to exit without save
```

Figure 58. Panel 20 — JOB Information Panel

The information on this panel has been already filled in from Phase 1 of this IVP.

1. Verify that the JOB statement contains the correct information.
2. Verify that the VISION:Inform LOAD library is correct.
3. Verify that the CLIST library is correct.
4. Press Enter to display the IMS JOB Information panel.

Panel 21 shows the PROMOTE JCL Build — IMS JOB Information panel (also known as the IMS JOB Information panel).

```
M9JK22X  ------------ PROMOTE JCL Build - IMS JOB Information -----------------
COMMAND ===>

              Provide the IMS JOB Control Information for the Promote JCL

 IMS Run Type         ===> DLI       ( BMP or DLI )

 Utility PSB Name     ===> INFUTIL

 Utility Tran Code    ===> INFUTIL   ( Required for BMP Run Type     )

 Online Module Prefix ===> INFORM    ( Six-character Transfer Prefix )

 IMS Res Library      ===> 'IMSESA.RESLIB'

Data Base Libraries - Required for DLI Run Type

 PSB Library          ===> 'INFORM.PSBLIB'
 DBD Library          ===> 'INFORM.DBDLIB'

 Use  ENTER  to complete the JCL Job Stream Build

 Use  END    to save the information and exit
 Use  CANCEL to exit without save
```

Figure 59. Panel 21 — IMS JOB Information

In the IMS JOB Information panel, most of the information should appear as entered during Phase 1 of this IVP:

1. Specify the IMS Run Type for batch DLI (DLI) or Batch Message Processing (BMP).
2. Specify the VISION:Inform Utility PSB Name and Tran Code.
3. Specify the VISION:Inform Online Module Prefix used in the TRANSFER installation step.
4. Verify the data set name of the IMS system resident load library.
5. Verify the data set names of the PSB and DBD libraries.
6. Press Enter to display the next panel.

The PROMOTE JCL Build — Generate the Job Stream panel (also known as the Generate JOB Stream panel) appears, as shown in Panel 22.

```
M9JK23   ---------- PROMOTE JCL Build - Generate the Job Stream       ---------
COMMAND ===>


   The Promote Job Stream JCL will be generated and placed in the
   following Data Set and Member ready for you to Submit and Run.
   The generated JCL will be displayed for you in EDIT mode.

JCL Library for the Promote Job Stream

 Data Set Name  ===> 'INFORM.JCL'

 Member Name    ===> PROMOTE    (replaces existing member)


 Use  ENTER  to generated the Promote Job Stream JCL

 Use  END    to save the information and exit
 Use  CANCEL to exit without save
```

Figure 60. Panel 22 — Generate JOB Stream Panel

Type the name of the JCL library and member name where you want to save the generated Promote JCL.

You can optionally change the member name to specify a new name.

Press Enter.

Panel 23 shows that the Promote JCL has been built and saved.

```
***-------------------------------------------------------------***
***                                                             ***
***              THE PROMOTE RUN JOB STREAM JCL                 ***
***                HAS BEEN BUILT AND STORED.                   ***
***                                                             ***
***                    PRESS THE ENTER KEY                      ***
***             TO REVIEW AND EDIT THE JCL MEMBER.              ***
***                                                             ***
***-------------------------------------------------------------***
***
```

Figure 61. Panel 23 — Promote JCL Message Panel

Press Enter to continue to an ISPF edit session with the generated Promote JCL.

Initially, the Command area in Panel 24 is empty.

```
EDIT ---- INFORM.JCL(PROMOTE) - 01.00 ------------------------ COLUMNS 001 072
COMMAND ===> submit                                           SCROLL ===> PAGE
****** ***************************** TOP OF DATA ******************************
000001 //JOBNAME  JOB (Accounting Information)
000002 //*
000003 //*
000004 //*
000005 //*                                        INFORM LOADLIB
000006 //JOBLIB   DD  DSN=INFORM.LOADLIB,DISP=SHR
000007 //*                                        IMS RESIDENCE LIBRARY
000008 //         DD  DSN=IMSESA.RESLIB,DISP=SHR
000009 //*                                        IBM LANGUAGE ENVIRON LIB
000010 //*
000011 //*        DD  DSN=IBM.LANGUAGE.ENVR.RUNLIB,DISP=SHR
000012 //*
000013 //*
000014 //*  THE PRIMARY PROMOTE STEP FOR CICS AND IMS ENVIRONMENTS
000015 //*
000016 //*                                        TSO ENVIRONMENT PROGRAM
000017 //PROMOTE EXEC PGM=IKJEFT01,REGION=3072K
000018 //*
000019 //*                                        INFORM CLIST LIBRARY
```

Figure 62. Panel 24 — ISPF Edit Session with INFORM.JCL (PROMOTE)

Type 'submit' in the Command area and press Enter to complete the Promote process by submitting the job.

```
EDIT ---- INFORM.JCL(PROMOTE) - 01.00 -------------------- COLUMNS 00001 00072
COMMAND ===> end                                          SCROLL ===>   PAGE
****** ***************************** TOP OF DATA ****************************
000001 //JOBNAME  JOB (Accounting Information)
000002 //*
000003 //*
000004 //*
000005 //*                                        INFORM LOADLIB
000006 //JOBLIB   DD  DSN=INFORM.LOADLIB,DISP=SHR
000007 //*                                        IMS RESIDENCE LIBRARY
000008 //         DD  DSN=IMSESA.RESLIB,DISP=SHR
000009 //*                                        IBM LANGUAGE ENVIRON LIB
000010 //*
000011 //*        DD  DSN=IBM.LANGUAGE.ENVR.RUNLIB,DISP=SHR
000012 //*
000013 //*
000014 //*  THE PRIMARY PROMOTE STEP FOR CICS AND IMS ENVIRONMENTS
000015 //*
000016 //*                                        TSO ENVIRONMENT PROGRAM
000017 //PROMOTE EXEC PGM=IKJEFT01,REGION=3072K
000018 //*
000019 //*                                        INFORM CLIST LIBRARY
```

Figure 63. Panel 25 — End ISPF Edit Session with INFORM.JCL (PROMOTE)

Use the End command (PF3) to display the Promote panel.

The Promote panel appears. Note the message ('Promote Dialog completed.') below the Command line.

```
M9JK20   --------- MAINTAINING the Background and Foreground Libraries --------
COMMAND ===> end
Promote Dialog completed.
  PROMOTE  - Enter the Data Set Names and Parameters needed for Building
             a JCL Job Stream that will be Run to Promote Definitions:

From DEFINITION Library   ===> 'INFORM.DEFLIB'

To   BACKGROUND Library   ===> 'INFORM.BGLIB'
And  FOREGROUND Library   ===> 'INFORM.FGLIB'
for  ONLINE Environment   ===> IMS

General Run Parameters  for the Promote

Run Type          ===> REAL    TEST or REAL Promote Run
Promote to FG Lib ===> ALL     ALL BG Lib Items, SELECT Items, or NONE
Print Glossaries  ===> YES     NO or YES - for every promoted definition
Condense BG LIB   ===> YES     NO or YES - compress unused space
Procedures to BG  ===> YES     NO or YES - promote associated procedures

 Use  ENTER  to process information and continue to Items selection panel
                                                  or to JCL Build panel
 Use  END    to save the information and exit
 Use  CANCEL to exit without save
```

Figure 64. Panel 26 — Exit the Promote Panel

Use the End command (PF3) to return to the Definition Processor menu.

The Definition Processor menu appears.

```
OPTION ===> x

               10  PARAMETERS - Specify Session Parameters

               19  IMPORT     - Import File Definitions from External Sources

               20  TABLE      - Create Table Definitions
               21  FILE       - Create File Definitions
               22  LDV        - Create Logical Data View Definitions
               23  PROCEDURE  - Create Procedures


               30  DISPLAY    - Review Definitions in Background Library
               31  PROMOTE    - Maintain Background and Foreground Libraries


               99  Requests   - Create Requests

                T  TUTORIAL   - View Definition Processor Tutorial
                X  EXIT       - Exit Definition Processor


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```

Figure 65. Panel 27 — Exiting the Definition Processor Menu

To exit the Definition Processor menu, type an 'x' in the Command area, as shown in Panel 27.

Press Enter to exit the Definition Processor menu and return to the Selection Menu panel.

The following panel shows the VISION:Workbench for ISPF Selection Menu (also known as the Selection Menu).

```
SELMENU ----------- VISION:Workbench for ISPF Selection Menu ----------------
OPTION  ===> x

              VISION:Workbench Release 6.0

  1 - BL (M4) Workbench for VISION:Builder 14.0

  2 - TR (M5) Workbench for VISION:Transact 7.5

  3 - IN (DA) Workbench for VISION:Inform 4.0 (Definition Processor)

  T - Introduction To VISION:Workbench for ISPF

  X - Exit the VISION:Workbench
```

Figure 66. Panel 28 — Selection Panel

Type an 'x' in the Command area and press Enter to exit.

Phase 2 of the IVP is now complete. Be sure to check the output from the Promote job in the output queue.

Phase 3 — Performing System Administration Functions

In this phase, you update the SYSTEM profile to add authorizations to access the IVP logical data view created in Phase 2. You can also add an optional password to the SYSTEM profile.

Note: In the menus and panels, **bold underlined** text areas indicate user input.

This part of the IVP requires that you be logged on to the IMS online system where you installed VISION:Inform. Enter the output MFS format name for the Logon panel. The default name for a 3270 Model 2 is /FORMAT INX202.

See **Figure 18. Platforms and Connection** FORMATS, in the chapter "**Installation Instructions**" for logon FORMAT information. The following is the Computer Associates - Logon panel (also known as the Logon panel).

```
Logon2                    Computer Associates - Logon


                  Welcome to VISION:Inform Release 4.0.

                  Please Enter Your User ID and Password:

                     User ID  . . . . system_
                     Password . . . .          (if password protected)


                +-----------------------------------------------+
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                +-----------------------------------------------+

Command ===>
F1 =Help     F3 =Exit
```

Figure 67. Panel 1 — Logon Panel

The default SYSTEM profile has not yet been updated to handle the IVP files. This and the following panels assume no changes from the delivered system. If the SYSTEM profile has been changed, modify the instructions accordingly.

In the Logon panel, enter the system administrator's User ID and Password.

1. Type 'system' in the User ID field, as shown in Panel 1.
2. Password:
   - Do not type a password if you are working with the default system.
   - If you are working with a system converted from an earlier release, you need to type the password for the SYSTEM profile to log on to the system.
3. Press Enter to display the Main Menu.

The Main Menu appears.

```
Menu2                  Computer Associates - Main Menu

_ Enter one of the following VISION:Inform or VISION:Bridge Options:


  VISION:Inform Options:

  1. Operation Facilities                    (Background Processor Status)
  2. Administration Facilities               (Profile Development)
  3. Report Facilities                       (Report Handling)

  VISION:Bridge Options:

  4. Quick Query                             (Assisted Query Development)
  5. Quick Query Immediate Response          (Assisted Query Development)
  6. Standard Query Processing               (Submit, Delete, Edit
                                              Queries and Stmts)
  7. Immediate Response Query Processing     (Run Queries and Immed Mode)


Command ===>
F1 =Help     F24=Cancel
```

Figure 68. Panel 2 — Main Menu

When the Main Menu appears, note that Option 2 is Administration Facilities.

```
Menu2                  Computer Associates - Main Menu

2 Enter one of the following VISION:Inform or VISION:Bridge Options:


  VISION:Inform Options:

  1. Operation Facilities                    (Background Processor Status)
  2. Administration Facilities               (Profile Development)
  3. Report Facilities                       (Report Handling)

  VISION:Bridge Options:

  4. Quick Query                             (Assisted Query Development)
  5. Quick Query Immediate Response          (Assisted Query Development)
  6. Standard Query Processing               (Submit, Delete, Edit
                                              Queries and Stmts)
  7. Immediate Response Query Processing     (Run Queries and Immed Mode)


Command ===>
F1 =Help     F24=Cancel
```

Figure 69. Panel 3 — Main Menu (Selecting Administration Facilities)

Type ‘2’ in the selection field, as shown in Panel 3.

Press Enter to display the Computer Associates - Source Processing panel (also known as the Source Processing panel).

The Source Processing panel appears.

```
Source2                Computer Associates - Source Processing
                                                                More:
    Name     Type    Owner   Last Used      Name     Type    Owner   Last Used
_ SYSTEM   PROFILE             /  /


Command ===>
F1 =Help     F7 =Backward F8 =Forward  F24=Cancel
```

Figure 70. Panel 4 — Source Processing Panel

Panel 4, the Source Processing panel, shows the profiles defined to VISION:Inform.

- As this example assumes no other profiles, only the SYSTEM profile appears.
- If you added other profiles, they also appear on this panel.

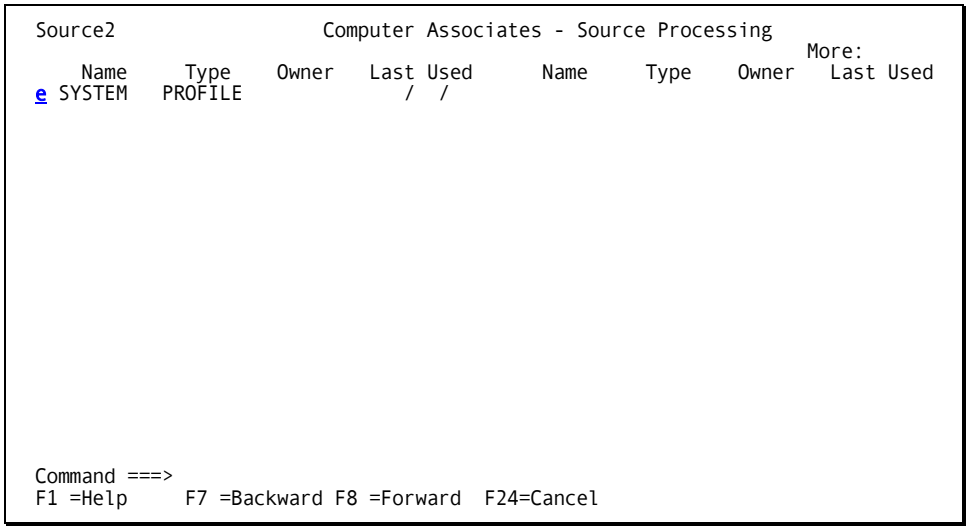

Figure 71. Panel 5 — Source Processing Panel

To edit, type an ‘e’ next to the SYSTEM profile, as shown.

Press Enter to display the Computer Associates - Editor panel (also known as the Full Screen Editor panel).

If your system contains additional profiles, you can scroll forward to locate the SYSTEM profile or use the LOCATE primary command.

```
Editor2        Computer Associates - Editor        Name: SYSTEM   Type: PROFILE
                                                                    More:      >
000100 PROFILE
000200 END PROFILE
```

```
Command ===>
F1 =Help     F3 =Exit     F5 =Rfind     F6 =Rchange   F7 =Backward F8 =Forward
F10=Left     F11=Right    F24=Cancel
```

Figure 72. Panel 6 — Full Screen Editor

The Full Screen Editor displays the SYSTEM profile, as it is delivered with VISION:Inform. Your panel could show more statements if your SYSTEM profile has been changed.

```
Editor2        Computer Associates - Editor        Name: SYSTEM   Type: PROFILE
                                                                    More:      >
i4 100 PROFILE
000200 END PROFILE
```

```
Command ===>
F1 =Help     F3 =Exit     F5 =Rfind     F6 =Rchange   F7 =Backward F8 =Forward
F10=Left     F11=Right    F24=Cancel
```

Figure 73. Panel 7 — Full Screen Editor (Adding Four Lines)

Type ' i4' in the Line Command area to insert four empty lines. Press Enter.

After you type the i4 command to insert four lines, the panel looks like Panel 8.

```
Editor2        Computer Associates - Editor        Name: SYSTEM   Type: PROFILE
                                                                   More:      >
000100 PROFILE
......
......
......
......
000200 END PROFILE









Command ===>
F1 =Help     F3 =Exit     F5 =Rfind     F6 =Rchange   F7 =Backward F8 =Forward
F10=Left     F11=Right    F24=Cancel
```

Figure 74. Panel 8 — Full Screen Editor (After Four Lines Have Been Inserted)

```
Editor2        Computer Associates - Editor        Name: SYSTEM   Type: PROFILE
                                                                   More:      >
000100 PROFILE password secret
...... include finance
...... end include
...... include finivp
...... end include
000200 END PROFILE









Command ===>
F1 =Help     F3 =Exit     F5 =Rfind     F6 =Rchange   F7 =Backward F8 =Forward
F10=Left     F11=Right    F24=Cancel
```

Figure 75. Panel 9 — Full Screen Editor (Enter Statements)

1. Type the four lines exactly as shown above. The INCLUDE statements provide the profile with explicit access to the FINANCE and FINIVP definitions.
2. You can also add a password as shown in the example.
   - In the IVP, use the word ‘secret’.
   - You can, of course, use whatever password you want.
3. Press Enter.

The Full Screen Editor returns panel displaying the lines you entered with line numbers and in uppercase.

```
Editor2         Computer Associates - Editor        Name: SYSTEM   Type: PROFILE
                                                                   More:       >
000100 PROFILE PASSWORD SECRET
000110 INCLUDE FINANCE
000120 END INCLUDE
000130 INCLUDE FINIVP
000140 END INCLUDE
000200 END PROFILE









Command ===>
F1 =Help     F3 =Exit     F5 =Rfind     F6 =Rchange   F7 =Backward F8 =Forward
F10=Left     F11=Right    F24=Cancel
```

Figure 76. Panel 10 — Full Screen Editor (Verify New Statements in the SYSTEM Profile)

Use the Exit command (PF3) to save the profile and return to the Source Processing panel.

When you return to the Source Processing panel, it looks like the following. Note the word 'Edited' under the column title Last Used.

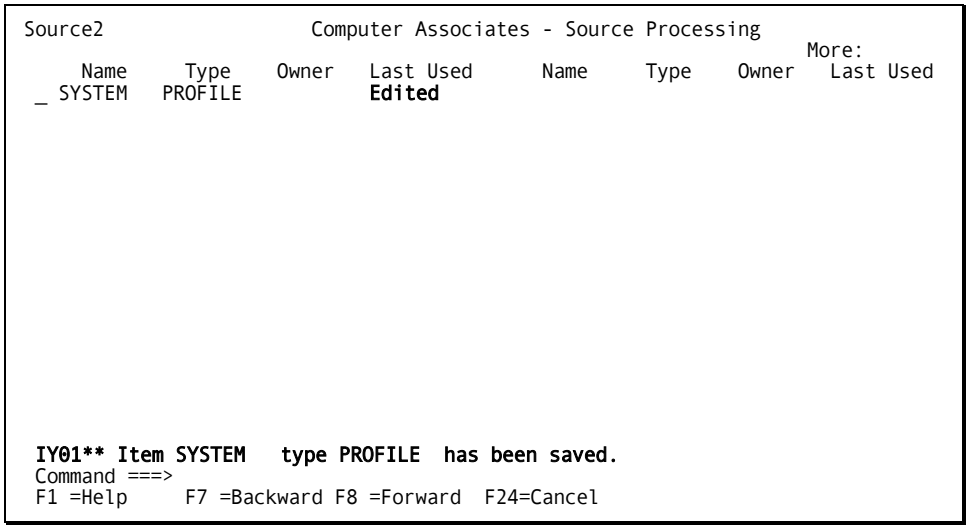

Figure 77. Panel 11 — Source Processing Panel (Showing That the Profile was Edited)

The IY01 message indicates that the profile was saved.

You now relogon so the updated profile can take effect.

From the Source Processing panel, use the Cancel command (PF24) to return to the Main Menu.

The Main Menu appears.

```
Menu2                  Computer Associates - Main Menu

2 Enter one of the following VISION:Inform or VISION:Bridge Options:


  VISION:Inform Options:

  1. Operation Facilities                    (Background Processor Status)
  2. Administration Facilities               (Profile Development)
  3. Report Facilities                       (Report Handling)

  VISION:Bridge Options:

  4. Quick Query                             (Assisted Query Development)
  5. Quick Query Immediate Response          (Assisted Query Development)
  6. Standard Query Processing               (Submit, Delete, Edit
                                              Queries and Stmts)
  7. Immediate Response Query Processing     (Run Queries and Immed Mode)


Command ===>
F1 =Help     F24=Cancel
```

Figure 78. Panel 12 — Main Menu

From the Main Menu, use the Cancel command (PF24) to return to the Logon panel.

The Logon panel appears.

```
Logon2                   Computer Associates - Logon


                  Welcome to VISION:Inform Release 4.0.

                   Please Enter Your User ID and Password:

                     User ID  . . . . system_
                     Password . . . .          (if password protected)


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                +-----------------------------------------------+

Command ===>
F1 =Help     F3 =Exit
```

Figure 79. Panel 13 — Logon Panel

You are now ready to proceed to the next phase of the IVP.

Phase 4 — Running the Background Processor

Note: In menus and panels, **bold underlined** text areas indicate user input.

This phase verifies the installation of the Background Processor.

In this phase, you will:

- Create and modify the Background Processor control member.
- Create and modify the Background Processor JCL.
- Submit the Background Processor job.

Make the indicated changes to your JCL and the control statements. Then submit the job. When the Background Processor is up and running, go to Phase 5.

Note that once the query has been processed, the Background Processor is not active. It is waiting for more work. Phase 8 terminates the Background Processor for 3270 platforms and Phase 7 terminates the Background Processor for remote platforms. The Background Processor can be run in a BMP or batch DLI region. This IVP uses the BMP JCL from sample member INFBMP in INFORM.JCL.

Background Processor Job Steps

There are two steps to the Background Processor job.

1. The first step is the Background Processor. This step should end with a condition code of zero. It also writes to the log file on disk.
2. The second step is an IEBPTPCH to print the log file. This step is added to the standard INFBMP job for the IVP.

Creating OSCIVP

1. Create a new member named OSCIVP in INFORM.SRCLIB by copying the existing member, OSCNTL.

   The following statements, which make up the new member OSCIVP, control the Background Processor.

```
CONTROL  NAME BGIVP  MAXTIME 60 QTIME 1
DATABASE NAME FINANCE  HELD AWAITING
DATABASE NAME FINIVP   HELD AWAITING
BS00 LOG   STAT
BT00 LOG   STAT
BE00 LOG   STAT
CE00 LOG   STAT
DB00 LOG   STAT
LG00 LOG   STAT
QS00 LOG   STAT   WRAPNO 40
QT00 LOG   STAT
QE00 LOG   STAT
IM00 LOG
```

Make the updates to create OSCIVP now.

- The Background Processor will stay up for one hour (MAXTIME 60).
- The two DATABASE statements are required.
- Use Phase 7 or Phase 8 to shut down the Background Processor from the IMS region before the 60 minutes have expired.
- This confirms communication between the Background Processor and VISION:Inform in IMS.

2. Save the new OSCIVP member in INFORM.SRCLIB.

Creating IVPBMP

Note: The IBM Language Environment (LE) library must be available.

1. Copy the JCL member INFBMP to a new member, IVPBMP.
2. The following excerpt of JCL below shows the changes to be made to IVPBMP. The **bold underlined** text areas show the lines that you need to add or change for the IVP.

```
------- add JOB statement here -------
//* MEMBER INFBMP
//*********************************************************************
//* THIS PROCEDURE EXECUTES THE BACKGROUND PROCESSOR IN A BMP REGION. *
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  *
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    *
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  *
//*               CONCATENATED TO THE INFBMP.STEPLIB DD STATEMENTS.   *
//*********************************************************************
//INFBMP  PROC RGN=,
//             LOADLIB=,
//             RESLIB=,
//             PGMLIB=,
//             SORTLIB=,
//             PROG=,
//             PSB=,
//             TRAN=,
//             INFLOG=,
//             BGLIB=,
//             REPORTS=,
//             RUNCNTL=,
//             HCSCFG=,
//             HTMLTPL=,
//             M4REPO=,
```

```
//             M4SORT=,
//             M4REPI=
//INFBMP EXEC PGM=DFSRRC00,REGION=&RGN,PARM=(BMP,&PROG,&PSB,&TRAN)
/\/\/\
```

Phase 5 — Verifying Promoted Definitions

Note: In menus and panels, **bold underlined** text areas indicate user input.

This phase verifies the Promote process from Phase 1 — Promoting the Sample Definitions and Phase 2 — Creating a Logical Data View.

In Phase 3 — Performing System Administration Functions of the IVP, you modified the SYSTEM profile. This phase assumes you added a password. If you did not, ignore the instructions about the password.

```
Logon2                    Computer Associates - Logon


                  Welcome to VISION:Inform Release 4.0.

                   Please Enter Your User ID and Password:

                     User ID  . . . . system
                     Password . . . . secret   (if password protected)


                +-----------------------------------------------+
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                +-----------------------------------------------+

Command ===>
F1 =Help     F3 =Exit
```

Figure 82. Panel 1 — Logon Panel

Type 'system' in the User ID field and the password ('secret' in the example) in the Password field. Note that the password, when entered, does not actually appear visible in the non-display Password field.

Press Enter to display the Main Menu.

Note that the Main Menu Options Selection field (the area in front of the word Enter) is initially empty.

```
Menu2                  Computer Associates - Main Menu

6 Enter one of the following VISION:Inform or VISION:Bridge Options:


  VISION:Inform Options:

  1. Operation Facilities                    (Background Processor Status)
  2. Administration Facilities               (Profile Development)
  3. Report Facilities                       (Report Handling)

  VISION:Bridge Options:

  4. Quick Query                             (Assisted Query Development)
  5. Quick Query Immediate Response          (Assisted Query Development)
  6. Standard Query Processing               (Submit, Delete, Edit
                                              Queries and Stmts)
  7. Immediate Response Query Processing     (Run Queries and Immed Mode)


Command ===>
F1 =Help     F24=Cancel
```

Figure 83. Panel 2 — Main Menu

Type a '6' in the Options Selection field, as shown in **bold** text in Panel 2.

Press Enter to display the Source Processing panel.

The Source Processing panel initially displays an empty Command area (near bottom of panel).

```
Source2                  Computer Associates - Source Processing
                                                                More:
    Name     Type    Owner   Last Used      Name     Type    Owner   Last Used
```

```
KM01** NO MEMBERS TO LIST.
Command ===> create finivp query
F1 =Help     F7 =Backward F8 =Forward  F24=Cancel
```

Figure 84 Panel 3 — Source Processing Panel

Note the KM01 message, which indicates there are no items to list for the SYSTEM user ID. If queries exist, they are listed on this panel, and the KM01 message does not display. Enter 'create finivp query' in the Command area, as shown in **bold** text at the bottom of Panel 3.

Press Enter to proceed to the Full Screen Editor.

The Full Screen Editor text area and Command area are initially empty.

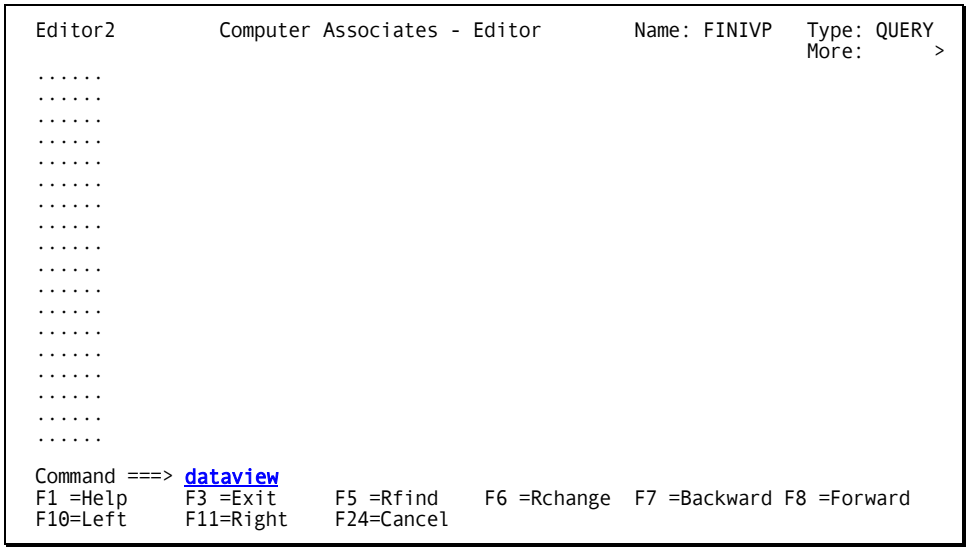

Figure 85. Panel 4 — Full Screen Editor

Type the 'dataview' command in the Command area and press Enter for the Editor to display a pop-up panel listing the available data views.

Note: The term ‘data view’ is seen as the word ‘dataview’ in the product.

The list of available data views is in the pop-up panel on the right.

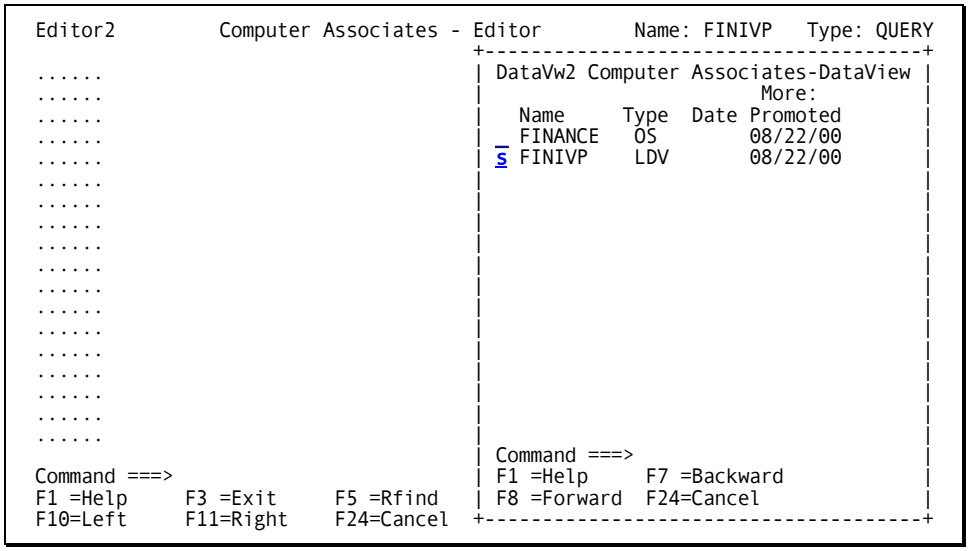

Figure 86. Panel 5 — DataView Pop-up Panel

The list contains FINANCE and FINIVP, which were promoted earlier in the IVP.

Type an 's' next to FINIVP in the pop-up panel as shown in Panel 5.

Press Enter for the Editor to display another pop-up panel (Fields panel) with a list of the fields in the FINIVP data view.

You select a field to obtain detailed information on it using the Fields pop-up panel on the right.

```
Editor2         Computer Associates - Editor        Name: FINIVP   Type: QUERY
                                     +--------------------------------------+
......                               | Fields2  Computer Associates-Fields  |
......                               | Dataview: FINIVP       More:     +   |
......                               | _ ACCOUNT                            |
......                               | _ ACCOUNT_AMOUNT                     |
......                               | s ACCOUNT_BUDGET_AMOUNT              |
......                               | _ ACCOUNT_CHARGE_MONTH               |
......                               | _ ACCOUNT_CHARGE_PERIOD              |
......                               | _ ACCOUNT_CHARGE_YEAR                |
......                               | _ ACCOUNT_DATE                       |
......                               | _ ACCOUNT_DAY                        |
......                               | _ ACCOUNT_DESCRIPTION                |
......                               | _ ACCOUNT_MONTH                      |
......                               | _ ACCOUNT_NUMBER                     |
......                               | _ ACCOUNT_TYPE                       |
......                               | _ ACCOUNT_YEAR                       |
......                               | _ ACCTCNT                            |
......                               | _ DATECNT                            |
......                               |                                      |
                                     | Command ===>                         |
Command ===>                         | F1 =Help     F7 =Backward            |
F1 =Help     F3 =Exit     F5 =Rfind  | F8 =Forward  F24=Cancel              |
F10=Left     F11=Right    F24=Cancel +--------------------------------------+
```

Figure 87. Panel 6 — Fields Pop-up Panel

Type an 's' next to the ACCOUNT_BUDGET_AMOUNT field, as shown in the pop-up panel in Panel 6.

Press Enter to display the Fields Detail pop-up panel.

The Fields Detail pop-up panel appears across the top.

```
Editor2         Computer Associates - Editor        Name: FINIVP   Type: QUERY
+-------------------------------------------------------------------------------+
| Detail2                    Computer Associates - Detail                       |
|                                                          DataView: FINIVP     |
| Details for Field: ACCOUNT_BUDGET_AMOUNT             Primary Name: ACTAMTBD   |
| Dsc: The budgeted dollar amounts for each account.                            |
| Type: PACKD  Decimals:    Length:   5 Print Length:  12 Start:    16          |
| Key Field Ind:           Segment: DATESEG              Parent: ACCTNUMB       |
|                                                                               |
| Command ===>                                                                  |
| F1 =Help     F24=Cancel                                                       |
|                                                                               |
+-------------------------------------------------------------------------------+
......                                  | _ ACCOUNT_MONTH                     |
......                                  | _ ACCOUNT_NUMBER                    |
......                                  | _ ACCOUNT_TYPE                      |
......                                  | _ ACCOUNT_YEAR                      |
......                                  | _ ACCTCNT                           |
......                                  | _ DATECNT                           |
......                                  |                                     |
                                        | Command ===>                        |
Command ===>                            | F1 =Help     F7 =Backward           |
F1 =Help     F3 =Exit     F5 =Rfind     | F8 =Forward  F24=Cancel             |
F10=Left     F11=Right    F24=Cancel    +-------------------------------------+
```

Figure 88. Panel 7 — Fields Detail Pop-up Panel

The detailed field information for the selected field is shown above.

In the Fields Detail pop-up panel, use the Cancel command (PF24) to return to the previous panel, the Fields pop-up panel.

The Fields pop-up panel appears on the right.

```
Editor2         Computer Associates - Editor        Name: FINIVP   Type: QUERY
                                        +-------------------------------------+
......                                  | Fields2  Computer Associates-Fields |
......                                  | Dataview: FINIVP       More:     +  |
......                                  | _ ACCOUNT                           |
......                                  | _ ACCOUNT_AMOUNT                    |
......                                  | _ ACCOUNT_BUDGET_AMOUNT             |
......                                  | _ ACCOUNT_CHARGE_MONTH              |
......                                  | _ ACCOUNT_CHARGE_PERIOD             |
......                                  | _ ACCOUNT_CHARGE_YEAR               |
......                                  | _ ACCOUNT_DATE                      |
......                                  | _ ACCOUNT_DAY                       |
......                                  | _ ACCOUNT_DESCRIPTION               |
......                                  | _ ACCOUNT_MONTH                     |
......                                  | _ ACCOUNT_NUMBER                    |
......                                  | _ ACCOUNT_TYPE                      |
......                                  | _ ACCOUNT_YEAR                      |
......                                  | _ ACCTCNT                           |
......                                  | _ DATECNT                           |
......                                  |                                     |
                                        | Command ===>                        |
Command ===>                            | F1 =Help     F7 =Backward           |
F1 =Help     F3 =Exit     F5 =Rfind     | F8 =Forward  F24=Cancel             |
F10=Left     F11=Right    F24=Cancel    +-------------------------------------+
```

Figure 89. Panel 8 — Fields Pop-up Panel After the Fields Detail Pop-up Panel

From the Fields pop-up panel, use the Cancel command (PF24) again to return to the DataView pop-up panel.

Note: The term 'data view' appears as one word in the product.

The DataView pop-up panel appears on the right.

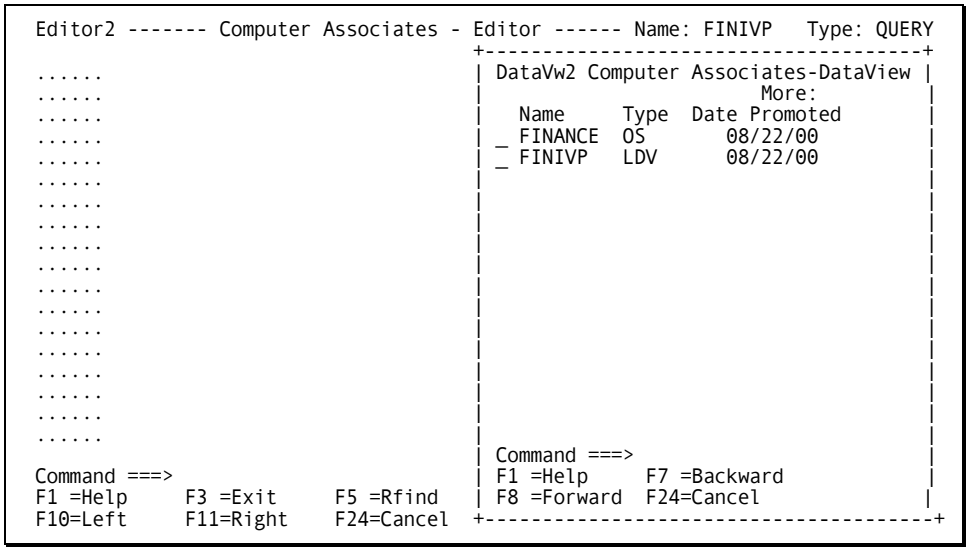

Figure 90. Panel 9 — DataView Pop-up Panel After the Fields Pop-up Panel

You have now verified that the Promote process functions correctly.

From the DataView pop-up panel, use the Cancel command (PF24) to return to the Full Screen Editor.

The Full Screen Editor appears, as shown in Panel 10.

```
Editor2         Computer Associates - Editor        Name: FINIVP   Type: QUERY
                                                                   More:      >
......
......
......
......
......
......
......
......
......
......
......
......
......
......
......
......
......
......

Command ===>
F1 =Help     F3 =Exit     F5 =Rfind    F6 =Rchange  F7 =Backward F8 =Forward
F10=Left     F11=Right    F24=Cancel
```

Figure 91. Panel 10 — Full Screen Editor

The Full Screen Editor text area and Command area are initially empty.

- If you are using a 3270 platform for query development, skip the rest of this phase and proceed to Phase 6 — Creating a Query for 3270 Platforms.
- If you are using a remote platform product for query development, finish the subsection that follows, skip Phase 6, and proceed to Phase 7 — Creating a Query for Remote Platforms.

Exiting for Remote Platform Users Only

Remote platform users proceed with the following steps:

1. Use the Cancel command (PF24) to continue back to the Source Processing panel.
2. Then use the Cancel command (PF24) again to return to the Main Menu.
3. From the Main Menu, the Cancel command returns you to the Logon panel, where the Exit command (PF3) terminates VISION:Inform.

The last screen after the Exit command on the Logon panel appears, as shown in Panel 11.

```
Logon2                    Computer Associates - Logon



                  Welcome to VISION:Inform Release 4.0.

                   Please Enter Your User ID and Password:

                     User ID  . . . . ________
                     Password . . . .          (if password protected)


                +------------------------------------------------+
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                +------------------------------------------------+
#800** Please press the CLEAR key to exit the session.
Command ===>
F1 =Help     F3 =Exit
```

Figure 92 Panel 11 — Exiting VISION:Inform

Note the #800 message above the Command area. Use the CLEAR key to return to a blank screen. Skip Phase 6 and proceed to Phase 7 — Creating a Query for Remote Platforms.

Phase 6 — Creating a Query for 3270 Platforms

Note: In the menus and panels, **bold underlined** text areas indicate user input.

If you are using a remote platform, skip this phase and go to Phase 7 — Creating a Query for Remote Platforms.

In this phase, you create and submit a query to verify the installation of the VISION:Inform Full Screen Editor. To provide you with the appropriate data entry text, each of the following panels has accompanying instructions.

Note: Remote (or client) platforms are VISION:Journey for DOS with VISION:Inform, and VISION:Journey for Windows with VISION:Inform. VISION:Bridge is the 3270 platform.

In this phase, Phase 6 picks up where you left off in Phase 5, with an empty Full Screen Editor panel.

The last panel (the Full Screen Editor) from Phase 5 — Verifying Promoted Definitions is the first panel in this phase of the IVP, as shown in the following panel.

```
 Editor2         Computer Associates - Editor        Name: FINIVP   Type: QUERY
                                                                    More:      >
......
......
......
......
......
......
......
......
......
......
......
......
......
......
......
......
......
 Command ===>
 F1 =Help     F3 =Exit     F5 =Rfind     F6 =Rchange   F7 =Backward F8 =Forward
 F10=Left     F11=Right    F24=Cancel
```

Figure 93. Panel 1 — Full Screen Editor

To create a query for the FINIVP logical data view, type the four lines, as shown by the **bold underlined** text in the following panel.

```
 Editor2         Computer Associates - Editor        Name: FINIVP   Type: QUERY
                                                                    More:      >
...... query database finivp
...... report profgrp ivpgrp
...... end report
...... end query
......
......
......
......
......
......
......
......
......
......
......
......
......
 Command ===>
 F1 =Help     F3 =Exit     F5 =Rfind     F6 =Rchange   F7 =Backward F8 =Forward
 F10=Left     F11=Right    F24=Cancel
```

Figure 94. Panel 2 — Entering a Query in the Full Screen Editor

Verify your entries and press Enter.

The statements you entered redisplay with line numbers and in uppercase text, as shown in Panel 3.

```
 Editor2         Computer Associates - Editor        Name: FINIVP   Type: QUERY
                                                                    More:      >
 000100 QUERY DATABASE FINIVP
 000200 REPORT PROFGRP IVPGRP
 000300 END REPORT
 000400 END QUERY









 Command ===>
 F1 =Help     F3 =Exit     F5 =Rfind     F6 =Rchange   F7 =Backward F8 =Forward
 F10=Left     F11=Right    F24=Cancel
```

Figure 95. Panel 3 — Full Screen Editor with Entered Query

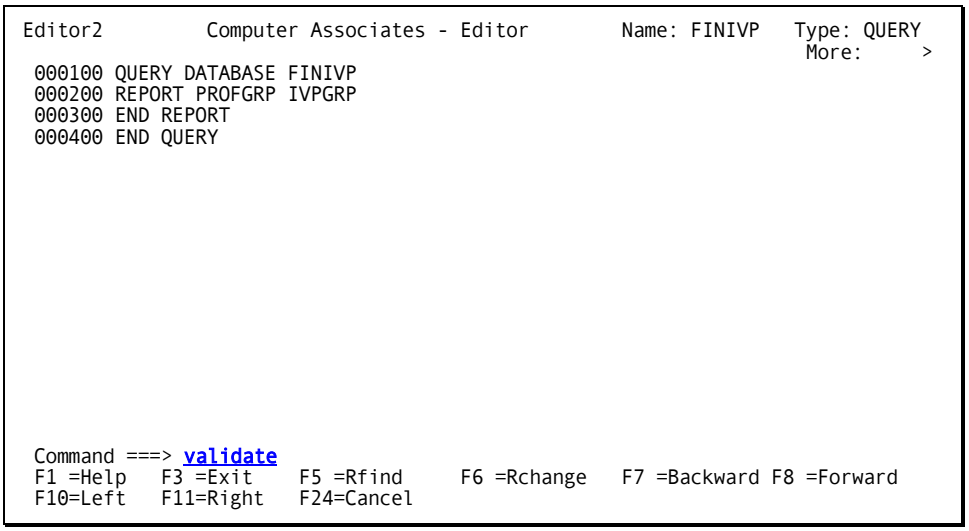

Figure 96. Panel 4 — Full Screen Editor

Type ‘validate’ in the Command area, as shown at the bottom of Panel 4.

Press Enter to execute the command for your query.

After the query is validated, the panel looks like the following.

```
Editor2         Computer Associates - Editor        Name: FINIVP   Type: QUERY
                                                                   More:      >
000100 QUERY DATABASE FINIVP
000200 REPORT PROFGRP IVPGRP
000300 END REPORT
000400 END QUERY









#V03** Validation is complete.  No errors were detected.
Command ===>
F1 =Help     F3 =Exit     F5 =Rfind     F6 =Rchange   F7 =Backward F8 =Forward
F10=Left     F11=Right    F24=Cancel
```

Figure 97. Panel 5 — Full Screen Editor

Note the message ('#V03** Validation is complete. No errors were detected.') above the Command field. If this message does not appear, correct the query and repeat the VALIDATE command.

From the Full Screen Editor, use the Exit command (PF3) to save the query and return to the Source Processing panel.

The Source Processing panel appears.

```
Source2                 Computer Associates - Source Processing
                                                                   More:      >
    Name     Type    Owner   Last Used      Name     Type    Owner   Last Used
_ FINIVP   QUERY    SYSTEM   08/23/00
```

```
IY01** Item FINIVP   type QUERY    has been saved.
Command ===>
F1 =Help     F7 =Backward F8 =Forward  F24=Cancel
```

Figure 98. Panel 6 — Source Processing Panel

The query is saved and this panel reappears with a save message ('IY01** ...'). The last used date reflects the current date.

Note that the Line Command area, the area to the left of the Name column, is initially empty.

```
Source2                 Computer Associates - Source Processing
                                                              More:      >
    Name     Type    Owner   Last Used      Name     Type    Owner   Last Used
s FINIVP   QUERY    SYSTEM   08/23/00
                                                                        
                                                                        
                                                                        
                                                                        
                                                                        
                                                                        
                                                                        
                                                                        
                                                                        
                                                                        
                                                                        
IY01** Item FINIVP   type QUERY    has been saved.
Command ===>
F1 =Help     F7 =Backward F8 =Forward  F24=Cancel
```

Figure 99. Panel 7 — Source Processing Panel (Submitting a Query)

To submit the query, type an ‘s’ next to the query name, FINIVP.

Press Enter to display the Submit panel.

The Submit panel appears.

```
Submit2                   Computer Associates - Submit
                          Name: FINIVP   Type: QUERY  OwnerId: SYSTEM

 To Submit the query enter EXIT
 To leave the panel without submitting the query enter CANCEL

Class                              10          (Enter  1-14 )
Maximum number of roots            _________   (Enter 1-99999999)
Maximum number of lines            ____        (Enter 1-9999)
Route to batch printer?            _           (Y)
Format for logical terminal        _________   (Terminal Id)
Generate query source with report  _           (Y)
Output Format                      1           (1 - Standard Report
                                                2 - HTML
                                                3 - Tab Delimited
                                                4 - Comma Delimited
                                                5 - Plain Text)
Override Query Output Format       _           (Y)



Command ===>
F1 =Help     F3 =Exit     F24=Cancel
```

Figure 100. Panel 8 — Submit Panel

```
Submit2                    Computer Associates - Submit
                           Name: FINIVP   Type: QUERY  OwnerId: SYSTEM

 To Submit the query enter EXIT
 To leave the panel without submitting the query enter CANCEL

Class                              10          (Enter  1-14 )
Maximum number of roots            ________    (Enter 1-99999999)
Maximum number of lines            ____        (Enter 1-9999)
Route to batch printer?            _           (Y)
Format for logical terminal        ________    (Terminal Id)
Generate query source with report  _           (Y)
Output Format                      1           (1 - Standard Report
                                                2 - HTML
                                                3 - Tab Delimited
                                                4 - Comma Delimited
                                                5 - Plain Text)
Override Query Output Format       _           (Y)



Command ===> exit
F1 =Help     F3 =Exit     F24=Cancel
```

Figure 101. Panel 9 — Submit Panel

To submit the query, type 'exit' in the Command area, as shown, and press Enter. Alternatively, press PF3.

The Source Processing panel appears.

```
Source2                 Computer Associates - Source Processing
                                                                More:
    Name     Type    Owner   Last Used      Name     Type    Owner    Last Used
_ FINIVP   QUERY    SYSTEM   Selected

QD01** Query 7504 - FINIVP   has been submitted.
Command ===>
F1 =Help     F7 =Backward F8 =Forward  F24=Cancel
```

Figure 102. Panel 10 — Source Processing Panel

Note the submit confirmation message (‘QD01** Query 7504 - FINIVP has been submitted.’). The query number on your panel will most likely differ from the one shown in Panel 10.

Use the Cancel command (PF24) to return to the Main Menu.

The Main Menu appears.

```
Menu2                   Computer Associates - Main Menu

6 Enter one of the following VISION:Inform or VISION:Bridge Options:


  VISION:Inform Options:

  1. Operation Facilities                    (Background Processor Status)
  2. Administration Facilities               (Profile Development)
  3. Report Facilities                       (Report Handling)

  VISION:Bridge Options:

  4. Quick Query                             (Assisted Query Development)
  5. Quick Query Immediate Response          (Assisted Query Development)
  6. Standard Query Processing               (Submit, Delete, Edit
                                              Queries and Stmts)
  7. Immediate Response Query Processing     (Run Queries and Immed Mode)


Command ===>
F1 =Help     F24=Cancel
```

Figure 103. Panel 11 — Main Menu

Your panel will look like Panel 11.

From the Main Menu, use Cancel (PF24) to return to the Logon panel.

The Logon panel appears.

```
Logon2                    Computer Associates - Logon


                   Welcome to VISION:Inform Release 4.0.

                    Please Enter Your User ID and Password:

                      User ID  . . . . ________
                      Password . . . .          (if password protected)


                 +-----------------------------------------------+
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                 +-----------------------------------------------+
Command ===>
F1 =Help     F3 =Exit
```

Figure 104. Panel 12 — Logon Panel

Use the Exit command (PF3) to log off VISION:Inform.

When you log off, a message ("#800** Please press the CLEAR key to exit the session.") appears.

```
Logon2                    Computer Associates - Logon


                   Welcome to VISION:Inform Release 4.0.

                    Please Enter Your User ID and Password:

                      User ID  . . . . ________
                      Password . . . .          (if password protected)


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                 +-----------------------------------------------+
#800** Please press the CLEAR key to exit the session.
Command ===>
F1 =Help     F3 =Exit
```

Figure 105. Panel 13 — Logon Panel

Follow the instructions in the message and press CLEAR.

This completes Phase 6 — Creating a Query for 3270 Platforms. Skip Phase 7 and proceed to Phase 8 — Viewing and Cleaning Up for 3270 Platforms.

Phase 7 — Creating a Query for Remote Platforms

Note: Remote platforms are VISION:Journey for DOS with VISION:Inform, and VISION:Journey for Windows with VISION:Inform. VISION:Bridge is the 3270 platform.

Phase 7 is for remote platforms only. If you are using a 3270 platform, use Phase 6 — Creating a Query for 3270 Platforms.

In this phase, you enter a task or query from a remote platform. Since there are a number of different platforms, the following instructions are generic. See the remote platform documentation for specific instructions.

1. First, check the script used to log on to VISION:Inform. This might have changed. Make the required changes.
2. Log on to the platform and retrieve the glossary for FINIVP.
3. Define a task/query reporting the fields PROFGRP and IVPGRP.
4. Order the task or query FINIVP.
5. Deliver the data when the task/query completes.
6. Disconnect the remote platform.

The remaining steps are contained in this section with each panel accompanied by instructions.

At this time, go to the host, log on to IMS, and follow the panels in this phase. When you complete this phase you will be done with the IVP.

If you are a VISION:Bridge user, do not terminate the Batch Processor and proceed to Phase 8 — Viewing and Cleaning Up for 3270 Platforms.

After entering the VISION:Inform transaction ID, the Logon panel appears.

```
Logon2                  Computer Associates - Logon


                  Welcome to VISION:Inform Release 4.0.

                   Please Enter Your User ID and Password:

                     User ID  . . . . ________
                     Password . . . .          (if password protected)


               +-----------------------------------------------+
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               +-----------------------------------------------+
Command ===>
F1 =Help     F3 =Exit
```

Figure 106. Panel 1 — Logon Panel

Note: **Bold underlined** text areas indicate user input.

```
Logon2                  Computer Associates - Logon


                 Welcome to VISION:Inform Release 4.0.

                  Please Enter Your User ID and Password:

                    User ID  . . . . system
                    Password . . . . secret     (if password protected)


              +-----------------------------------------------+
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Command ===>
F1 =Help     F3 =Exit
```

Figure 107. Panel 2 — Logon Panel with User ID and Password

Type ‘system’ and ‘secret’ (or your own password) as shown. The password does not display as you type it.

Press Enter to display the Main Menu.

The Main Menu appears.

```
Menu2                  Computer Associates - Main Menu

_ Enter one of the following VISION:Inform or VISION:Bridge Options:


  VISION:Inform Options:

  1. Operation Facilities                    (Background Processor Status)
  2. Administration Facilities               (Profile Development)
  3. Report Facilities                       (Report Handling)

  VISION:Bridge Options:

  4. Quick Query                             (Assisted Query Development)
  5. Quick Query Immediate Response          (Assisted Query Development)
  6. Standard Query Processing               (Submit, Delete, Edit
                                              Queries and Stmts)
  7. Immediate Response Query Processing     (Run Queries and Immed Mode)


Command ===>
F1 =Help     F24=Cancel
```

Figure 108. Panel 3 — Main Menu

```
Menu2                  Computer Associates - Main Menu

1 Enter one of the following VISION:Inform or VISION:Bridge Options:


  VISION:Inform Options:

  1. Operation Facilities                    (Background Processor Status)
  2. Administration Facilities               (Profile Development)
  3. Report Facilities                       (Report Handling)

  VISION:Bridge Options:

  4. Quick Query                             (Assisted Query Development)
  5. Quick Query Immediate Response          (Assisted Query Development)
  6. Standard Query Processing               (Submit, Delete, Edit
                                              Queries and Stmts)
  7. Immediate Response Query Processing     (Run Queries and Immed Mode)


Command ===>
F1 =Help     F24=Cancel
```

Figure 109. Panel 4 — Main Menu with Option 1 Selected

To select Operation Facilities, type a '1' preceding the word Enter, as shown.

Press Enter to display the next panel, the Command Input panel.

The Command Input panel appears, as shown in the Panel 5.

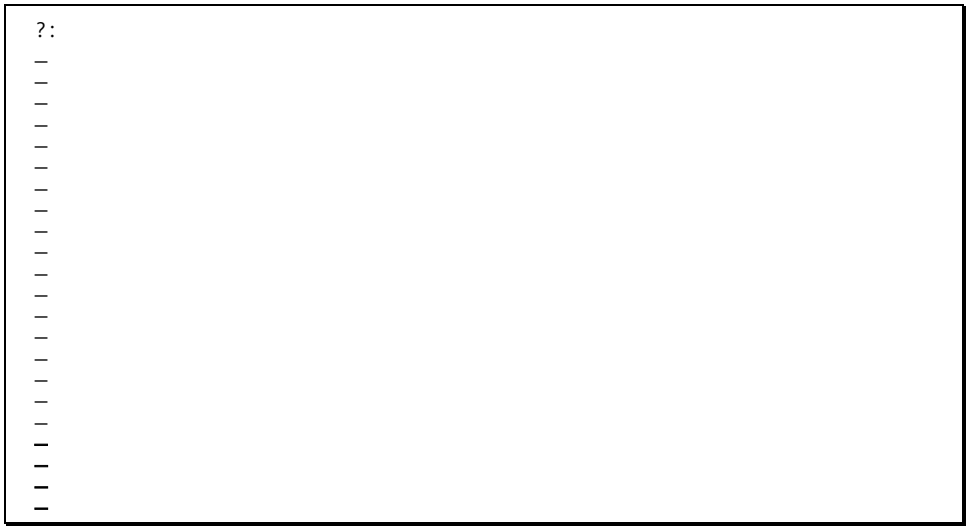

Figure 110. Panel 5 — Command Input Panel

Initially, the panel is empty.

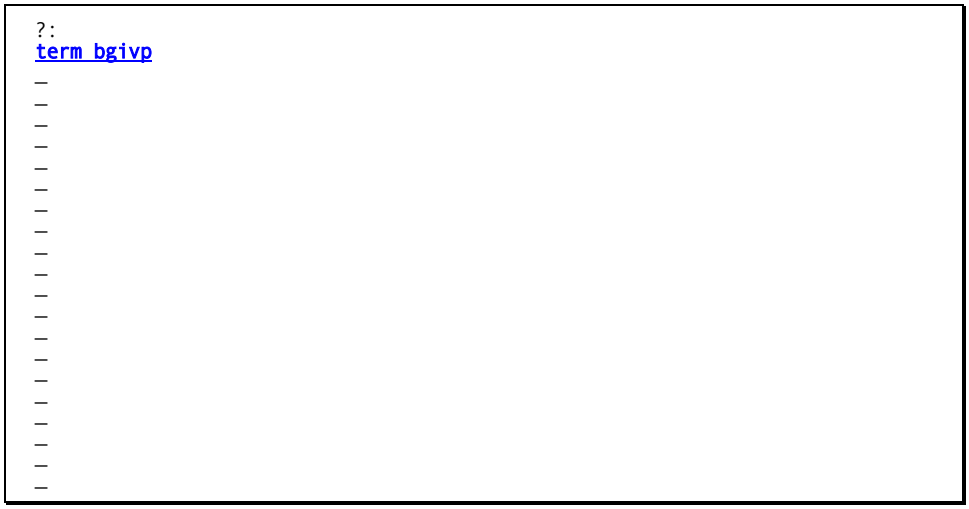

Figure 111. Panel 6 — Command Input Panel with TERMINATE Command (term bgivp)

In the Command Input panel, after the ?: prompt, type 'term bgivp', as shown. This command terminates the Background Processor.

Press Enter.

The message (‘TM01** BACKGROUND PROCESSOR BGIVP WILL TERMINATE.’) displays, as shown in Panel 7.

```
?:
term bgivp
TM01** BACKGROUND PROCESSOR BGIVP    WILL TERMINATE.
?:
_
```

Figure 112. Panel 7 — Command Input Panel with Terminate Message

```
?:
term bgivp
TM01** BACKGROUND PROCESSOR BGIVP    WILL TERMINATE.
?:
quit
```

Figure 113. Panel 8 — Command Input Panel with Quit Command

In the Command Input panel, type ‘quit’ after the ?: prompt.

Press Enter to return to the Main Menu.

The Main Menu appears, as shown in Panel 9.

```
Menu2                  Computer Associates - Main Menu

1 Enter one of the following VISION:Inform or VISION:Bridge Options:


  VISION:Inform Options:

  1. Operation Facilities                    (Background Processor Status)
  2. Administration Facilities               (Profile Development)
  3. Report Facilities                       (Report Handling)

  VISION:Bridge Options:

  4. Quick Query                             (Assisted Query Development)
  5. Quick Query Immediate Response          (Assisted Query Development)
  6. Standard Query Processing               (Submit, Delete, Edit
                                              Queries and Stmts)
  7. Immediate Response Query Processing     (Run Queries and Immed Mode)


Command ===>
F1 =Help     F24=Cancel
```

Figure 114. Panel 9 — Main Menu Panel After Terminating the Background Processor

From the Main Menu, use the Cancel command (PF24) to return to the Logon panel.

The Logon panel appears.

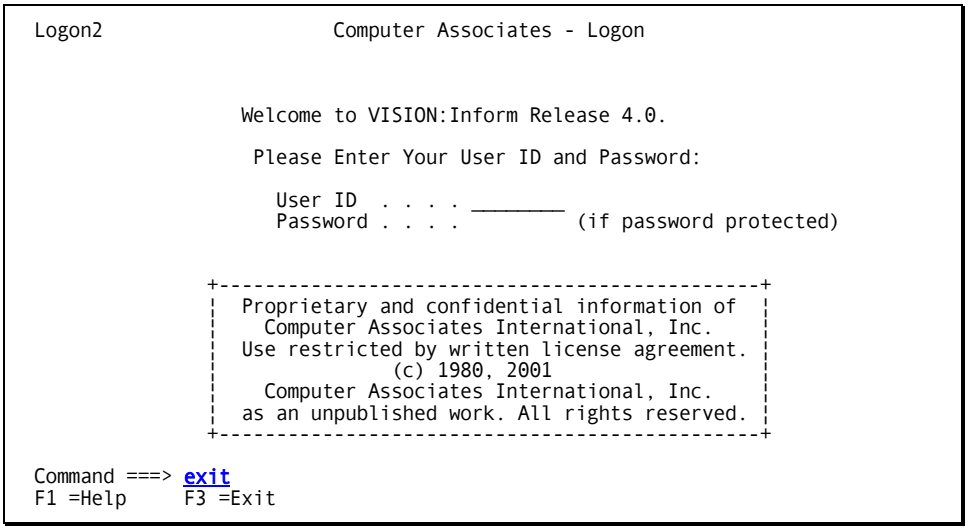

Figure 115. Panel 10 — Logon Panel

Type 'exit' in the Command area and press Enter, or press PF3.

The Logon panel displays a message.

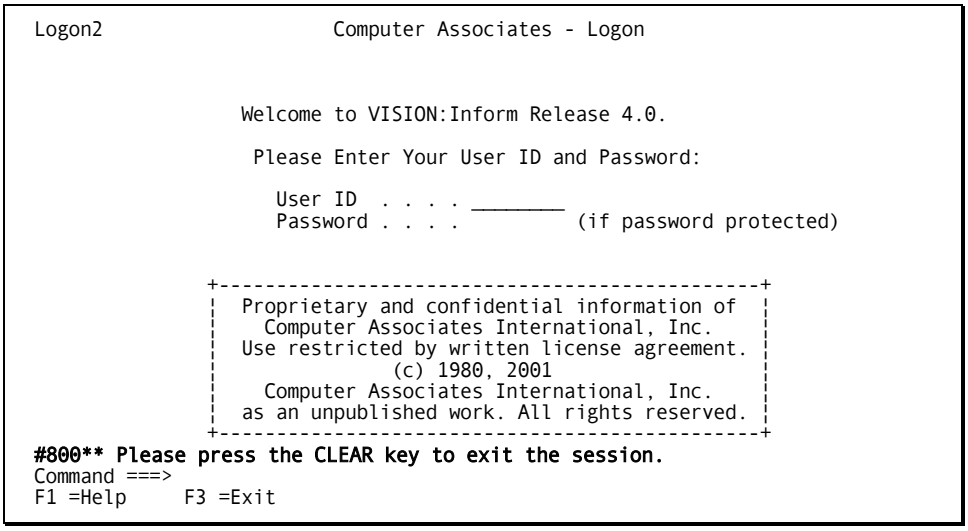

Figure 116. Panel 11 — Logon Panel with Exit Message

When you receive the #800 message, press CLEAR to display to a blank screen.

Phase 8 — Viewing and Cleaning Up for 3270 Platforms

Note: Remote (or client) platforms are VISION:Journey for DOS with VISION:Inform, and VISION:Journey for Windows with VISION:Inform. VISION:Bridge is the 3270 platform.

This phase is for 3270 platforms. If you are accessing VISION:Inform from a remote platform, skip this section.

In this phase:

- View and purge the report created in previous phases.
- Check the status of the Background Processor.
- Terminate the Background Processor.
- Delete the IVP query source.

At the end of this phase, the Installation Verification Process is complete.

To begin, log onto IMS, enter the IMS /FORMAT command for the VISION:Inform output MFS FORMAT NAME (default INX202) to display the Logon panel. See the second table under MFS Formats for Starting VISION:Inform in the chapter "**Installation Instructions**" for a list of default FORMAT names.

The Logon panel appears.

```
Logon2                    Computer Associates - Logon


                  Welcome to VISION:Inform Release 4.0.

                   Please Enter Your User ID and Password:

                     User ID  . . . . ________
                     Password . . . .          (if password protected)


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               +-------------------------------------------------+

Command ===>
F1 =Help     F3 =Exit
```

Figure 117. Panel 1 — Logon Panel

Note: **Bold underlined** text areas indicate user input.

```
Logon2                    Computer Associates - Logon


                  Welcome to VISION:Inform Release 4.0.

                   Please Enter Your User ID and Password:

                     User ID  . . . . system
                     Password . . . . secret     (if password protected)


               +-------------------------------------------------+
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               +-------------------------------------------------+

Command ===>
F1 =Help     F3 =Exit
```

Figure 118. Panel 2 — Logon Panel with User ID and Password

Type 'system' and 'secret' (or your own password) as shown. The password does not display as you type it.

Press Enter to display the next panel, which is the Main Menu.

The Main Menu appears.

```
Menu2                   Computer Associates - Main Menu

_ Enter one of the following VISION:Inform or VISION:Bridge Options:


  VISION:Inform Options:

  1. Operation Facilities                    (Background Processor Status)
  2. Administration Facilities               (Profile Development)
  3. Report Facilities                       (Report Handling)

  VISION:Bridge Options:

  4. Quick Query                             (Assisted Query Development)
  5. Quick Query Immediate Response          (Assisted Query Development)
  6. Standard Query Processing               (Submit, Delete, Edit
                                              Queries and Stmts)
  7. Immediate Response Query Processing     (Run Queries and Immed Mode)


Command ===>
F1 =Help     F24=Cancel
```

Figure 119. Panel 3 — Main Menu

```
Menu2                   Computer Associates - Main Menu

1 Enter one of the following VISION:Inform or VISION:Bridge Options:


  VISION:Inform Options:

  1. Operation Facilities                     (Background Processor Status)
  2. Administration Facilities                (Profile Development)
  3. Report Facilities                        (Report Handling)

  VISION:Bridge Options:

  4. Quick Query                              (Assisted Query Development)
  5. Quick Query Immediate Response           (Assisted Query Development)
  6. Standard Query Processing                (Submit, Delete, Edit
                                               Queries and Stmts)
  7. Immediate Response Query Processing      (Run Queries and Immed Mode)


Command ===>
F1 =Help     F24=Cancel
```

Figure 120. Panel 4 — Main Menu with Operation Facilities Selected

Type ‘1’ in the field to the left of the word Enter, as shown.

Press Enter to display the next panel, the Command Input panel.

```
?:
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
```

Figure 121. Panel 5 — Command Input Panel Showing Prompt

The Command Input panel appears and the ?: prompt displays, as shown in Panel 5.

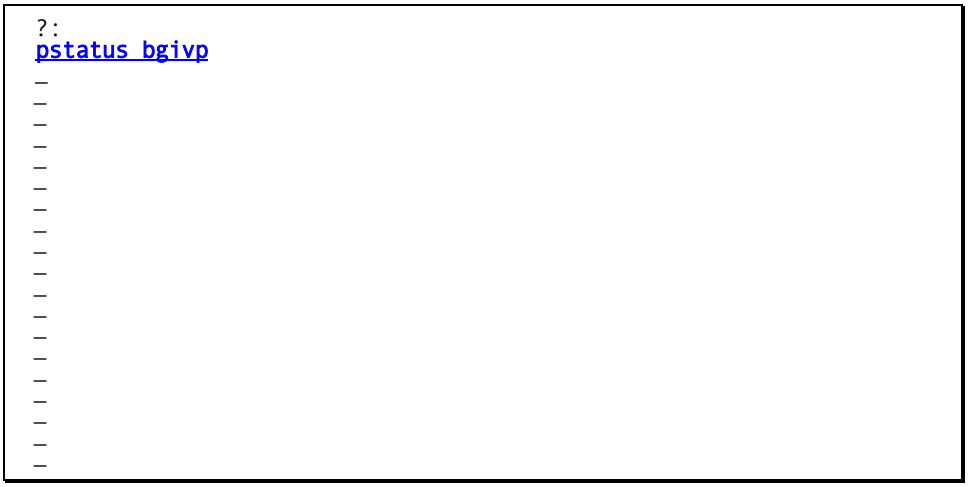

Figure 122. Panel 6 — Command Input Panel with PSTATUS Command

To request the status of the bgivp Background Processor, type 'pstatus bgivp', as shown.

Press Enter.

The Background Processor name is specified in the CONTROL statement of the Background Processor control file.

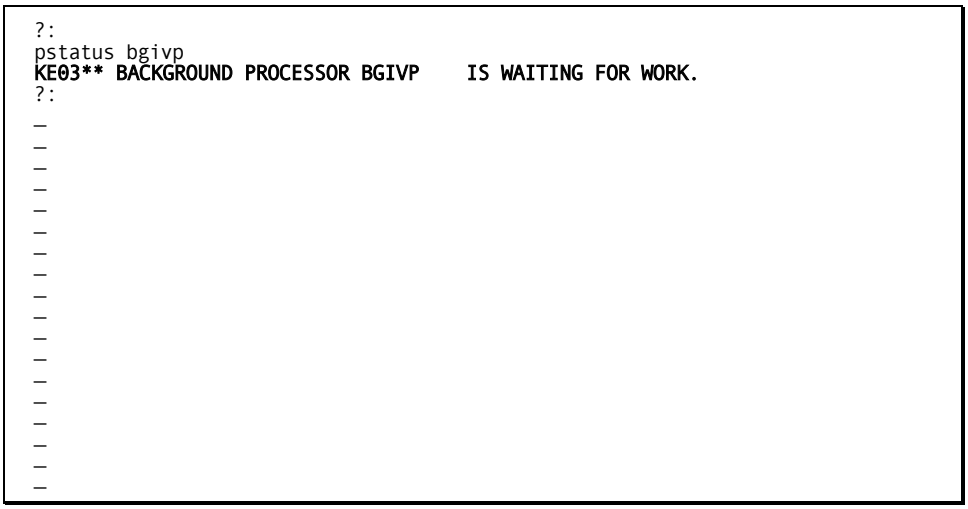

Figure 123. Panel 7 — Command Input Panel with Background Processor Status

The KE03 message ('KE03** BACKGROUND PROCESSOR BGIVP IS WAITING FOR WORK.') appears, providing it is within the one-hour time limit of the Background Processor job.

The KE07 message ('KE07 ** NONE OF THE SPECIFIED BACKGROUND PROCESSORS IS EXECUTING.') appears, if the one-hour time limit expires.

Verify that the Background Processor is still running. If not, restart the Background Processor by resubmitting job IVPBMP located in the INFORM.JCL library.

If you receive any other messages, contact Technical Support.

The processor status (pstatus) message is followed by the ?: prompt.

```
?:
pstatus bgivp
KE03** BACKGROUND PROCESSOR BGIVP    IS WAITING FOR WORK.
?:
qstatus
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
_
```

Figure 124. Panel 8 — Command Input Showing QSTATUS Command

Type 'qstatus' on the next line after the ?: prompt.

Press Enter.

Note: The panel you see will be similar to Panel 9. The query number, destination, and class could be different than what is in Panel 9.

```
QUERY #-NAME     STATUS      DEST.      PAGES   DATAVIEW   CLASS   USERID

2174-FINIVP      READY       $000           2   FINIVP        10
?:
_
```

Figure 125. Panel 9 — Qstatus Panel

Panel 9 shows the status of the query submitted in Phase 4.

- It is a status of READY, which indicates it is ready to view.
- If the status is AWAITING or ACTIVE, rekey 'qstatus' until the query processes and is READY. If it does not process, a problem could exist and you should contact Technical Support.

```
QUERY #-NAME     STATUS      DEST.      PAGES   DATAVIEW   CLASS   USERID

2174-FINIVP      READY       $000           2   FINIVP        10
?:
view finivp
```

Figure 126. Panel 10 — Qstatus Panel with VIEW Command

Type 'view finivp' to view the report output. The command, 'view finivp' is shown in blue in Panel 10.

Press Enter to display the report in the View panel.

Panel 11 shows the View panel.

```
**OUTPUT FOR USER SYSTEM  **
**ID                              **
**QUERY 2174-FINIVP  , CLASS 10**
**REPORT NO.  1, PAGE  COUNT        2**
**AGAINST DATABASE FINIVP  **
**PROCESSED 08/23/00     AT 17:41:06**









PA1                                                                  =
```

Figure 127. Panel 11 — View Panel

The VIEW command displays the report header. Note the MFS keystroke reminder, PA1, shown in the lower left corner in Panel 11. Press PA1 to display the next page of the report.

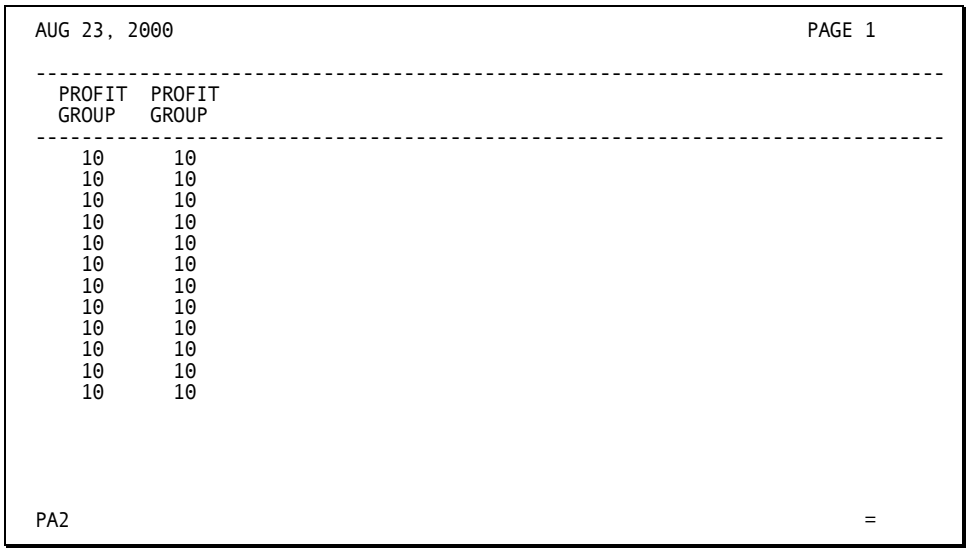

Figure 128. Panel 12 — View Panel

Panel 12 shows the body of the report. The IVP query does not have a large report, so it fits on one page.

```
AUG 23, 2000                                                          PAGE 1

------------------------------------------------------------------------------
  PROFIT  PROFIT
  GROUP   GROUP
------------------------------------------------------------------------------
    10      10
    10      10
    10      10
    10      10
    10      10
    10      10
    10      10
    10      10
    10      10
    10      10
    10      10
    10      10




PA2                                                                    =
```

Figure 129. Panel 13 — Terminate Paging in the View Panel

Note the keystroke reminder, PA2, in the bottom left hand corner of the panel. Press PA2 to obtain the system prompt , as shown in Panel 14.

```
?:
—
```

Figure 130. Panel 14 — Command Input Panel After Terminating the Report Display

The command input panel displays.

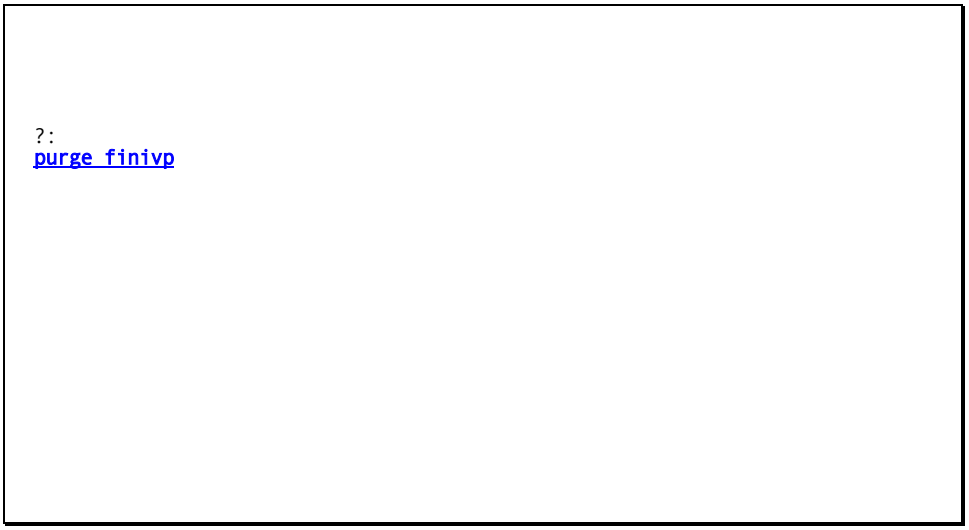

Figure 131. Panel 15 — Command Input Panel with PURGE Command

Type ‘purge finivp’ as shown.

Press Enter to purge the report.

When purge completes, messages appear.

```
?:
purge finivp
KF09** Query 2174 - FINIVP   has been purged.
KF01** PURGE COMPLETED.
?:
_
```

Figure 132. Panel 16 — Command Input Panel with Purge Messages

The query number in the KF09 message will not exactly match the number in your message.

```
?:
purge finivp
KF09** Query 2174 - FINIVP   has been purged.
KF01** PURGE COMPLETED.
?:
term bgivp
```

Figure 133. Panel 17 — Command Input Panel with the Terminate Background Processor Command

Type ‘term bgivp’ as shown to terminate the Background Processor.

Press Enter.

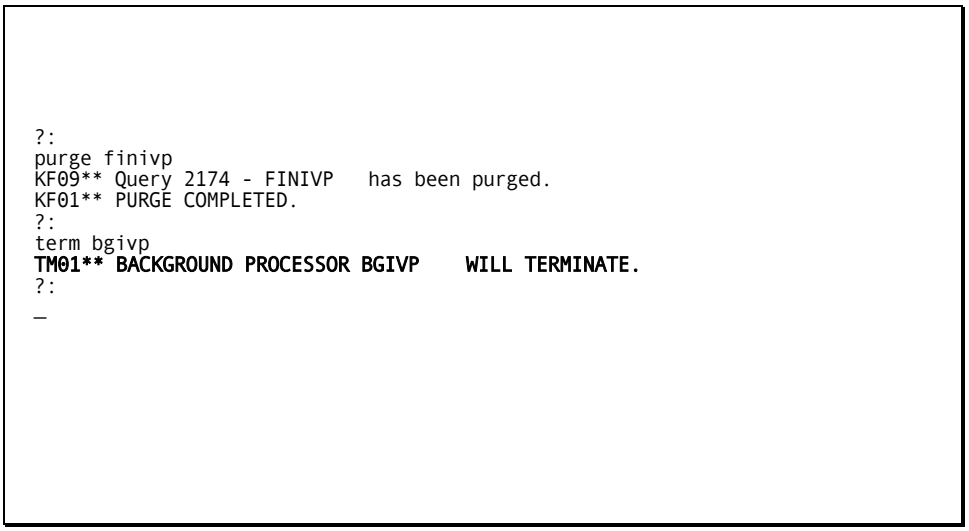

Figure 134. Panel 18 — Command Input Panel with Terminate Background Processor Message

The TM01 message appears.

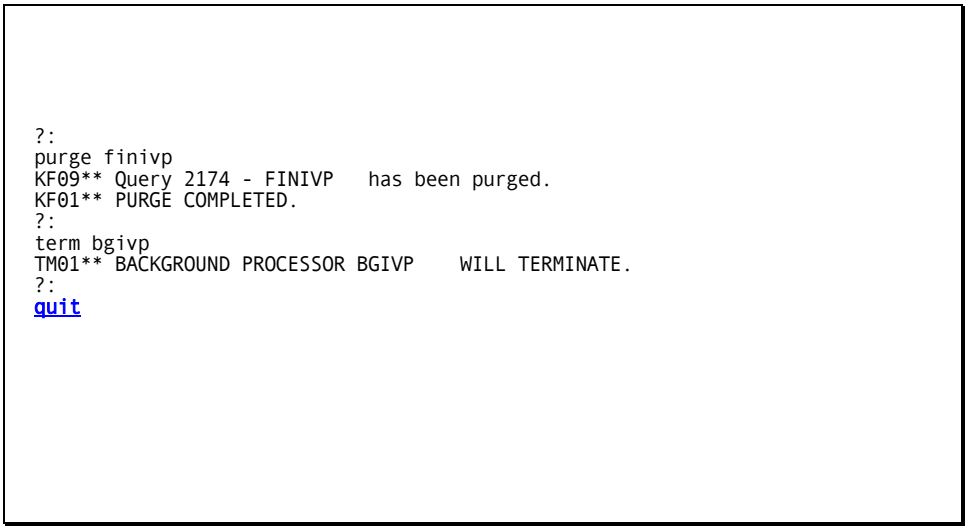

Figure 135. Panel 19 — Command Input Panel with QUIT Command

To return to the Main Menu, type ‘quit’ and press Enter.

The Main Menu appears.

```
Menu2                  Computer Associates - Main Menu

6 Enter one of the following VISION:Inform or VISION:Bridge Options:


  VISION:Inform Options:

  1. Operation Facilities                    (Background Processor Status)
  2. Administration Facilities               (Profile Development)
  3. Report Facilities                       (Report Handling)

  VISION:Bridge Options:

  4. Quick Query                             (Assisted Query Development)
  5. Quick Query Immediate Response          (Assisted Query Development)
  6. Standard Query Processing               (Submit, Delete, Edit
                                              Queries and Stmts)
  7. Immediate Response Query Processing     (Run Queries and Immed Mode)


Command ===>
F1 =Help     F24=Cancel
```

Figure 136. Panel 20 — Main Menu After Standard Query Processing

Type a ‘6 ‘ for Standard Query Processing, as shown in Panel 20.

Press Enter.

The Source Processing panel appears.

```
Source2                 Computer Associates - Source Processing
                                                              More:
    Name     Type    Owner   Last Used      Name     Type    Owner    Last Used
_ FINIVP   QUERY    SYSTEM   08/23/00

Command ===>
F1 =Help     F7 =Backward F8 =Forward  F24=Cancel
```

Figure 137. Panel 21 — Source Processing Panel

The date in the display is the date you created your query. Use the Source Processing panel to delete query source.

```
Source2                 Computer Associates - Source Processing
                                                              More:
    Name     Type    Owner   Last Used      Name     Type    Owner    Last Used
d  FINIVP   QUERY    SYSTEM   08/23/00

Command ===>
F1 =Help     F7 =Backward F8 =Forward  F24=Cancel
```

Figure 138. Panel 22 — Source Processing Panel with Query DELETE Command

To delete the query source, type ‘d’ as shown next to query FINIVP.

Press Enter.

The panel redisplays.

```
Source2                 Computer Associates - Source Processing
                                                                More:
    Name     Type    Owner   Last Used      Name     Type    Owner   Last Used
? FINIVP   QUERY    SYSTEM   08/23/00


#W00** To confirm DELETE re-enter the "D", otherwise no delete will occur.
Command ===>
F1 =Help     F7 =Backward F8 =Forward  F24=Cancel
```

Figure 139. Panel 23 — Source Processing Panel with Query Delete Message

When the #W00 message (‘#W00** To confirm DELETE re-enter the “D”, otherwise no delete will occur.‘) appears, type a second ‘d’ over the ? to confirm the delete.

```
Source2                 Computer Associates - Source Processing
                                                               More:
    Name     Type    Owner   Last Used      Name     Type    Owner    Last Used
d FINIVP   QUERY    SYSTEM   12/19/97


#W00** To confirm DELETE re-enter the "D", otherwise no delete will occur.
Command ===>
F1 =Help     F7 =Backward F8 =Forward  F24=Cancel
```

Figure 140. Panel 24 — Source Processing Panel with Confirm Delete Command

Type a ‘d’ as shown.

Press Enter.

The Source Processing panel redisplays.

```
Source2                 Computer Associates - Source Processing
                                                              More:
    Name     Type    Owner   Last Used      Name     Type    Owner    Last Used
_ FINIVP                    Deleted


Command ===>
F1 =Help     F7 =Backward F8 =Forward  F24=Cancel
```

Figure 141. Panel 25 — Source Processing Panel Showing Delete Query Source

Note the Last Used column now indicates that the query has been deleted.

From the Source Processing panel, use the Cancel command (PF24) to return to the Main Menu. The Main Menu appears.

```
Menu2                   Computer Associates - Main Menu

6 Enter one of the following VISION:Inform or VISION:Bridge Options:


  VISION:Inform Options:

  1. Operation Facilities                    (Background Processor Status)
  2. Administration Facilities               (Profile Development)
  3. Report Facilities                       (Report Handling)

  VISION:Bridge Options:

  4. Quick Query                             (Assisted Query Development)
  5. Quick Query Immediate Response          (Assisted Query Development)
  6. Standard Query Processing               (Submit, Delete, Edit
                                              Queries and Stmts)
  7. Immediate Response Query Processing     (Run Queries and Immed Mode)


Command ===>
F1 =Help     F24=Cancel
```

Figure 142. Panel 26 — Main Menu After Deleting the Query Source

In the Main Menu, use the Cancel command (PF24) to return to the Logon panel.

The Logon panel appears.

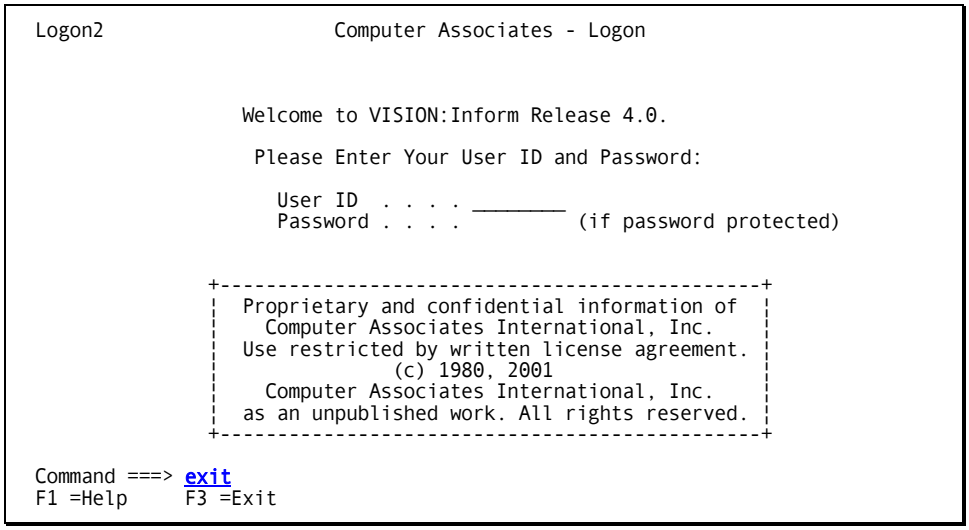

Figure 143. Panel 27 — Logon Panel After Query Deletion

Type the Exit command and press Enter, or press PF3 to exit.

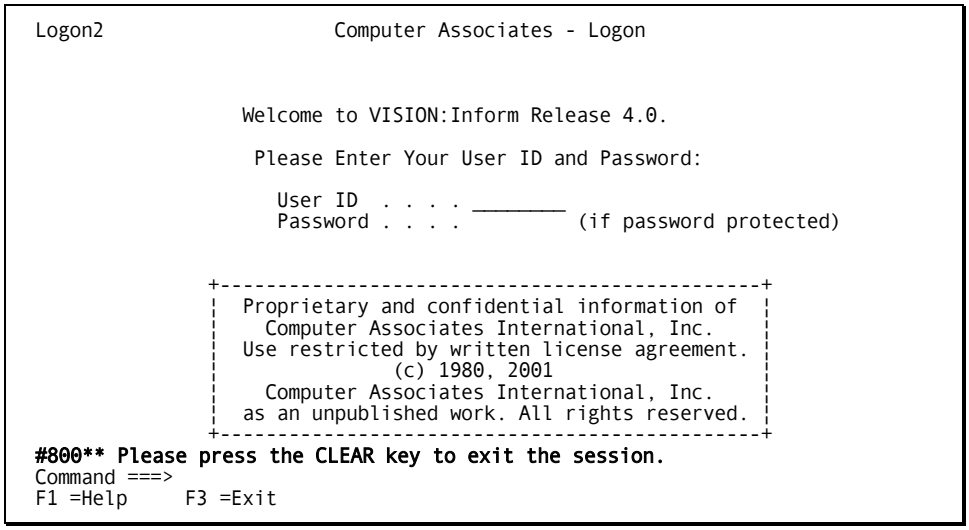

Figure 144. Panel 28 — Logon Panelj

When you receive the #800 message, press CLEAR to display a blank screen.

This completes the IVP.

Chapter

5

Modifying VISION:Inform

Use the information in this chapter to modify your VISION:Inform system after you complete the installation and customization, and the system is ready for production.

The modifications categories are:

- Modifications made by changing the PARMBLK parameter module.
- Modifications made by changing the M4PARAMS parameter module.
- Increasing the size of the VISION:Inform foreground library and the communication file.

Modifying the PARMBLK Parameter Module

The PARMBLK source member contains data in both uppercase and lowercase letters, as shown in the figure that follows.

- Enter parameters for the PARMS, QFILE, and LTERM macros, as well as the COMMAND positional subparameters of the CUSTOM macro in uppercase.
- You can use mixed case for the function key positional subparameter of the CUSTOM macro.

```
PARMBLK  TITLE 'VISION:Inform IMS PARMBLK Source'                        00010000
*                                                                        00020000
*  THIS IS THE DEFAULT INSTALLATION PARAMETER SPECIFICATION              00030000
*                                                                        00040000
         PARMS DEFCLAS=10,          DEFAULT CLASS ON SUBMIT             *00050000
               DEVTYPE=32702,       DEFAULT TERMINAL TYPE               *00060000
               BKLRECL=4276,        BACKUP/RESTORE RECORD LENGTH        *00070000
               FREESIZ=0,           STATIC FREESIZE                     *00080000
               MAXPAGE=99,          MAXIMUM PAGES RETURNED TO COMFILE   *00090000
               MCRPAGE=99,          MAXPAGE VALUE FOR REMOTE PLATFORMS  *00100000
               MAXQRY=10,           MAXIMUM QUERIES TO BE BATCHED       *00110000
               MINQRY=1,            MINIMUM QUERIES TO BE BATCHED       *00120000
               MEMSIZE=4000,        SIZE OF MEMORABL SEGMENT            *00130000
               SORTLIM=0,           ONLINE INQUIRY SORT LIMIT 0=NONE    *00140000
               SORTSIZ=62000,       BATCH INQUIRY SORT AREA SIZE        *00150000
               ERROPT=CONT,         BACKGROUND PROCESSOR ERROR OPTION   *00160000
               LEVRPT=NO,           MAXPAGE REPORTS STAY ON COMFILE     *00170000
               ENQNAME=INFENQUE,    MAJOR ENQ NAME                      *00180000
               INVSUM=YES,          INVALID SUMMARY FLAG                *00190000
               OPTMODE=1,           FULL DATABASE ACCESS OPTIMIZATION   *00200000
               BGPRINT=ALL,         ALL BG PROCESSORS PROCESS PRINT Q.  *00210000
```

```
              TMPSYNC=NO,          DO NOT ALLOW TEMP FIELD SYNCH.      *00220000
              ENQWAIT=(20,20),     ONLINE, BATCH ENQ WAIT CONTROL      *00230000
              RECONN=YES,          ONLINE SESSION RECONNECTION ACTIVE  *00231001
              PASSWDX=NO,          NO LOGON PASSWORD EXIT              *00232001
              DBCSSO=,             DBCS SHIFT OUT CHARACTER            *00240000
              DBCSSI=              DBCS SHIFT IN CHARACTER              00250000
        EJECT                                                          00260000
        QFILE LIB,                 LIBRARY FILE                        *00270000
              ROOTBLK=0160,        NUMBER OF ROOT BLOCKS               *00280000
              OVFLBLK=0224,        NUMBER OF OVERFLOW BLOCKS           *00290000
              BLKSIZE=4078,        BLOCK SIZE                          *00300000
              BKTSIZE=1016         BUCKET SIZE                          00310000
        EJECT                                                          00320000
        QFILE COM,                 COMMUNICATION FILE                  *00330000
              ROOTBLK=0120,        NUMBER OF ROOT BLOCKS               *00340000
              OVFLBLK=0288,        NUMBER OF OVERFLOW BLOCKS           *00350000
              BLKSIZE=4078,        BLOCK SIZE                          *00360000
              BKTSIZE=1016         BUCKET SIZE                          00370000
        EJECT                                                          00380000
*                                                                      00390000
* THE FOLLOWING IS AN EXAMPLE OF THE 'LTERM' MACRO:                     00400000
*                                                                      00410000
*       LTERM NAME=LT32701,TYPE=32701                                  00420000
*                                                                      00430000
* THE FOLLOWING ARE USER-DEFINED TERMINAL EXAMPLES:                     00440000
*                                                                      00450000
*       LTERM NAME=UTERM1,TYPE=U3270,HEIGHT=10,WIDTH=40                00460000
*       LTERM NAME=UPRINT1,TYPE=UPRINT,HEIGHT=40,WIDTH=100             00470000
        EJECT                                                          00480000
        CUSTOM BKWD=('BACKWARD','Backward','F7'), BACKWARD SCROLL      *00490000
              CANCEL=('CANCEL','Cancel','F24'),    SCREEN CANCEL       *00500000
              CHANGE=('CHANGE','Change','0'),      EDITOR TEXT CHANGE  *00510000
              CLEAR=('CLEAR','Clear','0'),         QQUERY CLEAR COMMAND*00520000
              COPY=('COPY','Copy','0'),            EDITOR EXTERNAL COPY*00530000
              CREATE=('CREATE','Create','0'),      EDITOR CREATE NEW   *00540000
              EXIT=('EXIT','Exit','F3'),           SCREEN EXIT         *00550000
              FIELDS=('FIELDS','Fields','0'),      EDITOR FIELDS CMD   *00560000
              FIND=('FIND','Find','0'),            EDITOR TEXT FIND    *00570000
              FWD=('FORWARD','Forward','F8'),      FORWARD SCROLL      *00580000
              HELP=('HELP','Help','F1'),           SCREEN HELP         *00590000
              LEFT=('LEFT','Left','F10'),          LEFT SCROLL         *00600000
              LOCATE=('LOCATE','Locate','0'),      EDITOR LINE # LOCATE*00610000
              RCHANGE=('RCHANGE','Rchange','F6'), EDITOR REPEAT CHANGE*00620000
              RENAME=('RENAME','Rename'),          QUICK QUERY RENAME  *00630000
              RENUM=('RENUMBER','Renumber','0'),   EDITOR RESEQUENCE   *00640000
              RESET=('RESET','Reset','0'),         EDITOR LINECMD RESET*00650000
              RFIND=('RFIND','Rfind','F5'),        EDITOR REPEAT FIND  *00660000
              RIGHT=('RIGHT','Right','F11'),       RIGHT SCROLL        *00670000
              SAVE=('SAVE','Save','0'),            ITEM SAVE IN FGLIB  *00680000
              SUBMIT=('SUBMIT','Submit','0'),      SUBMIT ITEM         *00690000
              VALID=('VALIDATE','Validate','0'),  EDITOR VALIDATE ITEM*00700000
              VIEWLST=('DATAVIEW','Dataview','0'), EDITOR DATAVIEW CMD*00710000
              ALL=ALL,                             CHANGE CMD OPERAND  *00720000
              ASIS=ASIS                            SAVE CMD OPERAND     00730000
        EJECT                                                          00740000
        ENDPARMS                                                       00750000
        END                                                            00760000
```

Figure 145. PARMBLK Source Module

PARMBLK Macros

PARMBLK uses five macros, PARMS, QFILE, LTERM, CUSTOM, and ENDPARMS. The following is a brief description of the five macros.

PARMS	Use the PARMS macro (required) to begin the generation of the installation parameter module. It defines various options that can be tailored to your specifications.
QFILE	Use the QFILE macro (required) to define the foreground library and communication file.
LTERM	Use the LTERM macro (optional) to define the characteristics of each IMS logical device that does not match the default specified in the PARMS macro. It is for report routing only.
CUSTOM	Use the CUSTOM macro (required) to customize the 3270 Panel command area entries and function key labels, as well as to assign function keys to primary commands.
ENDPARMS	Use the ENDPARMS macro (required) to end the specification of the parameters and cause the PARMBLK module to be generated.

The sections that follow describe the parameters for each macro.

PARMBLK PARMS Macro Parameters

Note: In the statement syntax, the parameters are in alphabetical order and the default is underlined. The continuation character is not shown.

The PARMS statement syntax is:

```
PARMS   BGPRINT={ ALL | ONLY },
        BKLRECL={ 4276 | nnnn },
        DBCSSI=hh,
        DBCSSO=hh,
        DEFCLAS={ 10 | nn },
        DEVTYPE={ 32702 | 32701 | 32703 | 32704 | 32705 |
         3284 | 3286 },
        ENQNAME={ INFENQUE | enqname },
        ENQWAIT={ (20,20) | (online,batch) },
        ERROPT={ CONT | TERM },
        FREESIZ={ 0 | nnnn },
        INVSUM={ YES | NO },
        LEVRPT={ NO | YES },
        MAXPAGE={ 99 | nnnnnnnn },
        MAXQRY={ 10 | nnn },
        MCRPAGE={ 99 | nnnnnnnn },
        MEMSIZE={ 4000 | NNNN },
        MINQRY={ 1 | nnn },
        OPTMODE={ 1 | 2 | 3 },
        PASSWDX={ NO | YES },
        RECONN={ YES | NO },
        SORTLIM={ 0 | recmax },
        SORTSIZ={ 62000 | sortspac },
        TMPSYNC={ NO | YES }
```

The PARMS parameter descriptions are in alphabetical order.

BGPRINT This parameter controls the processing of the communication file print queue by the Background Processors. Acceptable values are ALL or ONLY.

- Specifying ONLY indicates that only the single Background Processor with PRINT specified on the CONTROL statement can process the print queue.
- Specifying ALL indicates that any and all Background Processors can process the print queue.
- The default is ALL.

BKLRECL This is the block size of the backup/restore data sets (used with the library or communication file utilities).

- The default is 4276.
- Specify a value equal to or greater than 2048.

DBCSSI This is the Double Byte Character Set Shift In character. It can be a character representation of a single hexadecimal character only.

Enter this parameter only if your system supports DBCS. If you use this parameter, you must also use the DBCSSO parameter.

DBCSSO This is the Double Byte Character Set Shift Out character. It can be a character representation of a single hexadecimal character only.

Enter this parameter only if your system supports DBCS. If you use this parameter, you must also use the DBCSSI parameter.

DEFCLAS This is the default class for all submitted queries or tasks, if you do not specify a class during the submit process or in the user profile.

- Specify a value from 1 to 14.
- The default is class 10.

DEVTYPE This is the device type of all printers or terminals to which reports are routed not explicitly named in an LTERM macro. Acceptable values are 32701, 32702, 32703, 32704, 32705, 3284, or 3286.

ENQNAME This parameter specifies the major ENQ name for the ENQ/DEQ process used by VISION:Inform. The default name is INFENQUE.

ENQWAIT Use this parameter to customize the amount of time spent waiting during times of resource contention between online and batch access to the foreground library and communication file.

- The values are specified as (online,batch).
- For ENQWAIT=(online,batch), specify values from (1,1) to (2400,720).
- The default specification is ENQWAIT=(20,20). The default specifies 20 online waits (at 3-second intervals) and 20 batch waits (at 10-second intervals) that will occur before a 3521 (time-out) termination occurs.

ERROPT This parameter controls the operation of the Background Processor when errors occur during startup processing. The options are TERM or CONT.

- TERM causes the Background Processor to terminate on any startup error.
- CONT causes the Background Processor to continue operation even though startup errors do occur.
- The default is CONT.

FREESIZ This specifies the static FREESIZ value for the Background Processor (in K increments).

- Specify a whole number between 0 and 1024.
- The default, which is normally sufficient, is 0.

INVSUM Use this parameter to specify whether or not summarized fields that contain instances of invalid data are to be flagged with a question mark (?). Acceptable values for this parameter are YES or NO.

- YES indicates that these fields are to be flagged.
- NO turns the flagging off.
- The default is YES.

LEVRPT This parameter tells VISION:Inform whether reports that exceed the MAXPAGE value should remain on the communication file up to the MAXPAGE value, or be deleted. Acceptable values are YES or NO.

- YES indicates these partial reports are to remain on the communication file.
- NO indicates that the partial reports are to be deleted. In either case, the entire report is directed to the system printer.
- The default is NO.

MAXPAGE This specifies the maximum number of report pages that can be written to the communication file for online viewing by a query submitted by VISION:Bridge or the Batch Simulator. When this amount is exceeded, the entire report is re-directed to the INFREPT data set as specified in the Background Processor JCL.

- Specify a value from 0 to 99999999.
- Specifying 0 indicates that there is no MAXPAGE limit.
- The default is 99.

MAXQRY MAXQRY specifies the maximum number of queries or tasks to be batched together for processing in a single pass of the file or database by the Background Processor.

- Specify a value between 1 and 255.
- Make MAXQRY equal to or greater than the MINQRY value.
- The default is 10.

MCRPAGE MCRPAGE specifies the maximum number of pages of data which can be written to the communication file for any task submitted by any client software product except VISION:Bridge or the Batch Simulator. When this amount is exceeded, the part of the data already on the communication file is left on the file, and a copy of the output is written to the INFREPT data set as specified in the Background Processor JCL.

- Specify a value from 0 to 99999999.
- Specifying 0 indicates that there is no MCRPAGE limit.
- The default is 99.

MEMSIZE MEMSIZE specifies the size of the MEMORABL segment written to the online work file. The value specified must be at least 50. The default is 4000. If you change this value from the default of 4000, you must also change the segment size specification in the work file PSB, INFWORK.

MINQRY MINQRY specifies the minimum number of queries or tasks to be batched together for processing in a single pass of the file or database by the Background Processor. No queries or tasks will be processed against a file or database until this number is available.

- Specify a value between 1 and 255.
- Make MINQRY equal to or less than MAXQRY.
- The default is 1.

OPTMODE — OPTMODE specifies the database access optimization method to be used by VISION:Inform. Valid entries are 1, 2, or 3. The OPTMODE values are defined as follows:

- 1 — Full optimization at all database levels (dynamic tuning).
- 2 —Optimization at the root level only (dynamic tuning).
- 3 —No optimization (static tuning).

The default is 1. See the *VISION:Inform System Administrator Guide* for further details.

PASSWDX — PASSWDX specifies whether (YES) or not (NO) to activate the password processing entry to the user Profile Exit routine. The standard Profile Exit routine processing will not include a Password processing entry unless PASSWDX is specified as YES. The default value is NO. Specifying YES allows you to provide a Profile Exit routine that can interface to your security system (e.g., ACF2, RACF, Top Secret) for password validation. Refer to Profile Exit Routines in the appendix "Writing Exit Routines" for more information.

RECONN — The RECONN keyword specifies whether VISION:Inform will attempt to re-establish a disconnected session at the point of disconnection (YES), or at the LOGON Panel (NO). The default is YES.

SORTLIM — This is the maximum number of records that can be sorted in an online sort by the Immediate Response mode processor. A message is issued if this limit is exceeded by a user's query.

The default value is 0, which indicates there is no limit. In practice however, the record limit is the size of the available sort space (see note below) divided by the size of the sort record.

Note: This value is used only in the online version of Immediate Response. It is not used in batch versions (Batch Simulator). In the online version of Immediate Repsonse, VISION:Inform itself performs the sorts, in-core. The amount of storage available for online sorts is 512K. Queries with large amounts of data or records to be sorted may not run successfully in the online region, and should be run in batch.

SORTSIZ — This is the amount of space, in bytes, to be used for sort space by the batch version (Batch Simulator) of Immediate Response. The default is 62000 bytes. You can make the value higher or lower.

Note: This value is used only in batch (Batch Simulator) with Immediate Response. It is not used by the online version of Immediate Response. In the batch version of Immediate Response, sorts are performed by interfacing with your shop's IBM or IBM-compatible SORT program, and the SORTSIZ parameter is used to set the sort space for the SORT program. Queries with large amounts of data or records to be sorted may not run successfully in the online region, and should be run in batch.

TMPSYNC — This parameter specifies whether or not queries against logical data views that use a temporary field for coordination can be built. Acceptable values are YES or NO.

- NO indicates that they cannot.
- The default value is NO.
- YES indicates that such queries can be built.

If YES is specified, note the following:

Logical data view (LDV) coordination utilizing a temporary field as the coordinating key differs from coordination to a field in another file in both implementation and use.

- To implement, define the temporary field in a PROCEDURE.
- Include PROCEDURE as a component of the LDV.

Note that a T will be entered under 'File' entry preceding the temporary field name on the LDVFILES panel.

- Promote the PROCEDURE and LDV with the Definition Processor. The PROCEDURE is automatically invoked when the LDV is referenced.
- Use differs from coordination to database fields, in that the PROCEDURE is processed before any statements in the user queries. The temporary field will be built and coordination will take place just once for each master file record. There is never any looping when temporary fields are used for coordination with VISION:Inform.

See the *VISION:Inform Definition Processor Reference Guide*.

PARMBLK QFILE Macro Parameters

Note: In the statement syntax, the keyword parameters are in alphabetical order and the default is underlined. OVFLBLK defaults to 224 for LIB and 288 for COM, and ROOTBLK defaults to 160 for LIB and 120 for COM.

The QFILE statement syntax is:

```
QFILE   LIB,                              QFILE   COM,
        BLKSIZE={ 4078 | nnnn },                  BLKSIZE={ 4078 | nnnn },
        BKTSIZE={ 1016 | nnnn },                  BKTSIZE={ 1016 | nnnn },
        OVFLBLK={ 0224 | nnn },                   OVFLBLK={ 0288 | nnn },
        ROOTBLK={ 160 | nnn }                     ROOTBLK={ 120 | nnn }
```

The QFILE parameters are:

LIB or COM — The first parameter in the QFILE specification for a file is positional, and must be the file indicator, either LIB or COM.

- Use LIB to define foreground library parameters.
- Use COM to specify communication file parameters.

BLKSIZE — This is the block size or control interval size for the file.

- The default value is 4078.
- Make this value less than or equal to 32,750.
- You can specify another size to better fit a particular disk device or to improve performance by placing more data into a block.
- Be careful to match the changed value with the record size in the VSAM cluster definition. The VSAM record size should be 11 bytes larger than the QFILE BLKSIZE.
- Make the VSAM control interval size at least 7 bytes greater than the VSAM record size, and also a multiple of 512.

BKTSIZE — This entry specifies the maximum space an item can occupy in the root addressable area of the file.

- Make this entry less than the value of BLKSIZE-20.
- Make this entry a multiple of 4.
- The default size is 1016.

OVFLBLK — This entry specifies the number of blocks in the overflow area of the file. This area contains the remainder of items, which overflow the bucket size in the root area.

- If the foreground library or communication file runs out of space, increase this parameter.
- Make this number a multiple of 8.
- The default is 224 for the foreground library (LIB) and 288 for the communication file (COM).

For optimum use of VSAM file space, make the number of blocks you specify in the VSAM RECORDS parameter of the file initialization or restore JCL equal ROOTBLK+OVFLBLK+3.

The file initialization JCL member is INIT; the restore JCL member is LBRESTOR.

- If ROOTBLK+OVFLBLK+3 is less than the file size, the excess space will not be used.
- If ROOTBLK+OVFLBLK+3 is more than the file size, errors can occur.

ROOTBLK — This parameter specifies the number of blocks to be used in the root addressable area of the file.

- For the foreground library, make this number approximately the number of file definitions plus the number of users anticipated to use the system. When adding a significant number of new users or file definitions, increase this parameter.
- For the communication file, make this number approximately equal to the sum of the number of databases which can be queried through the file, the number of users of the file, the number of Background Processors to use the file plus 2, and the estimated number of reports/queries to be on the file at any time.
- The default is 160 for the foreground library (LIB) and 120 for the communication file (COM).

PARMBLK LTERM Macro Parameters

Note: In the statement syntax, the parameters are in alphabetical order and the default is underlined.

The LTERM macro identifies and defines IMS terminals and printers to VISION:Inform for the purpose of formatting and routing output.

The LTERM statement syntax is:

```
LTERM   HEIGHT={ 11 | rrr },
        NAME=USER device name,
        TYPE={ 32702 | 32703 | 32704 | 32705 | 3284 | 3286 | U3270 | UPRINT },
        WIDTH={ 131 | ccc }
```

The LTERM parameters are:

HEIGHT Specify the number of rows you define for a user defined printer (UPRINT) or terminal (U3270). The default is 11. The maximum is 99.

NAME Specify the 1- to 8-byte name for the IMS logical terminal or printer. This is the name used in the SUBMIT or ROUTE command. Make this name unique in the LTERM list.

TYPE Required. Specify the terminal or printer type. Acceptable values are:

Terminals	Printers
32702	3284
32703	3286
32704	U3270
32705	UPRINT

WIDTH Specify the number of columns for the user-defined printer (UPRINT) or terminal (U3270).

- The default is 131.
- The maximum is 132.
- Do not exceed M4LIST width in M4PARAMS.

LTERM Considerations

VISION:Inform IMS online printer support does not extend to PC emulator programs that emulate through software a particular printer device. This does not mean that a PC network emulated printer will not work with VISION:Inform. It just means that our experiences with emulated devices is that each PC emulator application, or even different releases of the same emulator, do not always operate exactly as the actual device being emulated does.

PARMBLK CUSTOM Macro Parameters

Use the CUSTOM macro to customize the screen command area entries, function key labels, and assign function keys to commands. The macro contains a list of parameters that have a series of one or three operands:

```
CUSTOM  BKWD=('BACKWARD','Backward','F7'),
        CANCEL=('CANCEL','Cancel','F24'),
        CHANGE=('CHANGE','Change','0'),
        CLEAR=('CLEAR','Clear','0'),
        COPY=('COPY','Copy','0'),
        CREATE=('CREATE','Create','0'),
        EXIT=('EXIT','Exit','F3'),
        FIELDS=('FIELDS','Fields','0'),
        FIND=('FIND','Find','0'),
        FWD=('FORWARD','Forward','F8'),
        HELP=('HELP','Help','F1'),
        LEFT=('LEFT','Left','F10'),
        LOCATE=('LOCATE','Locate','0'),
        RCHANGE=('RCHANGE','Rchange','F6'),
        RENAME=('RENAME','Rename'),
        RENUM=('RENUMBER','Renumber','0'),
        RESET=('RESET','Reset','0'),
        RFIND=('RFIND','Rfind','F5'),
        RIGHT=('RIGHT','Right','F11'),
        SAVE=('SAVE','Save','0'),
        SUBMIT=('SUBMIT','Submit','0'),
        VALID=('VALIDATE','Validate','0'),
        VIEWLST=('DATAVIEW','Dataview','0'),
        ALL=ALL,
        ASIS=ASIS
```

The CUSTOM operands operate in the following manner:

First operand — The first word shown within the parentheses. Use it to specify a customized name for the keyword (command) for which it is an operand.

- The customized name can be up to 20 columns in length.
- This name is used when the user keys a command name in the command line area.

Second operand — The second word shown within the parentheses. Use it to specify a customized name to be shown with a function key area of the command area of each panel. This name can be up to 8 columns long.

Third operand — The third word shown within the parentheses. Use this operand to equate a function key to the command represented by the keyword. If a macro keyword is not shown with a third operand, it represents a keyword for a command and, thus, cannot have a function key equated to it.

Note: The ALL and ASIS CUSTOM macro keywords may only specify the first operand. They are operand keywords, and cannot be assigned a function key or label.

PARMBLK ENDPARMS Macro

Make this macro specification the final macro statement in PARMBLK. It is required and has no parameters. Follow it with an END statement only.

Implementing the PARMBLK Changes

If you are completing the definition of a new library:

1. Run the PMBASMLK job to compile and link the new PARMBLK.
2. Transfer the online modules with the TRANSFER utility.
3. Run the INIT job to initialize the files.

If you are changing the definition of an existing library or communication file and you want to preserve the previous contents:

1. Run the backup job (CMBACKUP or LBBACKUP) for the communication file or foreground library, respectively.
2. Run the PARMBLK assembly and link job (PMBASMLK) and the TRANSFER utility.
3. Run the restore job (CMRESTOR or LBRESTOR) for the communication file or foreground library, respectively. The restore jobs initialize the file before restoring the backed up data.

Note: After making changes to the QFILE specifications of PARMBLK, you must initialize the file whose specifications have changed. For detailed information, refer to Changing the Size of the Foreground Library or Communication File.

Modifying the M4PARAMS Parameter Module

VISION:Inform provides default conditions for many of the parameters usually determined by the operating environment in each installation. These parameters affect various functions of the system. Since these parameters are part of the installation process, VISION:Inform provides you with the capability of changing their default values.

Use the special program module, called M4PARAMS, for changing default values. M4PARAMS is supplied with VISION:Inform. It is supplied as an Assembly language source CSECT and is well documented in its source form. The default is clearly indicated for each parameter.

Note: Use the M4PASMLK job in INFORM.JCL to implement changes to M4PARAMS. Run the TRANSFER job to complete the process.

You can change the value of any of the parameters, but do not make any changes that would modify the relative location of any field. The M4PARAMS CSECT is link edited as a load module after the installation of VISION:Inform. You can change it at any time using the procedure described in the section Customizing Parameters in the PARMBLK and M4PARAMS Modules.

The following specifications affect your VISION:Inform system:

CKPCHAR	COREINDX	CURCHAR	DECCHAR	DELIMITR
DIGCHAR	GRPCHAR	HEIGHT	LSTWIDTH	LSTDFWOP
MINCHAR	Month table	PLUCHAR	SORTPGM	SORTSIZE
SUBTITLE	ZSPCHAR			

For VISION:Inform systems used with workstation client platforms, the following are the only parameters that you can change: SORTSIZE, Month table, SORTPGM, and COREINDX.

The following figure shows the listing of the M4PARAMS CSECT.

```
MPOVS    TITLE 'M4PARAMS - COMPUTER ASSOCIATES INTERNATIONAL, INC.'     00010000
         ISEQ 73,80                                                     00020000
*********************************************************************** 00030000
*                                                                     * 00040000
*             PROPRIETARY AND CONFIDENTIAL INFORMATION OF             * 00050000
*               COMPUTER ASSOCIATES INTERNATIONAL, INC.               * 00060000
*             USE RESTRICTED BY WRITTEN LICENSE AGREEMENT             * 00070000
*                                                                     * 00080000
*                      DO NOT REMOVE THIS NOTICE                      * 00090000
*                                                                     * 00100000
*                                                                     * 00110000
*        COPYRIGHT (C) COMPUTER ASSOCIATES INTERNATIONAL, INC.        * 00120000
*            AS AN UNPUBLISHED WORK.  ALL RIGHTS RESERVED.            * 00130000
*                                                                     * 00140000
*********************************************************************** 00150000
         SPACE 3                                                        00160000
         MACRO                                                 C265 00170000
         M4TODAY &FORMAT                                       C265 00180000
         LCLA  &ACCUM                                          C265 00190000
&ACCUM   SETA  0                                               C265 00200000
         AIF   ('&FORMAT' EQ 'MMDDYY').EQU                     C265 00210000
&ACCUM   SETA  4                                               C265 00220000
         AIF   ('&FORMAT' EQ 'DDMMYY').EQU                     C265 00230000
&ACCUM   SETA  8                                               C265 00240000
         AIF   ('&FORMAT' EQ 'YYMMDD').EQU                     C265 00250000
&ACCUM   SETA  12                                              C265 00260000
         AIF   ('&FORMAT' EQ 'YYDDMM').EQU                     C265 00270000
&ACCUM   SETA  16                                              C265 00280000
         AIF   ('&FORMAT' EQ 'DDYYMM').EQU                     C265 00290000
&ACCUM   SETA  20                                              C265 00300000
         AIF   ('&FORMAT' EQ 'MMYYDD').EQU                     C265 00310000
         MNOTE 8,'ILLEGAL TODAY FORMAT, MMDDYY ASSUMED'        C265 00320000
&ACCUM   SETA  0                                               C265 00330000
.EQU     ANOP                                                  C265 00340000
TODAY    EQU   &ACCUM                                          C265 00350000
         MEND                                                  C265 00360000
         EJECT                                                          00370000
*********************************************************************** 00380000
```

```
*             USERS MUST NOT MAKE CHANGES BEFORE THIS PAGE        C265 00390000
********************************************************************** 00400000
        EJECT                                                          00410000
M4PARAMS CSECT                                                         00420000
********************************************************************** 00430000
*                                                                    * 00440000
*   THIS ROUTINE CONTAINS ALL PARAMETERS WHICH MAY BE SET AS USER     * 00450000
*   OPTIONS.                                                         * 00460000
*   1. USERS MAY CHANGE ANY OF THE ITEMS WITHIN THE RANGES SPECIFIED. * 00470000
*   2. USERS MUST NOT CHANGE THE LENGTH OF ANY ASSEMBLY ITEMS.       * 00480000
*   3. USERS MUST NOT CHANGE ITEMS THAT PRECEDE THE PAGE MARKED      * 00490000
*      "* USERS MUST NOT MAKE CHANGES BEFORE THIS PAGE *."           * 00500000
*   4. USERS MUST NOT CHANGE ITEMS THAT FOLLOW THE PAGE MARKED       * 00510000
*      "* USERS MUST NOT MAKE CHANGES FOLLOWING THIS PAGE *."        * 00520000
*                                                                    * 00530000
*   THIS ROUTINE MAY BE ASSEMBLED AND LINK EDITED AFTER BUILDER      * 00540000
*   INSTALLATION IS COMPLETE.  IF ALL OF THE DEFAULT PARAMETERS      * 00550000
*   ARE SATISFACTORY, NO ACTION IS NEEDED.  OTHERWISE, THE MODIFIED  * 00560000
*   MODULE MUST BE ASSEMBLED AND LINK EDITED ACCORDING TO THE        * 00570000
*   INSTRUCTIONS PROVIDED IN THE INSTALLATION MANUAL.                * 00580000
*                                                                    * 00590000
********************************************************************** 00600000
        EJECT                                                          00610000
*                                                                      00620000
* USER ID      - THIRTY-TWO CHARACTERS OF TEXT TO PRINT IN THE         00630000
*                SIGN ON.                                              00640000
*                                                                      00650000
USERID   DC    CL32' '                                                 00660000
        SPACE 5                                                        00670000
*                                                                      00680000
* SYSTEM       - ANY VALID PRINTABLE OR UNPRINTABLE CHARACTER     11.0 00690000
* DELIMITER      EXCEPT UNDERSCORE (X'6D') AND TILDE (X'A1').     11.0 00700000
*                THIS CHARACTER IS RESERVED AND MAY NOT APPEAR    11.0 00710000
*                IN ANY STATEMENTS EXCEPT FOR ITS USE                  00720000
*                AS A DELIMITER.                                       00730000
*                                                                      00740000
DELIMITR EQU   C'#'                    DEFAULT = POUND (NUMBER) SIGN   00750000
        SPACE 5                                                        00760000
*                                                                      00770000
* PAGE         - THE NUMBER OF PRINTABLE LINES ON A PAGE. THIS         00780000
* HEIGHT         NUMBER MUST BE GREATER THAN ZERO AND MUST BE          00790000
*                COMPATIBLE WITH THE DEFAULT PRINTER FORM AND          00800000
*                SIZE SPECIFICATION FOR THE PRINTERS AT YOUR SITE.     00810000
*                THE VALUE ASSUMES A SETTING OF 6 LINES PER INCH.      00820000
*                                                                      00830000
HEIGHT   EQU   66                      DEFAULT = 11 INCH PAGE AT 6 LPI 00840000
        SPACE 5                                                        00850000
*                                                                      00860000
* M4LIST       - THE NUMBER OF PRINTABLE COLUMNS ON THE M4LIST    QN10 00870000
* WIDTH          OUTPUT DEVICE, NOT INCLUDING THE ASA CONTROL     QN10 00880000
*                CHARACTER. THIS IS THE M4LIST RECORD LENGTH-1,   QN10 00890000
*                AND MUST BE AT LEAST 132 COLUMNS.                QN10 00900000
*                                                                 QN10 00910000
LSTWIDTH EQU   132                     DEFAULT = 132 COLUMNS      QN10 00920000
*                                                                 QN10 00930000
* DEFAULT      - THE NUMBER OF PRINTABLE COLUMNS ON AN OUTPUT     QN10 00940000
* WIDTH OF       REPORT PAGE, NOT INCLUDING THE ASA CONTROL       QN10 00950000
* PAGE           CHARACTER.  THIS IS THE DEFAULT VALUE USED IF    QN10 00960000
*                "WIDTH OF PAGE" ON THE EN/ER STATEMENT IS LEFT   QN10 00970000
*                BLANK.  THIS VALUE MUST NOT EXCEED THE M4LIST    QN10 00980000
*                WIDTH (LSTWIDTH) SPECIFIED ABOVE.                QN10 00990000
*                NOTE: A ZERO VALUE WILL CAUSE THE SYSTEM TO      QN10 01000000
*                      USE M4LIST WIDTH FOR THIS SPECIFICATION.   QN10 01010000
*                                                                 QN10 01020000
LSTDFWOP EQU   0                       DEFAULT = M4LIST WIDTH     QN10 01030000
        EJECT                                                          01040000
```

```
*                                                                       01050000
* AUTOMATIC    - THE AUTOMATIC GRAND SUMMARIES FEATURE PROVIDES         01060000
* GRAND          GRAND SUMMARIES FOR ALL FIELDS FOR WHICH A             01070000
* SUMMARIES      SUMMARY HAS BEEN REQUESTED ON A REPORT.  THE           01080000
*                FEATURE IS ACTIVATED BY ENTERING AN 8.  THE            01090000
*                FEATURE IS DEACTIVATED BY ENTERING A 0.                01100000
*                                                                       01110000
AUTOGRND EQU   0                       DEFAULT - NO AUTO GRAND SUMS    01120000
         SPACE 5                                                        01130000
*                                                                       01140000
* REPORT       - ANY VALID PRINTABLE OR UNPRINTABLE CHARACTER.          01150000
* COLUMN         THIS CHARACTER WILL BE USED TO FORM THE LINES          01160000
* HEADING        AROUND COLUMNS HEADINGS ON REPORTS.  IF A BLANK        01170000
* CHARACTER      IS SPECIFIED, ONE BLANK LINE WILL BE PRINTED           01180000
*                BETWEEN THE COLUMN HEADINGS AND THE DETAIL LINES       01190000
*                FOR SINGLE-SPACED REPORTS, TWO FOR DOUBLE-SPACED       01200000
*                REPORTS, ETC.                                          01210000
*                                                                       01220000
HEADCHAR EQU   C'-'                    DEFAULT = DASH (HYPHEN)         01230000
         SPACE 5                                                        01240000
*                                                                       01250000
* S-TYPE       - THE REPEATING SUBTITLE FEATURE PROVIDES FOR            01260000
* SUBTITLE       THE PRINTING OF THE PREVIOUS S-TYPE SUBTITLE           01270000
* CONTROL        UPON THE COMPLETION OF PAGE OVERFLOW.  THE             01280000
*                FEATURE IS ACTIVATED BY ENTERING A 1.  THE             01290000
*                FEATURE IS DEACTIVATED BY ENTERING A 0.                01300000
*                                                                       01310000
SUBTITLE EQU   0                       DEFAULT = NO REPEATED SUBTITLES 01320000
         EJECT                                                          01330000
*                                                                       01340000
* SPECIAL      - THESE CHARACTERS ARE PRINTED WHEN SPECIAL               01350000
* OUTPUT         SITUATIONS OCCUR DURING REPORTING:                     01360000
* CHARACTERS     (1) FIELD IS INVALID                                   01370000
*                (2) FIELD DOES NOT EXIST                               01380000
*                (3) FIELD CANNOT BE EDITED (EITHER WILL NOT            01390000
*                    CONVERT OR IS TOO BIG FOR THE COLUMN)              01400000
*                                                                       01410000
INVALID  EQU   C'*'                    DEFAULT = STAR FOR INVALID      01420000
NOTEXIST EQU   C'-'                    DEFAULT = DASH FOR MISSING      01430000
NOTEDIT  EQU   C'+'                    DEFAULT = PLUS FOR UNEDITABLE   01440000
         SPACE 5                                                        01450000
*                                                                       01460000
* PERCENT      - THIS CHARACTER IS PRINTED FOLLOWING A PERCENT          01470000
* CHARACTER      SUMMARY VALUE (E.G., 75.25%).                    J145 01480000
*                                                                       01490000
PERCENT  EQU   C'%'                    DEFAULT = PERCENT SIGN          01500000
         SPACE 5                                                        01510000
*                                                                       01520000
* SUMMARY      - THIS TABLE CONTAINS ONE FIVE-CHARACTER ENTRY           01530000
* LABEL          FOR EACH TYPE OF SUMMARY, PLUS ENTRIES FOR             01540000
* TABLE          PAGE AND GRAND.  EACH ENTRY MUST BE EXACTLY            01550000
*                FIVE CHARACTERS LONG.  LEADING OR TRAILING             01560000
*                BLANKS ARE ACCEPTABLE.                                 01570000
*                                                                       01580000
         ORG   M4PARAMS+105  ***** DO NOT CHANGE THIS STATEMENT    SYSM 01590000
TOTAL    DC    CL5'TOTAL'                                               01600000
CUM      DC    CL5'CUM. '                                               01610000
COUNT    DC    CL5'COUNT'                                               01620000
MAX      DC    CL5'MAX. '                                               01630000
MIN      DC    CL5'MIN. '                                               01640000
AVG      DC    CL5'AVG. '                                               01650000
RATIO    DC    CL5'RATIO'                                               01660000
PCT      DC    CL5'PCT. '                                               01670000
PAGE     DC    CL5'PAGE '                                               01680000
GRAND    DC    CL5'GRAND'                                               01690000
         EJECT                                                          01700000
```

```
*                                                                       01710000
* LISTING      - THESE CHARACTERS ARE USED AS SEPARATORS IN             01720000
* DELIMITER      THE FORMATTED SOURCE STATEMENT LISTING.  THE           01730000
* CHARACTERS     SINGLE SEPARATOR IS USED WHEN A LEFT AND               01740000
*                RIGHT SEPARATOR WOULD OTHERWISE OCCUPY THE             01750000
*                SAME POSITION.                                         01760000
*                                                                       01770000
LEFTMRK  EQU   C'('                    DEFAULT = LEFT PARENTHESIS      01780000
RIGHTMRK EQU   C')'                    DEFAULT = RIGHT PARENTHESIS     01790000
SINGSEP  EQU   C','                    DEFAULT = COMMA                 01800000
         SPACE 5                                                       01810000
*                                                                       01820000
* SOURCE       - ASA CARRIAGE CONTROL CHARACTER FOR FORMATTED           01830000
* STATEMENT      SOURCE STATEMENT LISTING.  THIS CARRIAGE               01840000
* LISTING        CONTROL CHARACTER IS USED ON ALL FORMATTED             01850000
* VERTICAL       SOURCE LINES AND ON THE FIRST LINE OF ANY              01860000
* SPACING        FORMATTED SOURCE STATEMENT COLUMN HEADINGS.            01870000
*                ACCEPTABLE CARRIAGE CONTROL CHARACTERS ARE:            01880000
*                BLANK = SINGLE SPACING                                 01890000
*                0     = DOUBLE SPACING                                 01900000
*                -     = TRIPLE SPACING                                 01910000
*                                                                       01920000
SLCCTL   EQU   C' '                    DEFAULT = SINGLE SPACING        01930000
         SPACE 5                                                       01940000
*                                                                       01950000
* MESSAGE      - THE MESSAGE CONTROL FEATURE PROVIDES FOR               01960000
* CONTROL        SUPPRESSION OF MESSAGES OUTPUT TO M4LIST               01970000
*                AND/OR THE CONSOLE TYPEWRITER.  MESSAGES               01980000
*                ARE INHIBITED BY ENTERING A 1.  MESSAGES               01990000
*                ARE NOT INHIBITED BY ENTERING A 0.                     02000000
*                                                                       02010000
PRINT    EQU   0                       DEFAULT = PRINTER MESSAGES ON   02020000
CONSOLE  EQU   1                       DEFAULT = CONSOLE MESSAGES OFF  02030000
         EJECT                                                         02040000
*                                                                       02050000
* M4REPO       - THE BLOCKSIZE FOR REPORT FILES. THE SIZE               02060000
* BLOCKSIZE      MUST BE AT LEAST 264.  NOTE THAT THIS            J228 02070000
*                BLOCKSIZE IS ALSO USED AS THE DEFAULT                  02080000
*                BLOCKSIZE FOR VARIABLE LENGTH SUBFILES           QN06 02090000
*                AND PROGRAM ANALYZER (PAL) OUTPUT.               QN06 02100000
*                ALSO, THIS BLOCKSIZE - 8 IS USED AS              QN06 02110000
*                THE DEFAULT BLOCKSIZE FOR UNDEFINED                   02120000
*                LENGTH SUBFILES.                                       02130000
*                                                                       02140000
REPOSIZ  EQU   4096                    DEFAULT = 4096 BLOCKSIZE        02150000
         SPACE 5                                                       02160000
*                                                                       02170000
* NUMBER       - NUMBER OF I/O BUFFERS TO BE ASSIGNED                   02180000
* OF I/O         TO USER DATA FILES.                                    02190000
* BUFFERS                                                               02200000
*                                                                       02210000
INPUT    EQU   2                       DEFAULT = 2 INPUT BUFFERS/FILE  02220000
OUTPUT   EQU   1                       DEFAULT = 1 OUTPUT BUFFER/FILE  02230000
         SPACE 3                                                  RIP  02240000
*                                                                 RIP  02250000
*  ONE-STEP    - THIS IS THE DEFAULT MAIN STORAGE ALLOCATION FOR  RIP  02260000
*  REPORT         THE REPORTER WHEN REPORT FILE OPTIMIZATION       RIP  02270000
*  STORAGE        IS USED IN A NO-SORT TYPE RUN.                   RIP  02280000
*                                                                  RIP  02290000
*                 THIS VALUE MUST BE AT LEAST 1024 AND NO GREATER  RIP  02300000
*                 THAN 1048576.                                    RIP  02310000
REPTSIZE EQU   8192           DEFAULT = 8K                        RIP  02320000
         SPACE 3                                                  SIP  02330000
*                                                                 SIP  02340000
*  ONE-STEP    - THIS IS THE DEFAULT MAIN STORAGE ALLOCATION FOR  SIP  02350000
*  SORT           THE SORT PROGRAM WHEN REPORT FILE OPTIMIZATION   SIP  02360000
```

```
*  STORAGE       IS USED IN A RUN REQUIRING A SORT OF THE          SIP  02370000
*                REPORT FILE.                                      SIP  02380000
*                THIS VALUE MUST BE AT LEAST 1024 AND NO GREATER   SIP  02390000
*                THAN 16777216.                                    SIP  02400000
*                                                                  SIP  02410000
SORTSIZE EQU   524288         DEFAULT = 512K                       SIP  02420000
         EJECT                                                         02430000
******************************************************************* ULS  02440000
*                                                                 * ULS  02450000
*  C H A R A C T E R S  U S E D  I N  E D I T  P A T T E R N S  * U026 02460000
*                                                                 * ULS  02470000
*   THE FOLLOWING EIGHT M4PARAMS OPTIONS CONTROL THE FORMAT OF    * ULS  02480000
*   FIELDS THAT ARE USING EXPLICIT EDIT PATTERNS.                 * U026 02490000
*                                                                 * ULS  02500000
*   THE EIGHT PARAMETERS ARE: DIGIT SELECT CHARACTER.     DIGCHAR* ULS  02510000
*                             ZERO SUPPRESS CHARACTER.    ZSPCHAR* ULS  02520000
*                             CURRENCY SYMBOL CHARACTER.  CURCHAR* ULS  02530000
*                             PLUS SYMBOL CHARACTER.      PLUCHAR* ULS  02540000
*                             MINUS SYMBOL CHARACTER.     MINCHAR* ULS  02550000
*                             CHECK PROTECTION CHARACTER. CKPCHAR* ULS  02560000
*                             DECIMAL POINT CHARACTER.    DECCHAR* ULS  02570000
*                             GROUPING CHARACTER.         GRPCHAR* ULS  02580000
*                                                                 * ULS  02590000
*   THE DECIMAL POINT AND GROUPING CHARACTERS ARE ALSO USED FOR   * ULS  02600000
*   OUTPUT REPORT EDITING OF NUMERIC FIELDS WHEN NO EXPLICIT      * U026 02610000
*   PATTERN IS SPECIFIED AND ARE RECOGNIZED AS DECIMAL POINT      * ULS  02620000
*   AND GROUPING CHARACTERS RESPECTIVELY WHEN CONVERTING INPUT    * ULS  02630000
*   CHARACTER STRING DATA TO NUMERIC VALUES.                      * ULS  02640000
*                                                                 * ULS  02650000
*                                                                 * ULS  02660000
*   VALID ENTRIES FOR THESE PARAMETERS INCLUDE ANY CHARACTER      * ULS  02670000
*   PRINTABLE OR UNPRINTABLE EXCEPT CHARACTERS IN THE RANGE       * ULS  02680000
*   OF HEXADECIMAL VALUES  X'00' THROUGH X'30'.  IN ADDITION,     * ULS  02690000
*   EACH SYMBOL MUST BE UNIQUE AMONG  ALL THE EIGHT EDITING       * ULS  02700000
*   SYMBOLS AND THE SYSTEM DELIMITER.  THAT IS, NONE OF THE       * ULS  02710000
*   NINE PARAMETERS (EIGHT EDIT SYMBOLS AND ONE SYSTEM            * ULS  02720000
*   DELIMITER) MAY BE THE SAME CHARACTER.                         * ULS  02730000
*                                                                 * ULS  02740000
*                                                                 * ULS  02750000
*                                                                 * ULS  02760000
*****************************************************************  ULS  02770000
         SPACE 3                                                       ULS  02780000
*                                                                      ULS  02790000
*  DIGIT       - SPECIFIES A DIGIT POSITION IN NUMERIC EDITED        ULS  02800000
*  SELECT        FIELDS.                                             ULS  02810000
*  CHARACTER                                                         ULS  02820000
*                                                                    ULS  02830000
DIGCHAR  EQU   C'9'                    DEFAULT = 9                  ULS  02840000
         SPACE 3                                                     ULS  02850000
*                                                                    ULS  02860000
*  ZERO        - SPECIFIES DIGIT POSITIONS IN NUMERIC EDITED         ULS  02870000
*  SUPPRESS      FIELDS WHICH WILL BE BLANKED IF ZERO.               ULS  02880000
*  CHARACTER                                                         ULS  02890000
*                                                                    ULS  02900000
ZSPCHAR  EQU   C'Z'                    DEFAULT = Z                  ULS  02910000
         SPACE 3                                                     ULS  02920000
*                                                                    ULS  02930000
*  CURRENCY    - SPECIFIES A LEADING/FLOATING CURRENCY SYMBOL        ULS  02940000
*  SYMBOL        FOR NUMERIC EDITED FIELDS.                          ULS  02950000
*  CHARACTER                                                         ULS  02960000
*                                                                    ULS  02970000
CURCHAR  EQU   C'$'                    DEFAULT = $                  ULS  02980000
         SPACE 3                                                     ULS  02990000
*                                                                    ULS  03000000
*  PLUS        - SPECIFIES A LEADING/FLOATING/TRAILING PLUS          ULS  03010000
*  SYMBOL        SYMBOL FOR NUMERIC EDITED FIELDS.                   ULS  03020000
```

```
*  CHARACTER                                                          ULS  03030000
*                                                                     ULS  03040000
PLUCHAR  EQU   C'+'                    DEFAULT = +                 ULS  03050000
         SPACE 3                                                   ULS  03060000
*                                                                     ULS  03070000
*  MINUS       - SPECIFIES A LEADING/FLOATING/TRAILING MINUS       ULS  03080000
*  SYMBOL        SYMBOL FOR NUMERIC EDITED FIELDS.                 ULS  03090000
*  CHARACTER                                                          ULS  03100000
*                                                                     ULS  03110000
MINCHAR  EQU   C'-'                    DEFAULT = -                 ULS  03120000
         SPACE 3                                                   ULS  03130000
*                                                                     ULS  03140000
*  CHECK       - SPECIFIES A FILL CHARACTER FOR LEADING ZERO       ULS  03150000
*  PROTECTION    DIGITS IN NUMERIC EDITED FIELDS.                  ULS  03160000
*  CHARACTER                                                          ULS  03170000
*                                                                     ULS  03180000
CKPCHAR  EQU   C'*'                    DEFAULT = *                 ULS  03190000
         SPACE 3                                                   ULS  03200000
*                                                                          03210000
* DECIMAL      - DECIMAL POINT CHARACTER FOR NUMERIC FIELDS.               03220000
* POINT                                                                    03230000
* CHARACTER                                                                03240000
*                                                                          03250000
DECCHAR  EQU   C'.'                    DEFAULT = .                 03260000
         SPACE 5                                                   03270000
*                                                                          03280000
* GROUPING     - GROUPING CHARACTER FOR NUMERIC FIELDS.                    03290000
* CHARACTER                                                                03300000
*                                                                          03310000
GRPCHAR  EQU   C','                    DEFAULT = ,                 03320000
         EJECT                                                     GRAF 03330000
*********************************************************************** GRAF 03340000
*                                                                     * GRAF 03350000
* G R A P H  R E P O R T  G R A P H I N G  C H A R A C T E R S       * GRAF 03360000
*                                                                     * GRAF 03370000
* THE FOLLOWING SEVEN M4PARAMS OPTIONS CONTROL THE CHARACTERS        * GRAF 03380000
* IN PLOTTING A GRAPH.                                               * GRAF 03390000
*                                                                     * GRAF 03400000
* THE SEVEN PARAMETERS ARE: PRIMARY    PLOT CHARACTER                * GRAF 03410000
*                           SECONDARY  PLOT CHARACTER                * GRAF 03420000
*                           FIT        PLOT CHARACTER                * GRAF 03430000
*                           HORIZONTAL AXIS CHARACTER                * GRAF 03440000
*                           HORIZONTAL HASH CHARACTER                * GRAF 03450000
*                           VERTICAL   AXIS CHARACTER                * GRAF 03460000
*                           VERTICAL   HASH CHARACTER                * GRAF 03470000
*                                                                     * GRAF 03480000
* THE ONLY RESTRICTIONS APPLY TO THE PRIMARY AND SECONDARY PLOT      * GRAF 03490000
* CHARACTERS WHICH CANNOT BE BLANK.                                  * GRAF 03500000
*                                                                     * GRAF 03510000
*                                                                     * GRAF 03520000
*                                                                     * GRAF 03530000
*********************************************************************** GRAF 03540000
         SPACE 3                                                   GRAF 03550000
*                                                                     GRAF 03560000
*  PRIMARY     - SPECIFIES THE CHARACTER TO USE WHEN PLOTTING      GRAF 03570000
*  PLOT          SINGLE POINTS   (SCATTER DIAGRAM)                 GRAF 03580000
*  CHARACTER     BARS                                              GRAF 03590000
*                                                                     GRAF 03600000
PRMCHAR  EQU   C'X'                    DEFAULT = X                 GRAF 03610000
         SPACE 3                                                   GRAF 03620000
*                                                                     GRAF 03630000
*  SECONDARY   - SPECIFIES THE CHARACTER TO USE WHEN PLOTTING      GRAF 03640000
*  PLOT          OVERLAID POINTS (SCATTER DIAGRAM)                 GRAF 03650000
*  CHARACTER                                                          GRAF 03660000
*                                                                     GRAF 03670000
SCDCHAR  EQU   C'*'                    DEFAULT = * (ASTERISK)      GRAF 03680000
```

```
*                                                                       GRAF 03690000
         SPACE 3                                                        GRAF 03700000
*                                                                       GRAF 03710000
*  FIT          - SPECIFIES THE CHARACTER TO USE WHEN PLOTTING         GRAF 03720000
*  PLOT           A LEAST SQUARES FIT LINE.                            GRAF 03730000
*  CHARACTER                                                           GRAF 03740000
*                                                                       GRAF 03750000
FITCHAR  EQU   C'.'                    DEFAULT = . (PERIOD)           GRAF 03760000
         SPACE 3                                                        GRAF 03770000
*                                                                       GRAF 03780000
*  HORIZONTAL   - SPECIFIES THE CHARACTER TO USE WHEN PLOTTING         GRAF 03790000
*  AXIS           THE HORIZONTAL AXES.                                 GRAF 03800000
*  CHARACTER                                                           GRAF 03810000
*                                                                       GRAF 03820000
HZACHAR  EQU   C'_'                    DEFAULT = _ (UNDERSCORE)       GRAF 03830000
         SPACE 3                                                        GRAF 03840000
*                                                                       GRAF 03850000
*  HORIZONTAL   - SPECIFIES THE CHARACTER TO USE WHEN PLOTTING         GRAF 03860000
*  HASH           THE HORIZONTAL HASH CHARACTERS MARKING               GRAF 03870000
*  CHARACTER      INTERVALS.                                           GRAF 03880000
*                                                                       GRAF 03890000
HZHCHAR  EQU   C'|'                    DEFAULT = | (VERTICAL BAR)     GRAF 03900000
         SPACE 3                                                        GRAF 03910000
*                                                                       GRAF 03920000
*  VERTICAL     - SPECIFIES THE CHARACTER TO USE WHEN PLOTTING         GRAF 03930000
*  AXIS           THE VERTICAL AXES.                                   GRAF 03940000
*  CHARACTER                                                           GRAF 03950000
*                                                                       GRAF 03960000
VTACHAR  EQU   C'|'                    DEFAULT = | (VERTICAL BAR)     GRAF 03970000
         SPACE 3                                                        GRAF 03980000
*                                                                       GRAF 03990000
*  VERTICAL     - SPECIFIES THE CHARACTER TO USE WHEN PLOTTING         GRAF 04000000
*  HASH           THE VERTICAL HASH CHARACTERS MARKING INTERVALS.      GRAF 04010000
*  CHARACTER                                                           GRAF 04020000
*                                                                       GRAF 04030000
VTHCHAR  EQU   C'-'                    DEFAULT = - (DASH)             GRAF 04040000
         EJECT                                                          GRAF 04050000
*                                                                            04060000
* UNIT         - TIME PROCESSING CAPABILITY UNIT                           04070000
* CONVERSION     CONVERSION MULTIPLIERS AND DELIMITER.                     04080000
* MULTIPLIERS    THE MULTIPLIER VALUES MUST BE POSITIVE                    04090000
* AND DELIMITER  INTEGERS LESS THAN 100.  THE DEFAULT                      04100000
*                VALUES ARE SET FOR HOURS/MINUTES/SECONDS.                 04110000
*                                                                          04120000
MULTPLR1 EQU   60                      DEFAULT = 60 MINUTES/HOUR          04130000
MULTPLR2 EQU   60                      DEFAULT = 60 SECONDS/MINUTE        04140000
TIMEDELM EQU   C':'                    DEFAULT = HH:MM:SS                 04150000
         EJECT                                                            04160000
*                                                                         04170000
* MONTH        - THIS TABLE CONTAINS ONE THREE-CHARACTER ENTRY            04180000
* TABLE          FOR EACH MONTH OF THE YEAR.  EACH ENTRY MUST BE          04190000
*                EXACTLY THREE CHARACTERS LONG.  LEADING OR TRAILING      04200000
*                BLANKS ARE ACCEPTABLE.                                   04210000
*                                                                         04220000
         ORG   M4PARAMS+69   ***** DO NOT CHANGE THIS STATEMENT    SYSM 04230000
JAN      DC    CL3'JAN'                                                  04240000
FEB      DC    CL3'FEB'                                                  04250000
MAR      DC    CL3'MAR'                                                  04260000
APR      DC    CL3'APR'                                                  04270000
MAY      DC    CL3'MAY'                                                  04280000
JUN      DC    CL3'JUN'                                                  04290000
JUL      DC    CL3'JUL'                                                  04300000
AUG      DC    CL3'AUG'                                                  04310000
SEP      DC    CL3'SEP'                                                  04320000
OCT      DC    CL3'OCT'                                                  04330000
NOV      DC    CL3'NOV'                                                  04340000
```

```
DEC      DC    CL3'DEC'                                                  04350000
         SPACE 5                                                         04360000
*                                                                        04370000
* DATE FLAG    - SPECIFIES THE FORMAT OF THE DATE FLAG.  THE FORMATS    04380000
* FORMAT         AVAILABLE AND THE VALUES ENTERED TO SELECT THEM ARE:    04390000
*                MMM DD, YYYY  0                                         04400000
*                DD MMM YYYY   1                                         04410000
*                YYYY MMM DD   2                                         04420000
*                                                                        04430000
DATE     EQU   0                       DEFAULT = MMM DD, YYYY           04440000
         SPACE 5                                                         04450000
*                                                                        04460000
* TODAY FLAG   - SPECIFIES THE FORMAT OF THE TODAY FLAG.  THE FORMATS   04470000
* FORMAT         AVAILABLE AND THE VALUES ENTERED TO SELECT THEM ARE:    04480000
*                MMDDYY  MMDDYY                                          04490000
*                DDMMYY  DDMMYY                                          04500000
*                YYMMDD  YYMMDD                                          04510000
*                MMYYDD  MMYYDD                                          04520000
*                DDYYMM  DDYYMM                                          04530000
*                YYDDMM  YYDDMM                                          04540000
*                                                                        04550000
         M4TODAY MMDDYY                DEFAULT = MMDDYY                 04560000
         EJECT                                                           04570000
*                                                                        04580000
* TODAY FLAG   - SPECIFIES THE DELIMITER USED TO FORMAT THE TODAY        04590000
* DELIMITER      FLAG WHEN USED AS A REPORT DATE OR FREE FORM DATE        04600000
*                FLAG.  ALSO USED TO FORMAT A USER-SUPPLIED REPORT       04610000
*                DATE.                                                   04620000
*                                                                        04630000
TODAYDLM EQU   C'/'                    DEFAULT = MM/DD/YY               04640000
         SPACE 5                                                         04650000
*                                                                        04660000
* ISDATE FLAG  - SPECIFIES THE DELIMITER USED TO FORMAT THE ISDATE       04670000
* DELIMITER      FLAG WHEN USED AS A REPORT DATE OR FREE FORM DATE        04680000
*                FLAG.                                                   04690000
*                                                                        04700000
ISDATDLM EQU   C'-'                    DEFAULT = YYYY-MM-DD             04710000
         SPACE 5                                                         04720000
*                                                                        04730000
* JULIAN FLAG  - SPECIFIES THE DELIMITER USED TO FORMAT THE JULIAN       04740000
* DELIMITER      FLAG WHEN USED AS A REPORT DATE OR FREE FORM DATE        04750000
*                FLAG.                                                   04760000
*                                                                        04770000
JULDLM   EQU   C'.'                    DEFAULT = YY.DDD                 04780000
         SPACE 5                                                         04790000
* SORT         - SPECIFIES THE SORT PROGRAM FOR WHICH SORT CONTROL       04800000
* PROGRAM        STATEMENTS ARE TO BE GENERATED.  THE SORT PROGRAMS      04810000
*                AND THE VALUES ENTERED TO SELECT THEM ARE:              04820000
*                SM-023    0                                      I136 04830000
*                5734-SM1  1                                      I136 04840000
*                5740-SM1  2                                           04850000
*                                                                      04860000
SORTPGM  EQU   2                       DEFAULT = 5740-SM1               04870000
         EJECT                                                           04880000
*                                                                  Z021 04890000
* MAXIMUM      - SPECIFIES THE MAXIMUM AMOUNT OF STORAGE, IN K,    Z021 04900000
* WORKING        TO ALLOCATE FOR WORKING STORAGE.  THIS STORAGE    Z021 04910000
* STORAGE        DOES NOT INCLUDE FILE BUFFERS.                    Z021 04920000
*                                                                  Z021 04930000
MAXGETMN EQU   1024                    DEFAULT = 1024K            Z021 04940000
*                                                                       04950000
* MINIMUM      - SPECIFIES MINIMUM AMOUNT OF STORAGE, IN K, TO     SYSM 04960000
* STORAGE        BE RELEASED TO THE SYSTEM AT THE START OF THE     SYSM 04970000
* RELEASED       RUN VIA THE 'FREEMAIN' MACRO.                         04980000
* TO SYSTEM                                                             04990000
*                                                                       05000000
```

```
MINCORE  EQU   12                      DEFAULT = 12K              SYSM 05010000
         SPACE 5                                                        05020000
* ALTERNATE    - THE NUMBER OF PRINTABLE COLUMNS ON THE ALTERNATE  QN10 05030000
* M4LIST         M4LIST OUTPUT DEVICE, NOT INCLUDING THE ASA       QN10 05040000
* WIDTH          CONTROL CHARACTER.  THIS IS THE M4LIST1 RECORD    QN10 05050000
*                LENGTH-1, AND MUST BE AT LEAST 24 COLUMNS.        QN10 05060000
*                                                                  QN10 05070000
ALTWIDTH EQU   132                 ALT DEFAULT = 132 COLUMNS      QN10 05080000
*                                                                  QN10 05090000
* ALTERNATE    - THE NUMBER OF PRINTABLE COLUMNS ON AN ALTERNATE   QN10 05100000
* DEFAULT        REPORT PAGE, NOT INCLUDING THE ASA CONTROL        QN10 05110000
* WIDTH OF       CHARACTER.  THIS IS THE DEFAULT VALUE USED IF     QN10 05120000
* PAGE           "WIDTH OF PAGE" ON THE EN/ER STATEMENT IS LEFT    QN10 05130000
*                BLANK.  THIS VALUE MUST NOT EXCEED THE M4LIST1    QN10 05140000
*                WIDTH (ALTWIDTH) SPECIFIED ABOVE.                 QN10 05150000
*                NOTE: A ZERO VALUE WILL CAUSE THE SYSTEM TO USE   QN10 05160000
*                      ALT M4LIST WIDTH FOR THIS SPECIFICATION.    QN10 05170000
*                                                                  QN10 05180000
ALTDFWOP EQU   0                   ALT DEFAULT = M4LIST1 WIDTH    QN10 05190000
         SPACE 5                                                  SNDS 05200000
*                                                                 SNDS 05210000
* SUPPRESS     - WHEN NO DATA IS SELECTED FOR A REPORT A SKELETON  SNDS 05220000
* NO-DATA-       REPORT IS PRODUCED INDICATING NO SELECTED DATA.   SNDS 05230000
* SELECTED       THIS PARAMETER WILL ALLOW SUPPRESSION OF THAT     SNDS 05240000
* REPORT         SKELETON REPORT.  ENTER 'N' TO INDICATE PRINTING  SNDS 05250000
*                OF THE REPORT.  ENTER 'Y' TO INDICATE THAT THE    SNDS 05260000
*                REPORT SHOULD BE SUPPRESSED.                      SNDS 05270000
*                                                                 SNDS 05280000
SUPRSNDS EQU   C'N'                DEFAULT = NO                   SNDS 05290000
         SPACE 5                                                  X054 05300000
* SUPPRESS     - THE FOLLOWING 3 SPECIFICATIONS ALLOW INFORMATION  X054 05310000
* INFO AND       AND WARNING MESSAGES (MESSAGE TYPES 0 AND 1) TO   X054 05320000
* WARNING        BE OPTIONALLY SUPPRESSED FOR ANY OF THE DECODE/   X054 05330000
* MESSAGES       COMPILATION, FILE PROCESSING OR REPORT GENERATION X054 05340000
*                PHASES OF VISION:BUILDER OPERATION.  ENTER 'Y'    X054 05350000
*                TO ALLOW ALL INFORMATION AND WARNING MESSAGES     X054 05360000
*                TO BE PRINTED FOR THE RESPECTIVE PHASE OF         X054 05370000
*                OPERATION.  ENTER 'N' TO CAUSE THE INFORMATION    X054 05380000
*                AND WARNING MESSAGES TO BE SUPPRESSED FOR THE     X054 05390000
*                RESPECTIVE PHASE OF OPERATION                     X054 05400000
*                                                                  X054 05410000
DECMSOPT EQU   C'Y' DECODE/COMPILATION PHASE INFO MESSAGES = YES   X054 05420000
PROMSOPT EQU   C'Y' FILE PROCESSING    PHASE INFO MESSAGES = YES   X054 05430000
RPTMSOPT EQU   C'Y' REPORT GENERATION  PHASE INFO MESSAGES = YES   X054 05440000
         SPACE 5                                                  Z007 05450000
* FILE         - THIS OPTION SPECIFIES THE DEFAULT ADDRESSING      Z007 05460000
* PROCESSING     MODE TO BE USED DURING THE FILE PROCESSING        Z007 05470000
* PHASE          PHASE OF THE APPLICATION.  ENTER 'Y' TO INDICATE  Z007 05480000
* ADDRESS        THAT 31-BIT ADDRESSING BE USED AND THAT FILE      Z007 05490000
* MODE           BUFFERS AND OTHER FILE PROCESSING STORAGE AREAS   Z007 05500000
*                BE ALLOCATED ABOVE THE 16-MEG STORAGE LINE.       Z007 05510000
*                ENTER 'N' TO INDICATE THAT 24-BIT ADDRESSING BE   Z007 05520000
*                USED AND THAT FILE BUFFERS AND OTHER FILE         Z007 05530000
*                FILE PROCESSING STORAGE AREAS BE ALLOCATED BELOW  Z007 05540000
*                THE 16-MEG LINE.                                  Z007 05550000
*                                                                  Z007 05560000
AMODE31  EQU   C'Y'     FILE PROCESSING AMODE(31) = YES            Z007 05570000
         SPACE 5                                                  QN06 05580000
*                                                                 QN06 05590000
* M4PAOUT      - THE MAXIMUM NUMBER OF LINES TO BE                 QN06 05600000
* MAXIMUM        PROVIDED FOR THE PROGRAM ANALYZER                 QN06 05610000
* LINES          REQUEST EXECUTION TRACE.                          QN06 05620000
*                                                                  QN06 05630000
PALTRCMX EQU   1024           DEFAULT = 1024 LINES                QN06 05640000
         EJECT                                                    QN10 05650000
*        ------------------------------------------------------    QN10 05660000
```

```
*        -                                                -      QN10 05670000
*        -  S Y S T E M   D E P E N D E N T   V A L U E S -      QN10 05680000
*        -                                                -      QN10 05690000
*        --------------------------------------------------      QN10 05700000
         SPACE 3                                                 QN10 05710000
*                                                                     05720000
* HIGH LEVEL   - SPECIFIES WHETHER OR NOT THE HIGHEST LEVEL ISAM       05730000
* ISAM INDEX     INDICES FOR BISAM INPUT AND BISAM INPUT/OUTPUT       05740000
* CONTROL        FILES ARE TO RESIDE IN MAIN STORAGE FOR IMPROVED     05750000
*                EFFICIENCY.  THE HIGHEST LEVEL INDICES MAY BE        05760000
*                TRACK, CYLINDER, OR (IF OPTCD=M WAS SPECIFIED        05770000
*                WHEN THE ISAM FILE WAS CREATED) MASTER INDICES.      05780000
*                THE HIGHEST LEVEL INDICES ARE MADE RESIDENT BY       05790000
*                ENTERING A 1.  THE HIGHEST LEVEL INDICES REMAIN      05800000
*                NON-RESIDENT BY ENTERING A 0.                        05810000
*                                                                     05820000
COREINDX EQU   0                       DEFAULT = NO INDICES IN STORAGE 05830000
         SPACE 3                                                 11.0 05840000
********************************************************************** 05850000
*              FOLLOWING ARE THE DEFAULT CONDITION CODES             * 05860000
********************************************************************** 05870000
         SPACE 1                                                 11.0 05880000
CONDCOD1 EQU   0            NORMAL TERMINATION                   11.0 05890000
CONDCOD2 EQU   4            ERROR  TERMINATION                   11.0 05900000
CONDCOD3 EQU   8            NO SORTING (RC SPECIFICATION)        11.0 05910000
CONDCOD4 EQU  16            NO SORTING (INVALID REQUESTS)        11.0 05920000
         EJECT                                                       05930000
********************************************************************** 05940000
*              USERS MUST NOT MAKE CHANGES FOLLOWING THIS PAGE       * 05950000
********************************************************************** 05960000
         EJECT                                                       05970000
         ORG   M4PARAMS+L'USERID ,                               QN06 05980000
M4RELNO  DC    CL4'14.0'               RELEASE NUMBER           Y015 05990000
M4DELIM  DC    AL1(DELIMITR)           SYSTEM DELIMITER             06000000
M4HEIGHT DC    AL1(HEIGHT)             PAGE HEIGHT                  06010000
         DC    X'00'                   ***** UNUSED *****       Z019 06020000
M4AUTOG  DC    AL1(AUTOGRND)           AUTOMATIC GRAND SUMMARIES    06030000
M4SING   DC    AL1(SINGSEP)            LISTING DELIMITER CHARACTER  06040000
M4HEADER DC    AL1(HEADCHAR)           REPORT COLUMN HEADING CHARACTER 06050000
M4SUBTIT DC    AL1(SUBTITLE)           SUBTITLE CONTROL             06060000
M4MESAND DC    AL1(X'FF'-10*CONSOLE)   MESSAGE CONTROL              06070000
M4MESOR  DC    AL1(PRINT)              MESSAGE CONTROL              06080000
M4LFTMRK DC    AL1(LEFTMRK)            LISTING DELIMITER CHARACTER  06090000
M4RHTMRK DC    AL1(RIGHTMRK)           LISTING DELIMITER CHARACTER  06100000
M4INVFLD DC    AL1(INVALID)            SPECIAL OUTPUT CHARACTER     06110000
M4NONEXT DC    AL1(NOTEXIST)           SPECIAL OUTPUT CHARACTER     06120000
M4NOEDIT DC    AL1(NOTEDIT)            SPECIAL OUTPUT CHARACTER     06130000
M4PERCNT DC    AL1(PERCENT)            PERCENT CHARACTER            06140000
         DC    AL1(0)                ** UNUSED-OLD M4LIB RESERVE  QN15 06150000
M4REPO   DC    Y(REPOSIZ)              M4REPO BLOCKSIZE             06160000
M4INBUT  DC    AL1(INPUT)              NUMBER OF I/O BUFFERS        06170000
M4OTBUF  DC    AL1(OUTPUT)             NUMBER OF I/O BUFFERS        06180000
M4CYLOVL DC    AL1(0)                  # OF TRACKS FOR ISAM CYL OFLO 06190000
M4SLCTL  DC    AL1(SLCCTL)             SOURCE STMNT LISTING VERT SP 06200000
M4LIST   DC    AL1(0)                  M4LIST UNIT ASSIGNMENT       06210000
M4INPUT  DC    AL1(0)                  M4INPUT UNIT ASSIGNMENT      06220000
M4MINCOR DC    Y(MINCORE)              MINIMUM STORAGE RELEASE TO SYS 06230000
M4SORTP  DC    AL1(SORTPGM)            SORT PROGRAM                 06240000
M4DECPT  DC    AL1(DECCHAR)            DECIMAL POINT CHARACTER      06250000
M4COMMA  DC    AL1(GRPCHAR)            GROUPING CHARACTER           06260000
M4MULT1  DC    AL1(MULTPLR1)           UNIT CONVERSION MULTIPLIER   06270000
M4MULT2  DC    AL1(MULTPLR2)           UNIT CONVERSION MULTIPLIER   06280000
M4TIMDEL DC    AL1(TIMEDELM)           UNIT CONVERSION DELIMITER    06290000
M4DATFMT DC    AL1(DATE)               DATE FLAG FORMAT             06300000
M4MONTH  EQU   *                       MONTH TABLE                  06310000
         ORG   *+3*12 ***** DO NOT CHANGE THIS STATEMENT *****      06320000
```

```
M4LABEL  EQU   *                        SUMMARY LABEL TABLE             06330000
         ORG   *+5*10 ***** DO NOT CHANGE THIS STATEMENT *****          06340000
M4TDYFMT DC    AL1(TODAY)               TODAY FLAG FORMAT               06350000
M4TDYDLM DC    AL1(TODAYDLM)            TODAY FLAG DELIMITER            06360000
M4ISDDLM DC    AL1(ISDATDLM)            ISDATE FLAG DELIMITER           06370000
M4JULDLM DC    AL1(JULDLM)              JULIAN FLAG DELIMITER           06380000
M4VOLCNT DC    AL1(0)                   M4REPO VOLUME COUNT             06390000
         DC    Y(0)                  ** UNUSED-OLD M4LIB BLKSIZE   QN15 06400000
M4CYLIDX DC    AL1(COREINDX)            HIGH LEVEL ISAM INDEX CONTROL   06410000
M4LSTLBL DC    AL1(0)                   M4LIST TAPE LABELS              06420000
M4AM31   DC    AL1(AMODE31)             31-BIT ADDRESS MODE OPTION Z007 06430000
M4INTR   DC    AL1(0)                   IMPRECISE INTERRUPT        BIG1 06440000
M4MODNO  DC    AL1(1)                   360/370 INSTRUCTION SET    BIG1 06450000
M4FLTPNT DC    AL1(1)                   FLOATING POINT HARDWARE    BIG1 06460000
M49DCHAR DC    AL1(DIGCHAR)             DIGIT SELECT               ULS  06470000
M4ZDCHAR DC    AL1(ZSPCHAR)             ZERO SUPPRESS              ULS  06480000
M4CPCHAR DC    AL1(CKPCHAR)             CHECK PROTECTION           ULS  06490000
M4CUCHAR DC    AL1(CURCHAR)             CURRENCY SYMBOL            ULS  06500000
M4PLCHAR DC    AL1(PLUCHAR)             PLUS SIGN                  ULS  06510000
M4MICHAR DC    AL1(MINCHAR)             MINUS SIGN                 ULS  06520000
M4REPTSZ DC    AL4(REPTSIZE)            REPORTER STORAGE           RTP  06530000
M4SORTSZ DC    AL4(SORTSIZE)            SORT STORAGE               STP  06540000
M4PRCHAR DC    AL1(PRMCHAR)             PRIMARY    PLOT CHARACTER  GRAF 06550000
M4SCCHAR DC    AL1(SCDCHAR)             SECONDARY  PLOT CHARACTER  GRAF 06560000
M4FTCHAR DC    AL1(FITCHAR)             FIT        PLOT CHARACTER  GRAF 06570000
M4HACHAR DC    AL1(HZACHAR)             HORIZONTAL AXIS CHARACTER  GRAF 06580000
M4HHCHAR DC    AL1(HZHCHAR)             HORIZONTAL HASH CHARACTER  GRAF 06590000
M4VACHAR DC    AL1(VTACHAR)             VERTICAL   AXIS CHARACTER  GRAF 06600000
M4VHCHAR DC    AL1(VTHCHAR)             VERTICAL   HASH CHARACTER  GRAF 06610000
M4PALTRM DC    AL4(PALTRCMX)            MAX PAL TRACE LINES        QN06 06620000
         DC    X'00'                    ***** UNUSED *****         Z019 06630000
M4AWIDTH DC    AL2(ALTWIDTH)            ALT M4LIST WIDTH (LRECL-1) Z019 06640000
M4SUPNDS DC    AL1(SUPRSNDS)            SUPPRESS NO-DATA-SEL RPT?  SNDS 06650000
         DC    X'00'                    ***** UNUSED *****         11.0 06660000
M4CCODE1 DC    AL2(CONDCOD1)            NORMAL CONDITION CODE      11.0 06670000
M4CCODE2 DC    AL2(CONDCOD2)            ERROR  CONDITION CODE      11.0 06680000
M4CCODE3 DC    AL2(CONDCOD3)            NO SORT (SPECIFIED)        11.0 06690000
M4CCODE4 DC    AL2(CONDCOD4)            NO SORT (INVALID REQUESTS) 11.0 06700000
M4MSDEC  DC    AL1(DECMSOPT)            DECODE/COMPILE MSG OPTION  X054 06710000
M4MSPRO  DC    AL1(PROMSOPT)            PROCESSING     MSG OPTION  X054 06720000
M4MSRPT  DC    AL1(RPTMSOPT)            REPORTING      MSG OPTION  X054 06730000
         DC    X'00'                    ***** UNUSED *****         Z019 06740000
M4WIDTH  DC    AL2(LSTWIDTH)            M4LIST WIDTH (LRECL-1)     Z019 06750000
M4DEFWD  DC    AL2(LSTDFWOP)            DEFAULT MK4 WIDTH-OF-PAGE  Z019 06760000
M4ADEFWD DC    AL2(ALTDFWOP)            DEFAULT ALT WIDTH-OF-PAGE  Z019 06770000
M4MAXGMN DC    AL4(MAXGETMN)            DEFAULT MAX GETMAIN        Z021 06780000
         DC    XL8'00'                  ***** UNUSED *****         Z019 06790000
M4PAREND EQU   *-1                      ### M4PARAMS END LOC ###   QN10 06800000
*                                                                  Z019 06810000
         END                                                            06820000
```

Figure 146. M4PARAMS Module Source

Changing the Size of the Foreground Library or Communication File

If you need additional space in the VISION:Inform foreground library or communication file, you usually need to increase the number of overflow blocks. You only need to add root blocks when the Backup Utility output listing shows an increasing number of root overflow blocks in use.

Follow these steps, in the order shown, to increase the size of these files:

1. Take the file (foreground library or communication file) offline.

   The procedure to increase the size of a file includes deleting the VSAM cluster containing the file. For this reason, no other application can have the file open during this procedure.

2. Back up the file.

   - For the foreground library, modify the JCL in the LBBACKUP member of the INFORM.JCL PDS. You only need to run the BACKFG step.
   - For the communication file, modify the CMBACKUP JCL member. Run the job.

   Check the output listing to verify that it ran without error. Make note of the space utilization messages at the end of the listing.

3. Modify the QFILE macro in the PARMBLK source.

   Locate the customized copy of the PARMBLK that you used to install VISION:Inform.

   - This is delivered as member PARMBLK in the INFORM.SRCLIB PDS.
   - This member contains two invocations of the QFILE macro, one for the foreground library (QFILE LIB), and one for the communication file (QFILE COM).
   - Change the QFILE OVFLBLK parameter value to the new value. Make OVFLBLK a multiple of 8.

   Save the updated PARMBLK source. Assemble and link the new PARMBLK by executing the JCL member PMBASMLK in the INFORM.JCL job control library.

4. Run the TRANSFER Utility.

   This job is found in member TRANSFER of INFORM.JCL. This step is **mandatory**.

5. Restore the file.

   - For the foreground library, modify the JCL member LBRESTOR in the INFORM.JCL job control library to restore the contents of file from the backup taken in the second step described above. You only need to run steps DEFFG and RESTFG.

     Change the value of RECORDS in the DEFINE CLUSTER statement to be equal to (ROOTBLK + OVFLBLK +3) from the new values used in the QFILE macro.

   - For the communication file, use the CMRESTOR job.

     Change the value of RECORDS in the DEFINE CLUSTER statement to be equal to (ROOTBLK + OVFLBLK +3) from the new values used in the QFILE macro.

6. Use the file.

   The file, with its increased capacity is now available for use. Bring it back online and use it.

Special Considerations for Multiple Update Access

Be aware of the importance of the PARMBLK PARMS macro ENQNAME parameter.

- The value specified in ENQNAME is used for the MVS major ENQ Name parameter for all ENQ/DEQ calls for resource control on the foreground library and communication file.
- If the files are updated by jobs or applications running concurrently on more than one CPU, it is this value that you must register with the Global Resource Sharing mechanism used in your shop.

Another factor that can affect the proper functioning of the method used to control concurrent access to the VISION:Inform foreground library and communication file is the use of third-party disk access optimization packages. These are applications that the Operations Staff use to optimize access to disk files through sophisticated buffering and I/O control techniques.

Note: Do not use these disk access optimization packages with VISION:Inform and its access to the foreground library and communication file. Doing so will result in the loss of data integrity to the contents of these files.

Chapter

6

Using the Checkpoint/Restart Feature

Activate the checkpoint/restart feature of the VISION:Inform Background Processor by including an additional control statement, the CHECKPNT statement, in the Background Processor INFIN data set. Take the checkpoint by using a record (root segment) count, or by using a timer interval that causes a checkpoint at the next record (root segment) read.

You can only enter the CHECKPNT command in the Background Processor control statement data set (INFIN). This statement is required for both checkpoint and restart runs of the Background Processor. Execute a restart in the normal IMS manner. Different changes are required to the Background Processor JCL to specify an IMS checkpoint or restart run.

In checkpoint/restart runs, the Background Processor is run in a "3-phase" mode instead of the default 1-phase. The first phase, the processing phase, is the only phase to be checkpointed. It is also the only phase that can be restarted. The second phase is a sort and the third phase is report generation. Neither the sort nor the report phases may be checkpointed or restarted because the volume of data in these phases does not typically warrant the need.

The system incurs additional I/O overhead when you use the checkpoint/restart feature. This is because of the report file being read and written more times than in a non-checkpoint/restart single-phase Background Processor run. You also incur additional IMS overhead when checkpointing and/or restarting.

The checkpoint/restart feature does not interface with GDBI or any other user code (own code) used with the VISION:Inform Background Processor, unless you take steps in the user code to re-establish position in the queried database after taking each checkpoint.

The CHECKPNT Control Statement

The VISION:Inform CHECKPNT statement syntax is:

```
CHECKPNT  COUNT | INTVL  IDPREF  M4LIST  M4REPO ;
```

The CHECKPNT parameters are as follows:

COUNT	Specifies the number of root segments to be read between checkpoint requests. You must specify COUNT as an integer value from 1 through 999999. COUNT and INTVL are mutually exclusive operands, but you must specify one or the other.
INTVL	Specifies a time interval in minutes. The interval you specify is the amount of time to occur between checkpoint requests. The checkpoint occurs at the next root segment read after the expiration of the time interval. You must specify INTVL as an integer value from 1 through 999. COUNT and INTVL are mutually exclusive operands, but you must specify one or the other.
IDPREF	Specifies the checkpoint ID prefix. You must specify IDPREF as an alphabetic string (no special characters or numerics). The maximum length of IDPREF is six. You may not use the string 'CAD' as the first three letters of the prefix since these are reserved for VISION:Inform. This operand is optional. If you do not specify it, a default four-character prefix of 'MFOR' is used.
M4LIST	Specifies the user ddname for M4LIST. This is not a required operand. You need it only if the ddname changes for M4LIST. The maximum length of the M4LIST operand is eight. The ddname must match that in the DBD and in the Background Processor JCL.
M4REPO	Specifies the user ddname for M4REPO. This is not a required operand. You need it only if you change the ddname for M4REPO. The maximum length of the M4REPO operand is eight. The ddname must match that in the DBD and in the Background Processor JCL.
;	Specifies that a comment follows. Precede this with a space.

Note: The CHECKPNT statement MUST be the first statement in the VISION:Inform Background Processor control file (INFIN).

Your user shop standards dictate the use of the M4REPO and M4LIST keywords. Both of these files must have a DBD/PSB.

Sample CHECKPNT statements are shown below.

```
CHECKPNT COUNT 999999 IDPREF XXXXX
CHECKPNT INTVL 999 IDPREF ABC
CHECKPN  INTV  999 IDPREF YYYY M4LIST DDNM1 M4REPO DDNM2
CHECKPNT INTVL 999 IDPREF ZZZ ; COMMENTS ALLOWED HERE
```

Figure 147. Sample CHECKPNT Statements

Operational Considerations

Checkpoint runs and non-checkpoint runs must be separate. The differences in JCL and in internal controls are not compatible.

You must execute a restart run will all the queries that were active in the original checkpointed run. Do not change the control statement file (INFIN) from that used in the original run. The results of changing something between a checkpointed run and the corresponding restart run can range from unpredictable results to abnormal termination of the run.

The VISION:Inform Background Processor notes and drops control statements in error unless you set the ERROPT=TERM option in the PARMBLK, in which case the Background Processor terminates when it detects an error in the CHECKPNT, or any control statement. Use ERROPT=TERM in all checkpoint/restart Background Processor runs. If the system detects an error in the CHECKPNT, or any control statement, messages are output to the log file (INFLOG) and communications file. The Background Processor, however, continues to run unless you set ERROPT=TERM.

When selecting a checkpoint ID prefix keep in mind that the checkpoint ID numeric suffix resets to zero at the start of each new batch of queries processed by the Background Processor. Also, if the character string is very large (5 or 6 characters) and the run takes many checkpoints it may be difficult to identify uniquely a particular checkpoint because the prefix ID length plus the numeric checkpoint length is eight bytes.

The user database DBD field and segment names must match the field and segment names specified in the file definition in the VISION:Inform background library. If they do not match, IMS return codes AC and AK can be received that cause the Background Processor to terminate prematurely.

If a checkpoint/restart Background Processor is run in a batch DLI region, and Data Base Recovery Control (DBRC) is active for the region, then you must add the IMS LOG files to the Background Processor job control.

Do not specify the Background Processor control statements OPTION ALTSORT and OPTION SWITCH1 in a checkpoint/restart run. The system ignores them if they are present.

Queries that create sub-file output are not eligible for checkpoint/restart runs.

DBD and PSB Considerations

The internal Background Processor report file out (M4REPO) and list file (M4LIST) must be explicitly specified IMS databases when you use the checkpoint/restart features. The access method for both files must be GSAM, PSB and DBD definitions for M4REPO and M4LIST are required. You must add them to your VISION:Inform PSB and DBD libraries.

In a BMP region, you must complete the ACBGEN. When running in a BMP region, however, it is necessary to have the ddname IMS point to the DBD library and the PSB library for access to the GSAM control blocks.

If naming standards dictate that you change the PSB/DBD names, then you must specify the M4LIST and M4REPO operands of the CHECKPNT control statement to provide the new ddnames. You must also change the Background Processor JCL ddnames to match the DBD specified name.

Sample PSB and DBD specifications for M4REPO and M4LIST are shown in these four examples:

Sample 1: PSB for M4REPO

```
PCB TYPE=GSAM,DBDNAME=M4REPO,PROCOPT=L
```

Sample 2: DBD for M4REPO

```
DBD NAME=M4REPO,ACCESS=(GSAM,BSAM)
DATASET DD1=M4REPO,RECFM=VB,RECORD=1020,SIZE=1024
```

Sample 3: PSB Entry for M4LIST

```
PCB TYPE=GSAM,DBDNAME=M4LIST,PROCOPT=L
```

Sample 4: DBD Entry for M4LIST

```
DBD NAME=M4LIST,ACCESS=(GSAM,BSAM)
DATASET DD1=M4LIST,RECFM=FB,RECORD=133,SIZE=133
```

Background Processor Job Control Changes

The changes required to the Background Processor JCL to use the checkpoint/restart feature depend on whether or not you run the Background Processor in a BMP region or a batch DLI region. This section describes the changes necessary to the delivered JCL in the INFORM.JCL library as members INFBMP (BMP region) and INFBATCH (batch DLI region).

JCL for Checkpoint Run in a BMP Region

Using a working version of the INFBMP JCL, make the following additions:

- Add the IMS DD statement to the INFBMP step of the procedures, specifying the PSB and DBD libraries for the GSAM data set information:

```
//IMS   DD DISP=SHR,DSN=INFORM.PSBLIB
//      DD DISP=SHR,DSN=INFORM.DBDLIB
```

- Add the CHECKPNT control statement as the first control statement in the INFIN data set.

JCL for Checkpoint Run in a Batch DLI Region

Using a working version of the INFBATCH JCL, make the following changes:

- Change the IEFRDER DD statement in the INFBG step of the procedure from DD DUMMY to point to the checkpoint/restart log data set that you use for this batch DLI region. You can allocate this data set in this step or a previous one. Here is an example of the specification for IEFRDER:

```
//IEFRDER DD DSN=INFORM.IMSLOG1,UNIT=SYSDA,
//     DISP=(NEW,CATLOG,CATLG),
//     SPACE=(TRK,(5,2),RLSE),
//     DCB=(RECFM=VB,BLKSIZE=1920,LRECL=1916,BUFNO=2)
```

- Add the CHECKPNT control statement as the first control statement in the INFIN data set.

Constructing the Checkpoint ID for Restart Runs

When you restart a Background Processor after a checkpoint run, you must specify a checkpoint ID as a parameter to DFSRRC00. VISION:Inform uses a 12-byte format of the checkpoint ID. The 12 bytes are derived from the information in the IMS DFS0540I message. To construct the checkpoint ID:

- Obtain the JES log of the Background Processor checkpoint run.
- Locate the last valid DFS0540I message that specifies a value in the CKPTID= field that matches the prefix specified in the VISION:Inform Background Processor CHECKPNT control statement.
- Using the information in the REGID=, DAY=, and TIME= fields of the DFS0540I message, construct the 12-byte checkpoint ID in the format *iidddhhmmmsst*, as follows:

ii	The region ID from the REG ID= field.
ddd	The day from the DAY= field.
hhmmmsst	The time from the TIME= field.

The following sections describe how to use the checkpoint ID in Background Processor restart runs.

JCL for Restart Run in a BMP Region

You must create the JCL for a restart run in a BMP region from the JCL described in the section JCL for Checkpoint Run in a BMP Region. Using the JCL for a Background Processor that you want to restart (there must be at least one valid checkpoint), construct the restart JCL as follows:

- In the INFBMP step of the procedure, add the checkpoint ID as specified in the section Constructing the Checkpoint ID for Restart Runs as the ninth positional parameter of the EXEC PGM=DFSRRC00 JCL statement PARM field.
- Add the IMSLOGR DD statement to the INFBMP step of the procedure. The IMSLOGR DD statement specifies the IMS OLDS (online data set) containing the checkpoint log records from the run begin restarted. You can determine the OLDS by inspecting the IMS log data set from the checkpoint run for the DFS681I message that corresponds to the DFS0540I message that you used to construct the checkpoint ID. This message identifies the OLDS to specify in the IMSLOGR DD statement that you want to add to the Background Processor restart JCL. For example:

```
//IMSLOGR DD DISP=SHR,DSN=IMSVS.OLDSn
```

JCL for Restart Run in a Batch DLI Region

You must create the JCL for a restart run in a batch DLI region from the JCL described in the section JCL for Checkpoint Run IN A Batch DLI Region. Using the JCL for a Background Processor that you want to restart (there must be at least one valid checkpoint), construct the restart JCL as follows:

- In the INFBG step of the procedure, add the Checkpoint ID as specified in the section Constructing the Checkpoint ID for Restart Runs as the eighth positional parameter of the EXEC PGM=DFSRRC00 JCL statement PARM field.
- Add the IMSLOGR DD statement to the INFBG step of the procedure. The IMSLOGR DD statement specifies the same file as the IEFRDER DD statement from the checkpoint run being restarted. For example:

```
//IMSLOGR DD DISP=SHR,DSN=IMSVS.OLDSn
```

- Change the IEFRDER DD statement for the restart run to point to a new file to contain the checkpoint log records for the restart run itself. For example:

```
//IEFRDER DD DSN=INFORM.IMSLOG2,UNIT=SYSDA,
//   DISP=(NEW,CATLG,CATLG),
//   SPACE=TRK,(5,2),RLSE),
//   DCB=(RECFM=VB,BLKSIZE=1920,LRECL=1916,BUFNO=2)
```

Chapter

7

Maintenance and Support

During the life of a VISION:Inform release, PTFs, formerly known as System Modifications (SMs), are developed to enhance, maintain, and customize the product and components. Any problems that arise are fixed by PTFs (SMs), which are numbered in sequence as they are developed for each release, beginning with 200. There are other patches called APARs, formerly known as Restricted System Modifications (RSMs), that are special customizations to the product and do not apply to all sites. The user should always review the APAR description carefully before applying them to a system.

The PTFs and APARs are identified by component and number using the following format:

ccxnnnn

where:

ccx	is one of these component/environment identifiers:	
	BL0	VISION:Builder engine
	CL0	COMLIB component
	WB0	Definition Processor
	INC	VISION:Inform for CICS
	INI	VISION:Inform for IMS

nnnn	is one of these modification number identifiers:	
	0001 to 0199	Numbers assigned to APARs, special patches
	0200 to 0500	Numbers assigned to PTFs, general patches

Examples: BL00200, BL00125, CL00215, WB00201, INC0210.

Maintenance – Installing the PTFs and APARs

All PTFs and APARs are installed to VISION:Inform and its components under the control of SMP/E. The SMP/E process for handling PTFs and APARs has the following basic steps:

1. Record and save the PTF or APAR into the global zone using the RECEIVE command.
2. Use the APPLY command to install the PTF or APAR to the target libraries.
3. Use the ACCEPT command to install the PTF or APAR into the distribution libraries.

Note: Once an APAR or PTF is accepted, you must refresh your working copy of the VISION:Inform load library. Use job INFCOPY1 or INFCOPY2 from the INFORM.R40.SMPCNTL dataset to refresh the load library. Any customizations (PARMBLK, M4PARAMS, user exits) should be re-applied at this time as well. Do not neglect to run the TRANSFER utility from INFORM.JCL if you are using a separate CICS online program library.

The PTFs are general modifications that are designed for all users and all systems. These should always be installed into VISION:Inform and its components in order to keep the system up to date. PTFs should be installed in both the target and distribution libraries.

The APARs are special modifications that are designed for unique situations. The APARs do not apply to all users and systems. The control statements in the PDS data set (INFORM.R40.SMPCNTL) contain comments for each item that describe the situation addressed by the PTF or APAR. Review the description of any APAR you are considering for your system. If you have any questions, concerns, or if you just need more information regarding an APAR, contact Computer Associates Technical Support at esupport.ca.com. Technical Support is available 24 hours a day, 7 days a week.

When installing APARs, there may be some time between the APPLY to the target libraries and the ACCEPT to the distribution libraries. You should take this time to evaluate whether the APAR satisfies the special need for your system. If you decide that the APAR is not appropriate, you can use an SMP/E RESTORE command to remove the APAR from the target libraries. Additionally, you can use an SMP/E REJECT command to remove the APAR for the global zone.

Note: Once you ACCEPT an element, such as APAR or PTF, into the distribution libraries, there is no direct method for restoring the previous version of an element in your target libraries.

The PDS data set (INFORM.R40.SMPCNTL) contains some model jobs for performing the various maintenance activities described above. Here are the member names and their functions:

Member Names	Description
SMPJOB04	RECEIVE a PTF or APAR into the Global Zone and Libraries
SMPJOB06	APPLY a PTF or APAR into the Target Libraries
SMPJOB08	ACCEPT a PTF or APAR into the Distribution Libraries
SMPREMOV	RESTORE (remove) a PTF or APAR from the Target Libraries
SMPREJCT	REJECT (remove) a PTF or APAR from the Global Zone and Libraries

There are other tools and facilities that are available for invoking SMP/E commands and functions. Any of these will work because VISION:Inform only uses the standard SMP/E processes. The Systems Group at each site has their favorite tools and procedures, and any of those should work just fine.

Notes: The APAR runs get a return code of 4 from APPLY and ACCEPT runs because they do not contain prerequisites for other PTFs and APARs.

When PTF runs are performed after an APAR has been processed, they get a return code of 4 because the PTF will not contain prerequisites for any APARs. Remember, the APARs can be identified by their number, which is in the range of *ccx*0001 to *ccx*0199, where *ccx* is the component/environment identifier.

Support – Problem Reporting

When a problem is encountered, contact Computer Associates Technical Support to have a representative review your situation. You must provide details to the representative concerning what actions were being performed at the time the problem occurred. Any information on recreating the problem is very useful. Capture any messages or information displayed and communicate these messages to the support representative.

Contact Computer Associates Technical Support at esupport.ca.com. Technical support is available 24 hours a day, 7 days a week.

VISION:Inform Problem Reporting

Depending upon the type of problem experienced, you may be asked to provide some combination of the following items:

- A description of events leading up to the problem
- A list of current APARS/PTFS
- The query or task source
- The file definition
- Security profiles
- Report output
- SYSUDUMP (full dump, unprocessed by dump-handling programs such as Abend-Aid™)
- VISION:Inform trace output
- The VISION:Inform log file
- JOB Control and JES listings and messages
- Relevant message from CICS Master Terminal
- 3270 Screen Print

Client Software Information

Note: Client software includes VISION:Journey for DOS with VISION:Inform, and VISION:Journey for Windows with VISION:Inform.

If the problem is with the flow of the client software, include a list of the keystrokes that precede the error. When the problem is not easy to recreate or requires a large amount of data entry or retrieval, provide disk copies or file transfers.

VISION:Builder and COMLIB Problem Reporting

For VISION:Builder and COMLIB problems, a Diagnostic Information Page may appear as part of the termination handling and message MK4S701 starts the display. (This message would be located in the log file for the Background Processor run in which the problem occurred.) Save the information on this display to send to your Computer Associates Technical Support Representative. In some cases, a complete SYSUDUMP taken at the time the problem occurred may be needed to help determine the reason for the error.

Definition Processor Problem Reporting

For Definition Processor problems, gather as much of the following information as possible:

- The objective of your session.
- The name, identification, or description of the last valid panel you saw before the problem.
- Any error messages that were displayed.
- Information from the unexpected error display, if applicable.
- Any other information you feel would be useful in recreating the situation.

Panel Identification

The upper-left corner of every Definition Processor data entry panel contains a panel identification name. This name is used to reference the panels in the Definition Processor documentation. This identification name is not the name of the panel member in your panel library.

To view the actual member name of a panel, type PANELID on the ISPF command line. To turn this feature off and return to the panel identification name, type PANELID. The PANELID command toggles between on and off.

Unexpected Error Panel

If the Definition Processor Abnormally terminates or detects a serious internal error, it displays an Unexpected Error panel. This panel contains information that is always useful when trying to track down the cause of the problem.

If you encounter this screen, obtain a screen print of the display before continuing. If you cannot obtain a screen print, record the following information:

- Error messages on the display.
- PSW value.
- The contents of registers 12, 14, and 15.

Use the Help Primary Command to display any message that might be pending.

Appendix

A

JCL Samples

These members are contained in the INFORM.JCL library:

Note: DL/I is shown as DLI in the product.

Member	Description	Page
ACBGEN	JCL to run the IMS ACBGEN	A-4
ALLOC	JCL to allocate the Background Processor log and work files	A-5
BUILDRQS	JCL for the VISION:Builder Quick Start Utility This Source Statement Retrieval [SSR] procedure retrieves definitions from a background library and stores them in the definition library.	A-7
CINFBAT	JCL to run the Background Processor in a batch DLI region with DB2 (Call Attach)	A-7
CINFBMP	JCL to run the Background Processor in a BMP region with DB2 (Call Attach)	A-10
CINFOBMP	JCL to run the Batch Simulator in a BMP region with DB2 (Call Attach)	A-13
CINFOSB	JCL to run the Batch Simulator in a batch DLI region with DB2 (Call Attach).	A-15
CMBACKUP	JCL to backup the communication file.	A-17
CMRESTOR	JCL to restore the communication file	A-18
CNVRTDEF	JCL to run the Definition Convert Utility to convert definitions from previous release formats to the Definition Processor format	A-20
COBOLQS	JCL to run the COBOL Quick Start Utility to generate a VISION:Inform file definition from a COBOL copybook	A-21
CREATFIN	JCL to create the VSAM FINANCE test file	A-22
CREATUTL	JCL to create the utility library for the Definition Processor	A-23

Member	Description	Page
DB2CALL	JCL to assemble and prepare the VISION:Inform DB2 module for the DB2 Call Attach Facility	A-24
DB2IMS	JCL to assemble and prepare the VISION:Inform DB2 module for the DB2 IMS Attach Facility	A-25
DB2QS	JCL to run the DB2 Quick Start Utility to convert DB2 table definitions into VISION:Inform file definitions	A-26
DB2TSO	JCL to assemble and prepare the VISION:Inform DB2 module for the DB2 TSO Attach Facility	A-27
DBDGEN	JCL to run the IMS DBDGEN	A-28
GLOSSARY	JCL to obtain a hard copy glossary listing for a data view	A-29
INFBATCH	JCL to run the Background Processor in a batch DLI region without DB2	A-30
INFBMP	JCL to run the Background Processor in a BMP region without DB2	A-33
INFOSB	JCL to run the Batch Simulator in a batch DLI region without DB2	A-35
INFOSBMP	JCL to run the Batch Simulator in a BMP region without DB2	A-37
INIT	JCL to initialize the foreground library, the communication file, the background library, and the online work file	A-39
INQRYQS	JCL to run the VISION:Inquiry Quick Start Utility to convert VISION:Inquiry file definitions into VISION:Inform file definition format.	A-43
LBBACKUP	JCL to back up the foreground and background libraries	A-44
LBRESTOR	JCL to restore the foreground and background libraries	A-46
LIBCOPY	JCL to copy items of type QUERY or STMTS from one foreground library to another foreground library	A-49
LINKLIB	JCL to link edit the CA-Librarian interface modules with the COBOL Quick Start Utility	A-51
LINKLIBR	JCL to link edit the CA-Librarian interface with the VISION:Results Quick Start Utility	A-52
LINKPAN	JCL to link edit the CA-Panvalet interface modules with the COBOL Quick Start Utility	A-53
LINKPANR	JCL to link edit the CA-Panvalet interface with the VISION:Results Quick Start Utility	A-54
LSXASMLK	JCL to assemble and link a user written INFREPT exit routine	A-55

Member	Description	Page
M4PASMLK	JCL to assemble and link the Background Processor parameter module M4PARAMS	A-56
MERGDEF	JCL to convert and copy all the file and logical data view definitions from the background library to the foreground library (synchronize background and foreground libraries)	A-57
MERGHLP	JCL to run the Field Description Merge Utility in a batch DLI region	A-59
MERGHLP1	JCL to run the Field Description Merge Utility in a BMP region	A-61
MFSUTL	JCL to generate all MFS Control Blocks	A-63
PMBASMLK	JCL to assemble and link the VISION:Inform parameter module PARMBLK	A-71
PRXASMLK	JCL to assemble and link a user written PROFILE exit routine	A-72
PSBGEN	JCL to run the IMS PSBGEN	A-73
PURGUTIL	JCL to run the Communication File Purge Utility in a batch DLI region	A-75
PURGUTLB	JCL to run the Communication File Purge Utility in a BMP region	A-77
RESULTQS	JCL to run the VISION:Results Quick Start Utility to convert VISION:Results file definitions into VISION:Inform format	A-79
TINFBTCH	JCL to run the Background Processor in a batch DLI region for DB2 Tables using TSO Attach	A-80
TINFOSB	JCL to run the Batch Simulator in a batch DLI region for DB2 Tables Using TSO Attach	A-83
TRANSFER	JCL to transfer the online program modules from the installation load library to the IMS online program load library	A-85

ACBGEN

```
//* MEMBER ACBGEN                                                        00010000
//********************************************************************* 00020000
//* THIS PROCEDURE GENERATES THE ACB'S.                                * 00030000
//********************************************************************* 00040000
//ACBGEN  PROC PSBLIB=,                                                 00050000
//             DBDLIB=,                                                 00060000
//             ACBLIB=,                                                 00070000
//             RESLIB=,                                                 00080000
//             IMSPCLB=,                                                00090000
//             COMP=,                                                   00100000
//             RGN=                                                     00110000
//GENACB EXEC PGM=DFSRRC00,PARM='UPB,&COMP',REGION=&RGN                 00120000
//SYSPRINT DD SYSOUT=*                                                  00130000
//STEPLIB  DD DISP=SHR,DSN=&RESLIB                                      00140002
//IMS      DD DISP=SHR,DSN=&PSBLIB                                      00150002
//         DD DISP=SHR,DSN=&DBDLIB                                      00160002
//IMSACB   DD DISP=OLD,DSN=&ACBLIB                                      00170002
//SYSUT3   DD UNIT=SYSDA,SPACE=(CYL,(3,3))                              00180000
//SYSUT4   DD UNIT=SYSDA,SPACE=(CYL,(3,3)),DCB=KEYLEN=8                 00190000
//COMPCTL  DD DISP=SHR,DSN=&IMSPCLB(DFSACBCP)                           00200002
//       PEND                                                           00210000
//*********************************************************************00220000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.  BEFORE     *00230000
//* YOU RUN THIS PROCEDURE, SPECIFY:                                   *00240000
//*                                                                    *00250000
//* PSBLIB  - THE PSB LIBRARY.                                         *00260000
//* DBDLIB  - THE DBB LIBRARY.                                         *00270000
//* ACBLIB  - THE ACB LIBRARY.                                         *00280000
//* RESLIB  - IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.                *00290000
//* IMSPCLB - IMS PROCEDURE LIBRARY.  THE DEFAULT IS IMSVS.PROCLIB.    *00300000
//* COMP    - REQUESTS COMPRESSION OF THE ACB LIBRARY.  THE DEFAULT    *00310000
//*           POSTCOMP.                                                *00320000
//* RGN     - THE REGION SIZE.  THE DEFAULT IS 1M.                     *00330002
//*                                                                    *00340000
//* IF YOU CHANGED THE PSB NAMES, CHANGE THEM ALSO IN THE SYSIN INPUT  *00350000
//* STATEMENT.                                                         *00360000
//*********************************************************************00370000
//ACBGEN  EXEC ACBGEN,                                                  00380000
//             PSBLIB='INFORM.PSBLIB',                                  00390001
//             DBDLIB='INFORM.DBDLIB',                                  00400001
//             ACBLIB='INFORM.ACBLIB',                                  00410003
//             RESLIB='IMSVS.RESLIB',                                   00420001
//             IMSPCLB='IMSVS.PROCLIB',                                 00430001
//             COMP=POSTCOMP,                                           00440000
//             RGN=1M                                                   00450002
//* ****************************************************************  00460000
//* DELETE THE BUILD PSB=INFORMMC STATEMENT FOLLOWING UNLESS YOU USE *  00470000
//* VISION:JOURNEY FOR DOS OR ANOTHER REMOTE PLATFORM WITH YOUR      *  00480000
//* VISION:INFORM PRODUCT.                                           *  00490000
//*                                                                  *  00500000
//* DELETE THE BUILD PSB=INFORMOS STATEMENT FOLLOWING UNLESS YOU USE *  00510000
//* RELEASE 2.0B OR HIGHER OF VISION:JOURNEY FOR WINDOWS WITH YOUR   *  00520000
//* VISION:INFORM PRODUCT.                                           *  00530000
//* ****************************************************************  00540000
//SYSIN DD *                                                            00550000
      BUILD PSB=(INFORMOC,INFORMBB,INFUTIL,INFORMSB,INFINIT)            00560000
      BUILD PSB=INFORMMC                                                00570000
      BUILD PSB=INFORMOS                                                00580000
```

Figure 148. ACBGEN — JCL to run the IMS ACBGEN

ALLOC

```
//* MEMBER ALLOC                                                          00010000
//*********************************************************************** 00020000
//* THIS PROCEDURE ALLOCATES FOUR FILES FOR THE BACKGROUND PROCESSOR  * 00030000
//* AND SHOULD BE RUN ONE TIME FOR EACH BACKGROUND PROCESSOR USED,    * 00040000
//* SPECIFYING UNIQUE NAMES FOR EACH PROCESSOR'S DATA SETS:           * 00050000
//*                                                                   * 00060000
//*   A) 1 EXTERNAL LOG FILE (INFLOG)                                 * 00070000
//*   B) 3 WORK FILES (M4REPO, M4REPI, M4SORT)                        * 00080000
//*********************************************************************** 00090000
//ALLOC PROC INFLOG=,                                                   00100000
//           LOGBLK=,                                                   00110000
//           M4REPO=,                                                   00120000
//           M4REPI=,                                                   00130000
//           REPBLK=,                                                   00140000
//           REPLREC=,                                                  00150000
//           M4SORT=,                                                   00160000
//           PRIM=,                                                     00170000
//           SEC=,                                                      00180000
//           DUNIT=,                                                    00190000
//           VOL=                                                       00200000
//STEP1 EXEC PGM=IEFBR14                                                00210000
//INFLOG  DD DSN=&INFLOG,DISP=(NEW,CATLG),UNIT=&DUNIT,                  00220000
//           DCB=(RECFM=FB,LRECL=200,BLKSIZE=&LOGBLK,DSORG=PS),         00230000
//           SPACE=(TRK,(20,10)),VOL=SER=&VOL                           00240000
//M4REPO  DD DSN=&M4REPO,DISP=(,CATLG),VOL=SER=&VOL,                    00250000
//           DCB=(BLKSIZE=&REPBLK,LRECL=&REPLREC,RECFM=VB,DSORG=PS),    00260000
//           UNIT=&DUNIT,SPACE=(CYL,(&PRIM,&SEC))                       00270000
//M4REPI  DD DSN=&M4REPI,DISP=(,CATLG),VOL=SER=&VOL,                    00280000
//           DCB=(BLKSIZE=&REPBLK,LRECL=&REPLREC,RECFM=VB,DSORG=PS),    00290000
//           UNIT=&DUNIT,SPACE=(CYL,(&PRIM,&SEC))                       00300000
//M4SORT  DD DSN=&M4SORT,DISP=(,CATLG),UNIT=&DUNIT,SPACE=(TRK,1),       00310000
//           VOL=SER=&VOL                                               00320000
//      PEND                                                            00330000
//*********************************************************************** 00340000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.            * 00350001
//* BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                           * 00360001
//*                                                                   * 00370000
//* INFLOG   - DSNAME FOR THE BACKGROUND PROCESSOR LOG FILE.          * 00380000
//* LOGBLK   - BLOCK SIZE FOR LOG FILE (MUST BE A MULTIPLE OF 200).   * 00390000
//* M4REPO   - DSNAME FOR THE M4REPO FILE.                            * 00400000
//* M4REPI   - DSNAME FOR THE M4REPI FILE.                            * 00410000
//* REPBLK   - BLOCK SIZE FOR BOTH M4REPO AND M4REPI.                 * 00420000
//* REPLREC  - LOGICAL RECORD LENGTH FOR BOTH M4REPO AND M4REPI.      * 00430000
//*                          *** N O T E ***                          * 00440000
//*            THE "REPBLK" AND "REPLREC" VALUES MUST CORRESPOND      * 00450000
//*            EXACTLY TO THE "REPOSIZ" PARAMETER SPECIFICATION IN    * 00460000
//*            MEMBER M4PARAMS IN 'INFORM.SRCLIB'. "REPLREC" MUST     * 00470001
//*            BE 4 LESS THAN "REPBLK". THE VALUES SPECIFIED          * 00480001
//*            IN THE SAMPLE INVOCATION BELOW MATCH THE DEFAULT       * 00490000
//*            VALUES AS DELIVERED WITH THE SYSTEM.                   * 00500000
//* M4SORT   - DSNAME FOR THE M4SORT FILE.                            * 00510000
//* PRIM     - PRIMARY ALLOCATION FOR M4REPO AND M4REPI.              * 00520000
//* SEC      - SECONDARY ALLOCATION FOR M4REPO AND M4REPI.            * 00530000
//* DUNIT    - TYPE OF DISK UNIT ASSIGNED FOR THE FILES.              * 00540000
//* VOL      - VOLSER OF THE DISK UNIT CONTAINING THE FILES.          * 00550000
//*********************************************************************** 00560000
//ALLOC   EXEC ALLOC,                                                   00570000
//             INFLOG='INFORM.INFLOG',                                  00580001
//             LOGBLK=200,                                              00590000
//             M4REPO='INFORM.M4REPO',                                  00600001
//             M4REPI='INFORM.M4REPI',                                  00610001
//             REPBLK=4096,                                             00620000
//             REPLREC=4092,                                            00630000
//             M4SORT='INFORM.M4SORT',                                  00640001
```

```
//            PRIM=5,                                              00650000
//            SEC=10,                                              00660000
//            DUNIT=SYSDA,                                         00670000
//            VOL=XXXXXX                                           00680000
```

Figure 149. ALLOC — JCL to Allocate the Background Processor Log and Work Files

BUILDRQS

```
//* MEMBER BUILDRQS                                                    00010004
//********************************************************************* 00020003
//* PROCEDURE TO RETRIEVE DEFINITION SOURCE STATEMENTS FROM A         * 00030003
//* BACKGROUND LIBRARY, AND STORE THEM AS A MEMBER IN THE DEFINITION  * 00040003
//* LIBRARY.                                                          * 00050003
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00060003
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00070003
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00080003
//*               CONCATENATED TO THE SSR.STEPLIB DD STATEMENTS.      * 00090003
//********************************************************************* 00100003
//SSR     PROC LOADLIB=,                                              00110000
//            BGLIB=,                                                 00120001
//            DEFLIB=,                                                00130001
//            MEMBER=                                                 00140001
//SSR    EXEC PGM=MARKIV,REGION=2048K                                 00150001
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                   00160002
//M4LIST   DD SYSOUT=*                                                00170001
//M4LIB    DD DISP=SHR,DSN=&BGLIB                                     00180001
//M4SSOUT  DD DISP=OLD,DSN=&DEFLIB(&MEMBER)                           00190002
//M4INPUT  DD DUMMY                                                   00200001
//       PEND                                                         00210001
//********************************************************************* 00220003
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00230003
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                          * 00240003
//*                                                                   * 00250003
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                * 00260003
//*    BGLIB   - THE INFORM BACKGROUND LIBRARY.                       * 00270003
//*    DEFLIB  - THE INFORM DEFINITION LIBRARY.                       * 00280003
//*    MEMBER  - MEMBER NAME FOR THE DEFINITION YOU ARE GENERATING.   * 00290003
//*                                                                   * 00300003
//*  YOU MUST ALSO PROVIDE THE APPROPRIATE SYSIN DATA IN THE          * 00310003
//*  SSR.M4INPUT DD OVERRIDE STMT.                                    * 00320003
//********************************************************************* 00330003
//GETSRC  EXEC SSR,                                                   00340000
//             LOADLIB='INFORM.LOADLIB',                              00350001
//             BGLIB='INFORM.BGLIB',                                  00360001
//             DEFLIB='INFORM.DEFLIB',                                00370001
//             MEMBER='DEFNAME'                                       00380000
//SSR.M4INPUT DD *                                                    00390000
SSR     RC                   B      S                                00400000
        CTOPRDEFNAME                                                00410000
```

Figure 150. BUILDRQS — JCL for the VISION:Builder Quick Start Utility (Procedure for Source Statement Retrieval (SSR) of Definitions in a Background Library)

CINFBAT

```
//* MEMBER CINFBAT                                                     00010000
//********************************************************************* 00020000
//* EXECUTE THE BACKGROUND PROCESSOR IN A DLI BATCH REGION, WITH      * 00030000
//* ACCESS TO DB2 TABLES USING CALL ATTACH.                           * 00040000
//*                                                                   * 00050000
//* IF THE FOREGROUND LIBRARY AND COMMUNICATIONS FILE DDNAMES HAVE    * 00060000
//* BEEN CHANGED IN THE DBD'S, MAKE SURE THEY MATCH THOSE IN THIS     * 00070000
//* PROCEDURE.                                                        * 00080000
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00090002
```

```
//*              THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00100002
//*              ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00110002
//*              CONCATENATED TO THE INFBG.STEPLIB DD STATEMENTS.    * 00120002
//********************************************************************* 00130000
//INFBATCH PROC RGN=,                                                   00140000
//             LOADLIB=,                                                00150000
//             RS1LOAD=,                                                00160000
//             DB2LOAD=,                                                00170000
//             RESLIB=,                                                 00180000
//             PGMLIB=,                                                 00190000
//             SORTLIB=,                                                00200001
//             PROG=,                                                   00210000
//             PSB=,                                                    00220000
//             PSBLIB=,                                                 00230000
//             DBDLIB=,                                                 00240000
//             FGLIB=,                                                  00250000
//             INFCOM=,                                                 00260000
//             INFLOG=,                                                 00270000
//             BGLIB=,                                                  00280000
//             REPORTS=,                                                00290000
//             RUNCNTL=,                                                00300000
//             HCSCFG=,                                                 00310004
//             HTMLTPL=,                                                00320004
//             M4REPO=,                                                 00330000
//             M4SORT=,                                                 00340000
//             M4REPI=                                                  00350000
//INFBG  EXEC PGM=DFSRRC00,REGION=&RGN,PARM=(DLI,&PROG,&PSB)            00360000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00370000
//         DD DISP=SHR,DSN=&RS1LOAD                                     00380000
//         DD DISP=SHR,DSN=&DB2LOAD                                     00390000
//         DD DISP=SHR,DSN=&RESLIB                                      00400000
//         DD DISP=SHR,DSN=&PGMLIB                                      00410000
//IMS      DD DISP=SHR,DSN=&PSBLIB                                      00420000
//         DD DISP=SHR,DSN=&DBDLIB                                      00430000
//DFSRESLB DD DISP=SHR,DSN=&RESLIB                                      00440000
//IEFRDER  DD DUMMY                                                     00450000
//M4LIB    DD DISP=SHR,DSN=&BGLIB                                       00460000
//M4REPO   DD DISP=SHR,DSN=&M4REPO                                      00470000
//SORTIN   DD DISP=SHR,DSN=&M4REPO                                      00480000
//M4SORT   DD DISP=SHR,DSN=&M4SORT                                      00490000
//SYSIN    DD DISP=SHR,DSN=&M4SORT                                      00500000
//M4REPI   DD DISP=SHR,DSN=&M4REPI                                      00510000
//SORTOUT  DD DISP=SHR,DSN=&M4REPI                                      00520000
//SORTMSG  DD SYSOUT=*                                                  00530000
//INFREPT  DD DISP=OLD,DSN=&REPORTS                                     00540000
//*INFREPT DD SYSOUT=*                                                  00550000
//INFORMLF DD DISP=OLD,DSN=&FGLIB                                       00560000
//INFORMCF DD DISP=OLD,DSN=&INFCOM                                      00570000
//INFLOG   DD DISP=OLD,DSN=&INFLOG                                      00580000
//SYSOUT   DD SYSOUT=*                                                  00590000
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB                                     00600001
//SORTWK01 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00610000
//SORTWK02 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00620000
//SORTWK03 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00630000
//HCSCFG   DD DISP=SHR,DSN=&HCSCFG                                      00640004
//M4HTBASE DD DISP=SHR,DSN=&HTMLTPL                                     00650004
//INFIN    DD DISP=SHR,DSN=&RUNCNTL                                     00660000
//       PEND                                                           00670000
//********************************************************************* 00680000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.  BEFORE    * 00690000
//* YOU RUN THIS PROCEDURE, SPECIFY:                                  * 00700000
//*                                                                   * 00710000
//* RGN     - THE REGION SIZE.  THE DEFAULT IS 2M.                    * 00720000
//* LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                   * 00730000
//* RS1LOAD - THE INFORM RELATIONAL SUPPORT LOAD LIBRARY.             * 00740000
//* DB2LOAD - THE DB2 LOAD LIBRARY.                                   * 00750000
```

```
//* RESLIB  - IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.               * 00760000
//* PGMLIB  - THE IMS PROGRAM LIBRARY.                                * 00770000
//* SORTLIB - THE SYSTEM SORT LOAD LIBRARY. DEFAULT SYS1.SORTLIB.     * 00780001
//* PROG    - BACKGROUND PROCESSOR LOAD MODULE. DEFAULT IS INFORMDE.  * 00790000
//* PSB     - BACKGROUND PROCESSOR PSBNAME. DEFAULT IS INFORMBB.      * 00800000
//* PSBLIB  - THE PSB LIBRARY.                                        * 00810000
//* DBDLIB  - THE DBD LIBRARY.                                        * 00820000
//* FGLIB   - THE INFORM FOREGROUND LIBRARY.                          * 00830000
//* INFCOM  - THE INFORM COMMUNICATION FILE.                          * 00840000
//* INFLOG  - THE INFORM HARDCOPY LOG FILE.                           * 00850000
//* BGLIB   - THE INFORM BACKGROUND LIBRARY.                          * 00860000
//* REPORTS - THE DATASET FOR PRINTED REPORTS.                        * 00870000
//* RUNCNTL - THE DATASET CONTAINING THE BACKGROUND PROCESSOR INPUT.  * 00880000
//*           PARAMETERS. ****NOTE**** SAMPLE CONTROL INPUT EXISTS IN * 00890000
//*                       MEMBER OSCNTL OF DATASET INFORM.SRCLIB.     * 00900000
//* HCSCFG  - THE CONFIGURATION FILE FOR DYNAMIC ALLOCATION OF        * 00910004
//*           ALTERNATE FORMAT OUTPUT FILES. SPECIFY A PDS AND MEMBER * 00920004
//*           NAME OR A SEQUENTIAL FILE NAME.                         * 00930004
//* HTMPTPL - THE DATA SET NAME OF THE PDS CONTAINING THE HTML        * 00940004
//*           TEMPLATES FOR HTML OUTPUT FORMAT.  THE DEFAULT IS       * 00950004
//*           THE INSTALLATION SOURCE LIBRARY.                        * 00960004
//* M4REPO  - BACKGROUND PROCESSOR WORK FILE, SORT INPUT FILE.        * 00970000
//* M4SORT  - BACKGROUND PROCESSOR SORT CONTROL OUTPUT AND SORT       * 00980000
//*           CONTROL INPUT.                                          * 00990000
//* M4REPI  - BACKGROUND PROCESSOR INPUT, SORT OUTPUT FILE.           * 01000000
//*********************************************************************** 01010000
//INFBATCH EXEC INFBATCH,                                               01020000
//             RGN=2M,                                                  01030000
//             LOADLIB='INFORM.LOADLIB',                                01040000
//             RS1LOAD='INFORM.RS1LOAD',                                01050000
//             DB2LOAD='DB2.LOADLIB',                                   01060000
//             RESLIB='IMSVS.RESLIB',                                   01070000
//             PGMLIB='USER.IMS.PGMLIB',                                01080000
//             SORTLIB='SYS1.SORTLIB',                                  01090001
//             PROG=INFORMDE,                                           01100000
//             PSB=INFORMBB,                                            01110000
//             PSBLIB='INFORM.PSBLIB',                                  01120000
//             DBDLIB='INFORM.DBDLIB',                                  01130000
//             FGLIB='INFORM.FGLIB',                                    01140000
//             INFCOM='INFORM.INFCOM',                                  01150000
//             INFLOG='INFORM.INFLOG',                                  01160000
//             BGLIB='INFORM.BGLIB',                                    01170000
//             REPORTS='INFORM.REPORTS',                                01180000
//             RUNCNTL='INFORM.SRCLIB(OSCNTL)',                         01190000
//             HCSCFG='INFORM.SRCLIB(HCSCNFIG)',                        01200004
//             HTMLTPL='INFORM.SRCLIB',                                 01210004
//             M4REPO='INFORM.M4REPO',                                  01220000
//             M4SORT='INFORM.M4SORT',                                  01230000
//             M4REPI='INFORM.M4REPI'                                   01240000
//DFSVSAMP  DD *                                                        01250000
8192,11                                                               01260003
//*********************************************************************** 01270000
//* INCLUDE DD STATEMENTS FOR ALL FILES AND DATABASES AVAILABLE TO    * 01280000
//* THIS BACKGROUND PROCESSOR HERE. USE THE FOLLOWING FORMAT:         * 01290000
//*                                                                   * 01300000
//* //INFBG.USERFILE   DD .....                                       * 01310000
//*                                                                   * 01320000
//* IF YOU WANT TO ALLOW SUBFILE CREATION ENTER A DD STATEMENT FOR    * 01330000
//* EACH SUBFILE WITH THE FOLLOWING FORMAT:                           * 01340000
//*                                                                   * 01350000
//* //INFBG.USERSUBF   DD .....                                       * 01360000
//*                                                                   * 01370000
//* IF YOU WANT TO ALLOW SUBFILE DEFINITION CREATION ADD A DD         * 01380000
//* STATEMENT FOR M4SUBF0.  USE THE FOLLOWING FORMAT:                 * 01390000
//*                                                                   * 01400000
//* //INFBG.M4SUBF0 DD DISP=MOD,DSN=USER.SUBFILE.DEFS                 * 01410000
```

```
//********************************************************************* 01420000
```

Figure 151. CINFBAT — JCL to Run the Background Processor in a Batch DLI Region with DB2 (Call Attach)

CINFBMP

```
//* MEMBER CINFBMP                                                      00010000
//********************************************************************* 00020000
//* THIS PROCEDURE EXECUTES THE BACKGROUND PROCESSOR IN A BMP REGION  * 00030000
//* WITH ACCESS TO DB2 TABLES USING CALL ATTACH OR IMS ATTACH.        * 00040000
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00050002
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00060002
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00070002
//*               CONCATENATED TO THE INFBMP.STEPLIB DD STATEMENTS.   * 00080002
//********************************************************************* 00090000
//INFBMP  PROC RGN=,                                                    00100000
//             LOADLIB=,                                                00110000
//             RS1LOAD=,                                                00120000
//             DB2LOAD=,                                                00130000
//             RESLIB=,                                                 00140000
//             PGMLIB=,                                                 00150000
//             PROCLIB=,                                                00160000
//             SORTLIB=,                                                00170001
//             PROG=,                                                   00180000
//             PSB=,                                                    00190000
//             TRAN=,                                                   00200000
//             IMSID=,                                                  00210000
//             SSM=,                                                    00220000
//             INFLOG=,                                                 00230000
//             BGLIB=,                                                  00240000
//             REPORTS=,                                                00250000
//             RUNCNTL=,                                                00260000
//             HCSCFG=,                                                 00270003
//             HTMLTPL=,                                                00280003
//             M4REPO=,                                                 00290000
//             M4SORT=,                                                 00300000
//             M4REPI=                                                  00310000
//INFBMP EXEC PGM=DFSRRC00,REGION=&RGN,                                 00320000
//            PARM=(BMP,&PROG,&PSB,&TRAN,,,,,,,,,&IMSID,,&SSM)          00330000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00340000
//         DD DISP=SHR,DSN=&RS1LOAD                                     00350000
//         DD DISP=SHR,DSN=&DB2LOAD                                     00360000
//         DD DISP=SHR,DSN=&PGMLIB                                      00370000
//         DD DISP=SHR,DSN=&RESLIB                                      00380000
//PROCLIB  DD DISP=SHR,DSN=&PROCLIB                                     00390000
//DFSESL   DD DISP=SHR,DSN=&RESLIB                                      00400000
//         DD DISP=SHR,DSN=&DB2LOAD                                     00410000
//INFLOG   DD DISP=OLD,DSN=&INFLOG                                      00420000
//M4LIB    DD DISP=SHR,DSN=&BGLIB                                       00430000
//M4REPO   DD DISP=SHR,DSN=&M4REPO                                      00440000
//SORTIN   DD DISP=SHR,DSN=&M4REPO                                      00450000
//M4SORT   DD DISP=SHR,DSN=&M4SORT                                      00460000
//SYSIN    DD DISP=SHR,DSN=&M4SORT                                      00470000
//M4REPI   DD DISP=SHR,DSN=&M4REPI                                      00480000
//SORTOUT  DD DISP=SHR,DSN=&M4REPI                                      00490000
//SORTMSG  DD SYSOUT=*                                                  00500000
//INFREPT  DD DISP=OLD,DSN=&REPORTS                                     00510000
//*INFREPT DD SYSOUT=*                                                  00520000
//SYSOUT   DD SYSOUT=*                                                  00530000
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB                                     00540001
//SORTWK01 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00550000
```

```
//SORTWK02 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00560000
//SORTWK03 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00570000
//HCSCFG   DD DISP=SHR,DSN=&HCSCFG                                      00580003
//M4HTBASE DD DISP=SHR,DSN=&HTMLTPL                                     00590003
//INFIN    DD DISP=SHR,DSN=&RUNCNTL                                     00600000
//       PEND                                                           00610000
//*********************************************************************** 00620000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.  BEFORE    * 00630000
//* YOU RUN THIS PROCEDURE, SPECIFY:                                  * 00640000
//*                                                                   * 00650000
//* RGN     - THE REGION SIZE.  THE DEFAULT IS 2M.                    * 00660000
//* LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                   * 00670000
//* RS1LOAD - LOAD LIBRARY CONTAINING THE DB2 INTERFACE MODULE.       * 00680000
//* DB2LOAD - THE DB2 LOAD LIBRARY.                                   * 00690000
//* RESLIB  - IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.               * 00700000
//* PGMLIB  - THE IMS PROGRAM LIBRARY.                                * 00710000
//* PROCLIB - THE IMS PROCEDURE LIBRARY. DEFAULT IS IMSVS.PROCLIB     * 00720000
//* SORTLIB - THE SYSTEM SORT LOAD LIBRARY. DEFAULT SYS1.SORTLIB.     * 00730001
//* PROG    - BACKGROUND PROCESSOR LOAD MODULE. DEFAULT IS INFORMBB.  * 00740000
//* PSB     - BACKGROUND PROCESSOR PSBNAME. DEFAULT IS INFORMBB.      * 00750000
//* TRAN    - BACKGROUND PROCESSOR TRANSACTION. DEFAULT IS INFBMP.    * 00760000
//* IMSID   - USED IN CONNECTING IMS ATTACH FOR DB2 IN A BMP.         * 00770000
//* SSM     - USED IN CONNECTING IMS ATTACH FOR DB2 IN A BMP.         * 00780000
//*       *** NOTE - SEE IMS SYSTEM DEFINITION REFERENCE MANUAL FOR   * 00790000
//*                  DETAILS ON SSM AND IMSID PARAMETERS.             * 00800000
//* INFLOG  - THE INFORM HARDCOPY LOG FILE.                           * 00810000
//* BGLIB   - THE INFORM BACKGROUND LIBRARY.                          * 00820000
//* REPORTS - THE DATASET FOR PRINTED REPORTS.                        * 00830000
//* RUNCNTL - THE DATASET CONTAINING THE BACKGROUND PROCESSOR INPUT   * 00840000
//*           PARAMETERS. ****NOTE**** PDS MEMBER "OSCNTL" IN THE     * 00850000
//*                       INFORM.SRCLIB HAS SAMPLE INPUT PARAMETERS.  * 00860000
//* HCSCFG  - THE CONFIGURATION FILE FOR DYNAMIC ALLOCATION OF        * 00870003
//*           ALTERNATE FORMAT OUTPUT FILES. SPECIFY A PDS AND MEMBER * 00880003
//*           NAME OR A SEQUENTIAL FILE NAME.                         * 00890003
//* HTMPTPL - THE DATA SET NAME OF THE PDS CONTAINING THE HTML        * 00900003
//*           TEMPLATES FOR HTML OUTPUT FORMAT.  THE DEFAULT IS       * 00910003
//*           THE INSTALLATION SOURCE LIBRARY.                        * 00920003
//* M4REPO  - THE PROCESSOR OUTPUT WORK FILE, SORT INPUT FILE.        * 00930000
//* M4SORT  - THE PROCESSOR SORT CONTROL OUTPUT, SORT CONTROL INPUT.  * 00940000
//* M4REPI  - THE PROCESSOR INPUT, SORT OUTPUT FILE.                  * 00950000
//*********************************************************************** 00960000
//INFBMP  EXEC INFBMP,                                                  00970000
//             RGN=2M,                                                  00980000
//             LOADLIB='INFORM.LOADLIB',                                00990000
//             RS1LOAD='INFORM.RS1LIB',                                 01000000
//             DB2LOAD='DB2.LOADLIB',                                   01010000
//             RESLIB='IMSVS.RESLIB',                                   01020000
//             PGMLIB='USER.IMS.PGMLIB',                                01030000
//             PROCLIB='IMSVS.PROCLIB',                                 01040000
//             SORTLIB='SYS1.SORTLIB',                                  01050001
//             PROG=INFORMBB,                                           01060000
//             PSB=INFORMBB,                                            01070000
//             TRAN=INFBMP,                                             01080000
//             IMSID=,                                                  01090000
//             SSM=,                                                    01100000
//             INFLOG='INFORM.INFLOG',                                  01110000
//             BGLIB='INFORM.BGLIB',                                    01120000
//             REPORTS='INFORM.REPORTS',                                01130000
//             RUNCNTL='INFORM.SRCLIB(OSCNTL)',                         01140000
//             HCSCFG='INFORM.SRCLIB(HCSCNFIG)',                        01150003
//             HTMLTPL='INFORM.SRCLIB',                                 01160003
//             M4REPO='INFORM.M4REPO',                                  01170000
//             M4SORT='INFORM.M4SORT',                                  01180000
//             M4REPI='INFORM.M4REPI'                                   01190000
//*********************************************************************** 01200000
//* INCLUDE DD STATEMENTS FOR ALL NON-DLI DATABASES AVAILABLE TO      * 01210000
```

```
//* THIS BACKGROUND PROCESSOR HERE. USE THE FOLLOWING FORMAT:         * 01220000
//*                                                                   * 01230000
//* //INFBMP.USERFILE  DD .....                                       * 01240000
//*                                                                   * 01250000
//* IF YOU WANT TO ALLOW SUBFILE CREATION ENTER A DD STATEMENT FOR    * 01260000
//* EACH SUBFILE WITH THE FOLLOWING FORMAT:                           * 01270000
//*                                                                   * 01280000
//* //INFBMP.USERSUBF  DD .....                                       * 01290000
//*                                                                   * 01300000
//* IF YOU WANT TO ALLOW SUBFILE DEFINITION CREATION ADD A DD         * 01310000
//* STATEMENT FOR M4SUBF0.  USE THE FOLLOWING FORMAT:                 * 01320000
//*                                                                   * 01330000
//* //INFBMP.M4SUBF0 DD DISP=MOD,DSN=USER.SUBFILE.DEFS                * 01340000
//******************************************************************* 01350000
```

Figure 152. CINFBMP — JCL to Run the Background Processor in a BMP Region with DB2 (Call Attach or IMS Attach)

CINFOBMP

```
//* MEMBER CINFOBMP                                                      00010000
//*********************************************************************** 00020000
//* PROCEDURE TO EXECUTE THE BATCH SIMULATOR IN A BMP REGION WITH     * 00030000
//* ACCESS TO DB2 TABLES UNDER IMS ATTACH OR CALL ATTACH.             * 00040000
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00050001
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00060001
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00070001
//*               CONCATENATED TO THE OSB.STEPLIB DD STATEMENTS.      * 00080001
//*********************************************************************** 00090000
//BMPOSB  PROC RGN=,                                                    00100000
//             LOADLIB=,                                                00110000
//             RS1LOAD=,                                                00120000
//             DB2LOAD=,                                                00130000
//             RESLIB=,                                                 00140000
//             PGMLIB=,                                                 00150000
//             PROCLIB=,                                                00160000
//             SORTLIB=,                                                00170000
//             PROG=,                                                   00180000
//             PSB=,                                                    00190000
//             TRAN=,                                                   00200000
//             IMSID=,                                                  00210000
//             SSM=,                                                    00220000
//             REPORTS=,                                                00230000
//             HCSCFG=,                                                 00240003
//             HTMLTPL=,                                                00250003
//             BGLIB=                                                   00260000
//OSB    EXEC PGM=DFSRRC00,REGION=&RGN,                                 00270000
//            PARM='BMP,&PROG,&PSB,&TRAN,,,,,,,,,,&IMSID,,&SSM'         00280000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00290000
//         DD DISP=SHR,DSN=&RS1LOAD                                     00300000
//         DD DISP=SHR,DSN=&DB2LOAD                                     00310000
//         DD DISP=SHR,DSN=&PGMLIB                                      00320000
//         DD DISP=SHR,DSN=&RESLIB                                      00330000
//PROCLIB  DD DISP=SHR,DSN=&PROCLIB                                     00340000
//DFSESL   DD DISP=SHR,DSN=&RESLIB                                      00350000
//         DD DISP=SHR,DSN=&DB2LOAD                                     00360000
//M4LIB    DD DISP=SHR,DSN=&BGLIB                                       00370000
//M4REPO   DD UNIT=SYSDA,SPACE=(TRK,(2,2))                              00380000
//SYSOUT   DD SYSOUT=*                                                  00390000
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB                                     00400000
//SORTWK01 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00410000
//SORTWK02 DD SPACE=(CYL,5,,CONTIG),UNIT=(SYSDA,SEP=SORTWK01)           00420000
//SORTWK03 DD SPACE=(CYL,5,,CONTIG),                                    00430000
//            UNIT=(SYSDA,SEP=(SORTWK01,SORTWK02))                      00440000
//INFPRINT DD SYSOUT=*                                                  00450000
//INFLIST  DD SYSOUT=*                                                  00460000
//HCSCFG   DD DISP=SHR,DSN=&HCSCFG                                      00470003
//M4HTBASE DD DISP=SHR,DSN=&HTMLTPL                                     00480003
//INFREPT  DD DISP=OLD,DSN=&REPORTS                                     00490000
//*INFREPT DD SYSOUT=*                                                  00500000
//       PEND                                                           00510000
//*********************************************************************** 00520000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00530000
//*    BEFORE YOU RUN THIS PROCEDURE,SPECIFY:                         * 00540000
//*                                                                   * 00550000
//*    RGN     - THE REGION SIZE. (DEFAULT 2M).                       * 00560000
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                * 00570000
//*    RS1LOAD - LOAD LIBRARY CONTAINING THE DB2 INTERFACE MODULE.    * 00580000
//*    DB2LOAD - THE DB2 LOAD LIBRARY.                                * 00590000
//*    RESLIB  - THE NAME OF THE IMS RESLIB. (DEFAULT IMSVS.RESLIB).  * 00600000
//*    PGMLIB  - THE IMS PROGRAM LIBRARY.                             * 00610000
//*    PROCLIB - THE NAME OF THE IMS PROCLIB (DEFAULT IMSVS.PROCLIB). * 00620000
//*    SORTLIB - THE SYSTEM SORT LOAD LIBRARY. DEFAULT SYS1.SORTLIB.  * 00630000
//*    PROG    - THE BATCH SIMULATOR LOAD MODULE. DEFAULT IS INFORMDL.* 00640000
```

```
//*    PSB     - THE INFORM PSBNAME. DEFAULT IS INFORMSB.             * 00650000
//*    TRAN    - THE BATCH SIMULATOR TRANSACTION. DEFAULT IS INFOSB.  * 00660000
//*    IMSID   - USED IN CONNENCTING IMS ATTACH TO DB2 IN A BMP.      * 00670000
//*    SSM     - USED IN CONNENCTING IMS ATTACH TO DB2 IN A BMP.      * 00680000
//*        *** NOTE - SEE IMS SYSTEM DEFINITION REFERENCE MANUAL FOR  * 00690000
//*                   DETAILS ON SSM AND IMSID PARAMETERS.            * 00700000
//*    REPORTS - THE DATASET FOR PRINTED REPORTS.                     * 00710000
//*    HCSCFG  - THE CONFIGURATION FILE FOR DYNAMIC ALLOCATION OF     * 00720003
//*              ALTERNATE FORMAT OUTPUT FILES. SPECIFY A PDS AND     * 00730003
//*              MEMBER NAME OR A SEQUENTIAL FILE NAME.               * 00740003
//*    HTMPTPL - THE DATA SET NAME OF THE PDS CONTAINING THE HTML     * 00750003
//*              TEMPLATES FOR HTML OUTPUT FORMAT.  THE DEFAULT IS    * 00760003
//*              THE INSTALLATION SOURCE LIBRARY.                     * 00770003
//*    BGLIB   - THE INFORM BACKGROUND LIBRARY.                       * 00780000
//*********************************************************************** 00790000
//BMPOSB  EXEC BMPOSB,                                                  00800000
//             RGN=2M,                                                  00810000
//             RESLIB='IMSVS.RESLIB',                                   00820000
//             LOADLIB='INFORM.LOADLIB',                                00830000
//             RS1LOAD='INFORM.RS1LIB',                                 00840000
//             DB2LOAD='DB2.LOADLIB',                                   00850000
//             PGMLIB='USER.IMS.PGMLIB',                                00860000
//             PROCLIB='IMSVS.PROCLIB',                                 00870000
//             SORTLIB='SYS1.SORTLIB',                                  00880000
//             PROG=INFORMDL,                                           00890000
//             PSB=INFORMSB,                                            00900000
//             TRAN=INFOSB,                                             00910000
//             IMSID=,                                                  00920000
//             SSM=,                                                    00930000
//             REPORTS='INFORM.REPORTS',                                00940000
//             HCSCFG='INFORM.SRCLIB(HCSCNFIG)',                        00950003
//             HTMLTPL='INFORM.SRCLIB',                                 00960003
//             BGLIB='INFORM.BGLIB'                                     00970000
//OSB.DFSVSAMP DD *                                                     00980000
8192,11                                                               00990002
//*********************************************************************** 01000000
//* INCLUDE DD STATEMENTS FOR ALL FILES AND DATABASES AVAILABLE TO     * 01010000
//* THIS BATCH SIMULATOR HERE. USE THE FOLLOWING FORMAT:               * 01020000
//*                                                                    * 01030000
//* //OSB.USERFILE  DD .....                                           * 01040000
//*                                                                    * 01050000
//* IF YOU WANT TO ALLOW SUBFILE CREATION ENTER A DD STATEMENT FOR     * 01060000
//* EACH SUBFILE WITH THE FOLLOWING FORMAT:                            * 01070000
//*                                                                    * 01080000
//* //OSB.USERSUBF  DD .....                                           * 01090000
//*                                                                    * 01100000
//* IF YOU WANT TO ALLOW SUBFILE DEFINITION CREATION ADD A DD          * 01110000
//* STATEMENT FOR M4SUBF0.  USE THE FOLLOWING FORMAT:                  * 01120000
//*                                                                    * 01130000
//* //OSB.M4SUBF0 DD DISP=MOD,DSN=USER.SUBFILE.DEFS                   * 01140000
//*********************************************************************** 01150000
//* PLACE BATCH SIMULATOR INPUT STATEMENTS AFTER THE INFIN DD STMT.    * 01160000
//*********************************************************************** 01170000
//OSB.INFIN DD *                                                        01180000
```

Figure 153. CINFOBMP — Runs Batch Simulator in a BMP Region with DB2 (Call Attach or IMS Attach)

CINFOSB

```
//* MEMBER CINFOSB                                                      00010000
//*********************************************************************** 00020000
//* PROCEDURE TO EXECUTE THE BATCH SIMULATOR IN A DLI BATCH REGION    * 00030000
//* WITH ACCESS TO DB2 TABLES USING CALL ATTACH.                      * 00040000
//* IF THE DD NAMES FOR THE COMMUNICATION FILE AND FOREGROUND LIBRARY * 00050000
//* WERE CHANGED IN THE DBD, MAKE SURE THEY MATCH THOSE HERE.         * 00060000
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00070001
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00080001
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00090001
//*               CONCATENATED TO THE OSB.STEPLIB DD STATEMENTS.      * 00100001
//*********************************************************************** 00110000
//INFOSB  PROC RGN=,                                                    00120000
//             LOADLIB=,                                                00130000
//             RS1LOAD=,                                                00140000
//             DB2LOAD=,                                                00150000
//             RESLIB=,                                                 00160000
//             SORTLIB=,                                                00170000
//             PROG=,                                                   00180000
//             PSB=,                                                    00190000
//             PSBLIB=,                                                 00200000
//             DBDLIB=,                                                 00210000
//             FGLIB=,                                                  00220000
//             INFCOM=,                                                 00230000
//             REPORTS=,                                                00240000
//             HCSCFG=,                                                 00250003
//             HTMLTPL=,                                                00260003
//             BGLIB=                                                   00270000
//OSB    EXEC PGM=DFSRRC00,REGION=&RGN,PARM='DLI,&PROG,&PSB'            00280000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00290000
//         DD DISP=SHR,DSN=&RS1LOAD                                     00300000
//         DD DISP=SHR,DSN=&DB2LOAD                                     00310000
//         DD DISP=SHR,DSN=&RESLIB                                      00320000
//IMS      DD DISP=SHR,DSN=&PSBLIB                                      00330000
//         DD DISP=SHR,DSN=&DBDLIB                                      00340000
//IEFRDER  DD DUMMY                                                     00350000
//DFSRESLB DD DISP=SHR,DSN=&RESLIB                                      00360000
//M4LIB    DD DISP=SHR,DSN=&BGLIB                                       00370000
//M4REPO   DD UNIT=SYSDA,SPACE=(TRK,(2,2))                              00380000
//SYSOUT   DD SYSOUT=*                                                  00390000
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB                                     00400000
//SORTWK01 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00410000
//SORTWK02 DD SPACE=(CYL,5,,CONTIG),UNIT=(SYSDA,SEP=SORTWK01)           00420000
//SORTWK03 DD SPACE=(CYL,5,,CONTIG),                                    00430000
//            UNIT=(SYSDA,SEP=(SORTWK01,SORTWK02))                      00440000
//INFORMLF DD DISP=OLD,DSN=&FGLIB                                       00450000
//INFORMCF DD DISP=OLD,DSN=&INFCOM                                      00460000
//INFPRINT DD SYSOUT=*                                                  00470000
//INFLIST  DD SYSOUT=*                                                  00480000
//HCSCFG   DD DISP=SHR,DSN=&HCSCFG                                      00490003
//M4HTBASE DD DISP=SHR,DSN=&HTMLTPL                                     00500003
//INFREPT  DD DISP=OLD,DSN=&REPORTS                                     00510000
//*INFREPT DD SYSOUT=*                                                  00520000
//        PEND                                                          00530000
//*********************************************************************** 00540000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00550000
//*    BEFORE YOU RUN THIS PROCEDURE,SPECIFY:                         * 00560000
//*                                                                   * 00570000
//*    RGN     - THE REGION SIZE. (DEFAULT 2M).                       * 00580000
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                * 00590000
//*    RS1LOAD - LOAD LIBRARY CONTAINING THE DB2 INTERFACE MODULE.    * 00600000
//*    DB2LOAD - THE DB2 LOAD LIBRARY.                                * 00610000
//*    RESLIB  - THE NAME OF THE IMS RESLIB. (DEFAULT IMSVS.RESLIB)   * 00620000
//*    SORTLIB - THE SYSTEM SORT LOAD LIBRARY. DEFAULT SYS1.SORTLIB.  * 00630000
//*    PROG    - BATCH SIMULATOR LOAD MODULE. DEFAULT IS INFORMSB.    * 00640000
```

```
//*    PSB     - THE INFORM PSBNAME. DEFAULT IS INFORMSB.             * 00650000
//*    PSBLIB  - THE USER'S PSB LIBRARY.                              * 00660000
//*    DBDLIB  - THE USER'S DBD LIBRARY.                              * 00670000
//*    FGLIB   - THE INFORM FOREGROUND LIBRARY.                       * 00680000
//*    INFCOM  - THE INFORM COMMUNICATIONS FILE.                      * 00690000
//*    REPORTS - THE DATASET FOR PRINTED REPORTS.                     * 00700000
//*    HCSCFG  - THE CONFIGURATION FILE FOR DYNAMIC ALLOCATION OF     * 00710003
//*              ALTERNATE FORMAT OUTPUT FILES. SPECIFY A PDS AND     * 00720003
//*              MEMBER NAME OR A SEQUENTIAL FILE NAME.               * 00730003
//*    HTMPTPL - THE DATA SET NAME OF THE PDS CONTAINING THE HTML     * 00740003
//*              TEMPLATES FOR HTML OUTPUT FORMAT.  THE DEFAULT IS    * 00750003
//*              THE INSTALLATION SOURCE LIBRARY.                     * 00760003
//*    BGLIB   - THE INFORM BACKGROUND LIBRARY.                       * 00770000
//*******************************************************************  00780000
//INFOSB  EXEC INFOSB,                                                 00790000
//             RGN=2M,                                                 00800000
//             LOADLIB='INFORM.LOADLIB',                               00810000
//             RS1LOAD='INFORM.RS1LIB',                                00820000
//             DB2LOAD='DB2.LOADLIB',                                  00830000
//             RESLIB='IMSVS.RESLIB',                                  00840000
//             SORTLIB='SYS1.SORTLIB',                                 00850000
//             PROG=INFORMSB,                                          00860000
//             PSB=INFORMSB,                                           00870000
//             PSBLIB='INFORM.PSBLIB',                                 00880000
//             DBDLIB='INFORM.DBDLIB',                                 00890000
//             FGLIB='INFORM.FGLIB',                                   00900000
//             INFCOM='INFORM.INFCOM',                                 00910000
//             REPORTS='INFORM.REPORTS',                               00920000
//             HCSCFG='INFORM.SRCLIB(HCSCNFIG)',                       00930003
//             HTMLTPL='INFORM.SRCLIB',                                00940003
//             BGLIB='INFORM.BGLIB'                                    00950000
//OSB.DFSVSAMP DD *                                                    00960000
8192,11                                                              00970002
//*******************************************************************  00980000
//* INCLUDE DD STATEMENTS FOR ALL FILES AND DATABASES AVAILABLE TO     * 00990000
//* THIS BATCH SIMULATOR HERE. USE THE FOLLOWING FORMAT:               * 01000000
//*                                                                    * 01010000
//* //OSB.USERFILE  DD .....                                          * 01020000
//*                                                                    * 01030000
//* IF YOU WANT TO ALLOW SUBFILE CREATION ENTER A DD STATEMENT FOR     * 01040000
//* EACH SUBFILE WITH THE FOLLOWING FORMAT:                            * 01050000
//*                                                                    * 01060000
//* //OSB.USERSUBF  DD .....                                          * 01070000
//*                                                                    * 01080000
//* IF YOU WANT TO ALLOW SUBFILE DEFINITION CREATION ADD A DD          * 01090000
//* STATEMENT FOR M4SUBF0.  USE THE FOLLOWING FORMAT:                  * 01100000
//*                                                                    * 01110000
//* //OSB.M4SUBF0 DD DISP=MOD,DSN=USER.SUBFILE.DEFS                   * 01120000
//*******************************************************************  01130000
//* PLACE BATCH SIMULATOR INPUT STATEMENTS AFTER THE INFIN DD STMT.    * 01140000
//*******************************************************************  01150000
//OSB.INFIN DD *                                                       01160000
```

Figure 154. CINFOSB — JCL to Run the Batch Simulator in a Batch DL/I Region (Call Attach)

CMBACKUP

```
//* MEMBER CMBACKUP                                                      00010000
//*********************************************************************** 00020000
//*   THIS PROCEDURE CREATES A BACKUP COPY OF THE COMMUNICATIONS FILE *  00030000
//*   ON TAPE OR DISK, DEFAULTING TO TAPE.                           *  00040000
//*********************************************************************** 00050000
//CMBACKUP PROC INFCOM=,                                                 00060000
//             LOADLIB=,                                                 00070000
//             NAME=,                                                    00080000
//             FILENUM=,                                                 00090000
//             UNIT=,                                                    00100000
//             VOLSER=,                                                  00110000
//             PSB=,                                                     00120000
//             RESLIB=,                                                  00130000
//             PSBLIB=,                                                  00140000
//             DBDLIB=                                                   00150000
//VER     EXEC PGM=IDCAMS,REGION=1200K                                   00160000
//INFCOM    DD DISP=OLD,DSN=&INFCOM                                      00170000
//SYSPRINT  DD SYSOUT=*                                                  00180000
//BACKUP  EXEC PGM=DFSRRC00,PARM=(DLI,INFORMUU,&PSB),REGION=1200K        00190000
//STEPLIB   DD DISP=SHR,DSN=&LOADLIB                                     00200000
//          DD DISP=SHR,DSN=&RESLIB                                      00210000
//INFPRINT  DD SYSOUT=*                                                  00220000
//INFORMCF  DD DISP=OLD,DSN=&INFCOM                                      00230000
//INBACKUP  DD DISP=(NEW,KEEP),DSN=&NAME,UNIT=&UNIT,VOL=SER=&VOLSER,     00240000
//             LABEL=(&FILENUM,SL)                                       00250000
//IMS       DD DISP=SHR,DSN=&PSBLIB                                      00260002
//          DD DISP=SHR,DSN=&DBDLIB                                      00270002
//DFSRESLB  DD DISP=SHR,DSN=&RESLIB                                      00280002
//IEFRDER   DD DUMMY                                                     00290000
//        PEND                                                           00300000
//*********************************************************************** 00310000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THE PROCEDURE. BEFORE     *   00320000
//* YOU RUN THIS PROCEDURE, SPECIFY:                                 *   00330000
//*                                                                  *   00340000
//* INFCOM  - THE COMMUNICATIONS FILE DATA SET NAME.                 *   00350000
//* LOADLIB - THE INSTALLATION LOAD LIBRARY DATA SET NAME.           *   00360000
//* NAME    - THE BACKUP FILE TO CREATE.                             *   00370000
//* FILENUM - THE NUMBER OF THE TAPE FILE TO CONTAIN THE BACKUP.     *   00380000
//*           THE DEFAULT IS 1.                                      *   00390000
//* UNIT    - THE UNIT OF THE BACKUP FILE. THE DEFAULT IS TAPE.      *   00400000
//* VOLSER  - THE VOLUME SERIAL NUMBER OF THE BACKUP FILE.           *   00410000
//* PSB     - THE UTILITY PSBNAME. DEFAULT IS INFUTIL.               *   00420001
//* RESLIB  - THE IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.          *   00430000
//* PSBLIB  - THE PSB LIBRARY.                                       *   00440000
//* DBDLIB  - THE DBD LIBRARY.                                       *   00450000
//*********************************************************************** 00460000
//BACKUP  EXEC CMBACKUP,                                                 00470000
//             INFCOM='INFORM.INFCOM',                                   00480000
//             LOADLIB='INFORM.LOADLIB',                                 00490000
//             NAME='INFORM.BACKUP.INFCOM',                              00500000
//             FILENUM=1,                                                00510000
//             UNIT=TAPE,                                                00520000
//             VOLSER=XXXXXX,                                            00530000
//             PSB=INFUTIL,                                              00540001
//             RESLIB='IMSVS.RESLIB',                                    00550000
//             PSBLIB='INFORM.PSBLIB',                                   00560000
//             DBDLIB='INFORM.DBDLIB'                                    00570000
//VER.SYSIN DD *                                                         00580000
         VERIFY FILE(INFCOM)                                           00590000
//BACKUP.DFSVSAMP DD *                                                   00600000
8192,6                                                                 00610000
```

Figure 155. CMBACKUP — JCL to Backup the Communication File

CMRESTOR

```
//* MEMBER CMRESTOR                                                     00010000
//*********************************************************************** 00020000
//* THIS PROCEDURE RESTORES THE COMMUNICATIONS FILE FROM THE BACKUP   * 00030000
//* DATASET CREATED BY THE 'CMBACKUP' JOB. THIS JOB ASSUMES THAT      * 00040000
//* THE BACKUP FILE IS ON TAPE.                                       * 00050000
//*                                                                   * 00060000
//* IF THE COMMUNICATIONS FILE DD NAME WAS CHANGED FROM THE DEFAULT   * 00070000
//* OF "INFORMCF" IN THE DBD, MAKE THE APPROPRIATE DD NAME CHANGE TO  * 00080000
//* THE "REST" STEP OF THIS PROCEDURE.                                * 00090000
//*********************************************************************** 00100000
//CMRESTOR PROC INFCOM=,                                                00110000
//             LOADLIB=,                                                00120000
//             NAME=,                                                   00130000
//             FILENUM=,                                                00140000
//             UNIT=,                                                   00150000
//             VOLSER=,                                                 00160000
//             PSB=,                                                    00170000
//             RESLIB=,                                                 00180000
//             PSBLIB=,                                                 00190000
//             DBDLIB=                                                  00200000
//DEFINE  EXEC PGM=IDCAMS,REGION=1200K                                  00210000
//SYSPRINT  DD SYSOUT=*                                                 00220000
//REST    EXEC PGM=DFSRRC00,PARM=(DLI,INFORMUL,&PSB),REGION=1200K       00230000
//STEPLIB   DD DISP=SHR,DSN=&LOADLIB                                    00240000
//          DD DISP=SHR,DSN=&RESLIB                                     00250000
//INFPRINT  DD SYSOUT=*                                                 00260000
//INFORMCF  DD DISP=OLD,DSN=&INFCOM                                     00270000
//INBACKUP  DD DISP=OLD,DSN=&NAME,UNIT=&UNIT,VOL=SER=&VOLSER,           00280000
//             LABEL=(&FILENUM,SL)                                      00290000
//IMS       DD DISP=SHR,DSN=&PSBLIB                                     00300002
//          DD DISP=SHR,DSN=&DBDLIB                                     00310002
//DFSRESLB  DD DISP=SHR,DSN=&RESLIB                                     00320002
//IEFRDER   DD DUMMY                                                    00330000
//        PEND                                                          00340000
//*********************************************************************  00350000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THE PROCEDURE. BEFORE     *  00360000
//* YOU RUN THIS PROCEDURE, SPECIFY:                                 *  00370000
//*                                                                  *  00380000
//* INFCOM  - THE COMMUNICATIONS FILE DATA SET NAME.                 *  00390000
//* LOADLIB - THE INSTALLATION LOAD LIBRARY DATA SET NAME.           *  00400000
//* NAME    - THE BACKUP FILE CREATED BY THE BACKUP PROCEDURE.       *  00410000
//* FILENUM - THE NUMBER OF THE TAPE FILE CONTAINING THE BACKUP.     *  00420000
//*           THE DEFAULT IS 1.                                      *  00430000
//* UNIT    - THE UNIT OF THE BACKUP FILE. THE DEFAULT IS TAPE.      *  00440000
//* VOLSER  - THE VOLUME SERIAL NUMBER OF THE BACKUP FILE.           *  00450000
//* PSB     - THE INITIALIZE UTILITY PSB NAME. DEFAULT IS INFINIT.   *  00460000
//* RESLIB  - THE IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.          *  00470000
//* PSBLIB  - THE PSB LIBRARY.                                       *  00480000
//* DBDLIB  - THE DBD LIBRARY.                                       *  00490000
//*                                                                  *  00500000
//*   ALSO CHANGE THE DEFINE.SYSIN SPECIFICATION AS YOU DID FOR THE  *  00510000
//*   INIT PROCEDURE.                                                *  00520000
//*                   NAME('INFORM.INFCOM')                          *  00530000
//*                   NAME('INFORM.INFCOM.DATA')                     *  00540000
//*                   VOL('USERDVOL')                                *  00550000
//*                   OWNER('USER')                                  *  00560000
//*                                                                  *  00570000
//*   REFER TO THE IBM ACCESS METHOD SERVICES MANUAL FOR MORE        *  00580000
//*   INFORMATION.                                                   *  00590000
//*********************************************************************  00600000
//RESTORE EXEC CMRESTOR,                                                00610000
//             INFCOM='INFORM.INFCOM',                                  00620000
//             LOADLIB='INFORM.LOADLIB',                                00630000
//             NAME='INFORM.BACKUP.INFCOM',                             00640000
```

```
//             FILENUM=1,                                              00650000
//             UNIT=TAPE,                                              00660000
//             VOLSER=XXXXXX,                                          00670001
//             PSB=INFINIT,                                            00680000
//             RESLIB='IMSVS.RESLIB',                                  00690000
//             PSBLIB='INFORM.PSBLIB',                                 00700000
//             DBDLIB='INFORM.DBDLIB'                                  00710001
//DEFINE.SYSIN DD *                                                    00720000
      DELETE 'INFORM.INFCOM' CLUSTER PURGE                           00730000
      DEFINE CLUSTER -                                               00740000
               (NAME('INFORM.INFCOM') -                              00750000
               VOL('USERDVOL') -                                     00760000
               RECORDS(411) -                                        00770000
               SHAREOPTIONS(3 3) -                                   00780000
               NONINDEXED ERASE -                                    00790000
               CONTROLINTERVALSIZE(4096) -                           00800000
               RECORDSIZE(4089 4089) -                               00810000
               OWNER('USER')) -                                      00820000
             DATA(NAME('INFORM.INFCOM.DATA'))                        00830000
//REST.DFSVSAMP DD *                                                 00840000
8192,6                                                               00850000
```

Figure 156. CMRESTOR — JCL to Restore the Communication File

CNVRTDEF

```
//* MEMBER CNVRTDEF                                                      00010000
//*********************************************************************  00020000
//* THIS PROCEDURE RUNS THE DEFINITION CONVERT UTILITY IN ORDER TO   *  00030002
//* CONVERT THE FOLLOWING ITEMS FROM OLDER VISION:INFORM RELEASE     *  00040002
//* FORMATS TO THE DEFINITION PROCESSOR FORMAT:                      *  00050002
//*                                                                  *  00060002
//*         1) FILE DEFINITIONS              2) TABLE DEFINITIONS    *  00070001
//*         3) LOGICAL DATAVIEW DEFINITIONS  4) ASL PROCEDURES       *  00080001
//*         5) EXTERNAL REQUESTS                                     *  00090001
//*********************************************************************  00100000
//CONVERT PROC LOADLIB=,                                                 00110000
//            RGN=,                                                      00120001
//            RUNMODE=,                                                  00130001
//            OUTPDS=,                                                   00140001
//            INPUT=                                                     00150001
//CONVRT EXEC PGM=CONVERT,REGION=&RGN,PARM='&RUNMODE'                    00160001
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                      00170001
//SYSPRINT DD SYSOUT=*                                                   00180001
//SYSTERM  DD SYSOUT=*                                                   00190001
//OUTPDS   DD DISP=SHR,DSN=&OUTPDS                                       00200001
//SYSIN    DD DISP=SHR,DSN=&INPUT                                        00210001
//       PEND                                                            00220001
//********************************************************************** 00230000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00240001
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                          * 00250001
//*                                                                   * 00260000
//*  LOADLIB - NAME OF THE INFORM INSTALLATION LOAD LIBRARY.          * 00270001
//*  RGN     - THE REGION SIZE. DEFAULT IS 512K.                      * 00280001
//*  RUNMODE - THE CONVERT UTILITY RUN MODE. SPECIFY EITHER 'TEST'    * 00290001
//*            OR 'UPDATE'. THE DEFAULT IS 'TEST'.                    * 00300001
//*  OUTPDS  - THE NAME OF THE PARTITIONED DATASET WHERE THE          * 00310001
//*            CONVERTED OUTPUT WILL BE STORED.                       * 00320001
//*  INPUT   - SPECIFY A SINGLE INPUT STREAM AS EITHER A SEQUENTIAL   * 00330001
//*            FILE OR A PDS MEMBER. EXAMPLE:                         * 00340001
//*            SEQUENTIAL  -- //  INPUT='USER.SEQ.FILEDEFS'           * 00350001
//*            PARTITIONED -- //  INPUT='USER.PDS.FILEDEFS(MEMBER)'   * 00360001
//********************************************************************** 00370000
//CONVERT EXEC CONVERT,                                                  00380001
//            LOADLIB='INFORM.LOADLIB',                                  00390001
//            RGN=512K,                                                  00400000
//            RUNMODE=TEST,                                              00410000
//            OUTPDS='USER.PDS.CNVDEFS',                                 00420000
//            INPUT='USER.SEQ.FILEDEFS'                                  00430000
```

Figure 157. CNVRTDEF — JCL to Run the Definition Convert Utility to Convert Definitions from Previous Release Formats to the Definition Processor Format

COBOLQS

```
//* MEMBER COBOLQS                                                        00010000
//************************************************************************ 00020000
//* EXECUTE THE COBOL QUICK START UTILITY.                              * 00030000
//* ***** NOTE *****                                                    * 00040000
//* THE SYSCOPY DD STATEMENT IS USED FOR MVS COPYBOOK LIBRARIES.        * 00050000
//* THE PANDD1  DD STATEMENT IS USED FOR PANVALET COPYBOOK LIBRARIES.   * 00060003
//* THE MASTER  DD STATEMENT IS USED FOR LIBRARIAN COPYBOOK LIBRARIES.* 00070003
//*                                                                     * 00080003
//* THIS UTILITY MAY ALSO BE INVOKED INTERACTIVELY UNDER TSO/ISPF       * 00090003
//* USING THE DEFINITION PROCESSOR COMPONENT IMPORT FUNCTION.           * 00100003
//************************************************************************ 00110000
//COBOLQS PROC LOADLIB=,                                                  00120000
//            COPYLIB=,                                                   00130001
//            DEFLIB=,                                                    00140001
//            MEMBER=                                                     00150001
//COBOLQS EXEC PGM=COBOLQS,REGION=1024K                                   00160003
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                       00170002
//SYSPRINT DD SYSOUT=*                                                    00180001
//SYSCOPY  DD DISP=SHR,DSN=&COPYLIB                                       00190002
//*PANDD1  DD DISP=SHR,DSN=&COPYLIB                                       00200002
//*MASTER  DD DISP=SHR,DSN=&COPYLIB                                       00210002
//SYS004   DD DISP=OLD,DSN=&DEFLIB(&MEMBER)                               00220002
//SYSIN    DD DUMMY                                                       00230001
//       PEND                                                             00240001
//*********************************************************************  00250000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.          *   00260001
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                         *   00270001
//*                                                                  *   00280000
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.               *   00290001
//*    COPYLIB - THE COBOL COPY LIBRARY.                             *   00300000
//*    DEFLIB  - THE INFORM DEFINITION LIBRARY.                      *   00310001
//*    MEMBER  - MEMBER NAME FOR THE DEFINITION YOU ARE GENERATING.  *   00320000
//*                                                                  *   00330000
//*  YOU MUST ALSO PROVIDE THE APPROPRIATE SYSIN DATA IN THE         *   00340000
//*  COBOLQS.SYSIN DD OVERRIDE STMT.                                 *   00350000
//*********************************************************************  00360000
//QS      EXEC COBOLQS,                                                   00370000
//             LOADLIB='INFORM.LOADLIB',                                  00380001
//             COPYLIB='COBOL.COPYBOOK',                                  00390000
//             DEFLIB='INFORM.DEFLIB',                                    00400001
//             MEMBER='NEWNAME'                                           00410000
//COBOLQS.SYSIN DD *                                                      00420000
  FILEGEN NAME=NEWNAME,TYPE=FIXED,BUFFSIZE=80                           00430003
  SEGMENT NAME=OFFICE,NUMBER=10,LEVEL=1                                 00440000
  $COBOL                                                                00450000
        01  OFFICE-DATA.                                                 00460000
            02  OFFICE-CODE    PIC S9(3).                              00470000
            02  OFFICE-ADDRESS.                                        00480000
                03  OFFICE-STREET   PIC X(20).                         00490000
                03  OFFICE-CITY     PIC X(15).                         00500000
                03  OFFICE-STATE    PIC X(2).                          00510000
                03  OFFICE-ZIP.                                        00520000
                    04  OFFICE-ZIP-FIRST-FIVE  PIC X(5).               00530000
                    04  OFFICE-ZIP-LAST-FOUR   PIC X(4).               00540000
            02  OFFICE-PHONE       PIC 9(7)  OCCURS 3.                 00550000
            02  OFFICE-AREA-CODE   PIC X(3).                           00560000
            02  SPEED-DIAL         PIC X(3).                           00570000
            02  FILLER             PIC X(4).                           00580000
  $ECOBOL                                                               00590000
```

Figure 158. COBOLQS — JCL to Run the COBOL Quick Start Utility to Generate a VISION:Inform File Definition from a COBOL Copybook

CREATFIN

```
//* MEMBER CREATFIN                                                      00010000
//*********************************************************************** 00020000
//*   THIS PROCEDURE EXECUTES IDCAMS TO DEFINE THE CLUSTER FOR        * 00030000
//*   THE SAMPLE DATABASE, AND TO LOAD THE DATABASE FROM THE FILE     * 00040000
//*   CREATED DURING THE UNLOAD JOB.                                  * 00050000
//*********************************************************************** 00060000
//RESTORE PROC BKUPFLE=,                                                00070000
//            DATAFLE=                                                  00080000
//DEFINE  EXEC PGM=IDCAMS,REGION=512K                                   00090002
//SYSPRINT  DD SYSOUT=*                                                 00100000
//REPRO   EXEC PGM=IDCAMS,REGION=512K                                   00110002
//SYSPRINT  DD SYSOUT=*                                                 00120000
//INPUT     DD DISP=OLD,DSN=&BKUPFLE                                    00130003
//OUTPUT    DD DISP=OLD,DSN=&DATAFLE                                    00140003
//        PEND                                                          00150000
//*********************************************************************** 00160000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.            * 00170002
//* BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                           * 00180002
//*                                                                   * 00190000
//* BKUPFLE - THE DATASET CREATED BY THE UNLOAD JCL.                  * 00200000
//* DATAFLE - THE DATASET YOU WANT TO RESTORE THE FINANCE FILE TO.    * 00210000
//*                                                                   * 00220001
//* **NOTE**  YOU MUST ALSO SPECIFY THE FOLLOWING FOR DEFINE.SYSIN:   * 00230001
//*           NAME('INFORM.FINANCE')                                  * 00240002
//*           VOL('VOLUME')                                           * 00250001
//*           DATA(NAME('INFORM.FINANCE.DATA'))                       * 00260002
//*           INDEX(NAME('INFORM.FINANCE.INDEX'))                     * 00270002
//*********************************************************************** 00280000
//RESTORE EXEC RESTORE,                                                 00290000
//             BKUPFLE='INFORM.TEMPFIN',                                00300002
//             DATAFLE='INFORM.FINANCE'                                 00310002
//DEFINE.SYSIN DD *                                                     00320000
  DEFINE  CLUSTER -                                                     00330000
    (NAME(INFORM.FINANCE) -                                             00340002
     VOL(VOLUME) -                                                      00350001
     TRACKS(10 5)) -                                                    00360000
     DATA -                                                             00370000
       (NAME(INFORM.FINANCE.DATA) -                                     00380002
        KEYS(8 0) -                                                     00390000
        RECORDSIZE(3600 3608) -                                         00400000
        FREESPACE(10 10) -                                              00410000
        BUFFERSPACE(10000)) -                                           00420000
     INDEX -                                                            00430000
       (NAME(INFORM.FINANCE.INDEX) -                                    00440002
        IMBED)                                                          00450000
//REPRO.SYSIN DD *                                                      00460000
   REPRO -                                                              00470000
       INFILE(INPUT) -                                                  00480000
       OUTFILE(OUTPUT)                                                  00490000
```

Figure 159. CREATFIN — JCL to Create the VSAM FINANCE Test File

CREATUTL

```
//* MEMBER CREATUTL                                                      00010000
//*********************************************************************** 00020000
//* THIS PROCEDURE CREATES THE SYSTEM DEFINITION PROCESSOR UTILITY    * 00030002
//* LIBRARY.                                                          * 00040002
//*********************************************************************** 00050000
//RESTORE PROC SRCLIB=,                                                 00060000
//            UTLIB=,                                                   00070001
//            LOADLIB=,                                                 00080001
//            BKUPFLE=                                                  00090001
//DEFINE EXEC PGM=IDCAMS,REGION=1024K                                   00100001
//SYSPRINT DD SYSOUT=*                                                  00110001
//INITLB EXEC PGM=MARKUTIL,REGION=1024K                                 00120001
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00130001
//M4LIST   DD SYSOUT=*                                                  00140001
//M4LIB    DD DISP=SHR,DSN=&UTLIB                                       00150001
//M4WORK   DD DUMMY                                                     00160001
//M4INPUT  DD DISP=SHR,DSN=&SRCLIB(@INIT)                               00170001
//RESTLB EXEC PGM=MARKUTIL,REGION=1024K                                 00180001
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00190001
//M4LIST   DD SYSOUT=*                                                  00200001
//M4LIB    DD DISP=OLD,DSN=&UTLIB                                       00210001
//M4WORK   DD DISP=OLD,DSN=&BKUPFLE                                     00220001
//M4INPUT  DD DISP=SHR,DSN=&SRCLIB(@RESTORE)                            00230001
//       PEND                                                           00240001
//*********************************************************************** 00250000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.            * 00260001
//* BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                           * 00270001
//*                                                                   * 00280000
//* SRCLIB  - THE INFORM SOURCE LIBRARY.                              * 00290001
//* UTLIB   - THE INFORM UTILITY LIBRARY.                             * 00300001
//* LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                   * 00310001
//* BKUPFLE - THE INFORM UTILITY LIBRARY TEMPORARY FILE.              * 00320001
//*                                                                   * 00330000
//* **NOTE**  YOU MUST ALSO SPECIFY THE FOLLOWING FOR DEFINE.SYSIN:   * 00340000
//*           NAME('INFORM.UTLIB')                                    * 00350001
//*           VOL('VOLUME')                                           * 00360000
//*           DATA(NAME('INFORM.UTLIB.DATA'))                         * 00370001
//*********************************************************************** 00380000
//RESTORE EXEC RESTORE,                                                 00390000
//             SRCLIB='INFORM.SRCLIB',                                  00400001
//             UTLIB='INFORM.UTLIB',                                    00410001
//             LOADLIB='INFORM.LOADLIB',                                00420001
//             BKUPFLE='INFORM.TEMPUTL'                                 00430001
//DEFINE.SYSIN DD *                                                     00440000
   DEFINE CLUSTER -                                                     00450000
    (NAME('INFORM.UTLIB') -                                             00460001
     VOL('VOLUME') -                                                    00470000
     NUMBERED -                                                         00480000
     RECORDSIZE(507 507) -                                              00490000
     SHAREOPTIONS(3 3) -                                                00500000
     CISZ(4096) -                                                       00510000
     TRK(5 5)) -                                                        00520000
   DATA(NAME('INFORM.UTLIB.DATA'))                                      00530001
```

Figure 160. CREATUTL — JCL to Create the Utility Library for the Definition Processor

DB2CALL

```
//* MEMBER DB2CALL                                                      00010000
//*********************************************************************** 00020000
//* THIS JOB PERFORMS THE ASSEMBLY AND PROGRAM PREPARATION STEPS      * 00030000
//* REQUIRED FOR THE 'DB2MOD' PROGRAM FROM 'INFORM.SRCLIB' TO BE      * 00040000
//* USED WITH THE DB2 CALL ATTACH FACILITY.                           * 00050000
//*********************************************************************** 00060000
//* STEP 1 - ASSEMBLE THE INFORM DB2 MODULE.                          * 00070000
//*********************************************************************** 00080000
//GEN     EXEC PGM=ASMA90,PARM='DECK,NOOBJECT',REGION=2M                00090003
//SYSPRINT  DD SYSOUT=*                                                 00100000
//SYSPUNCH  DD DISP=(MOD,PASS),DSN=&&GENOUT,UNIT=SYSDA,                 00110000
//             SPACE=(800,(200,200)),                                   00120000
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=3200)                     00130000
//SYSUT1    DD UNIT=SYSDA,SPACE=(CYL,(1,1))                             00140000
//SYSLIB    DD DISP=SHR,DSN=SYS1.MACLIB                                 00150000
//SYSIN     DD DISP=SHR,DSN=INFORM.SRCLIB(DB2MOD)                       00160000
//*********************************************************************** 00170000
//* STEP 2 - INVOKE THE STANDARD DB2 PREPARE PROCEDURE.               * 00180000
//*      ******* N O T E *******                                       * 00190000
//*          THE "MEM" AND "USER" DSNHASM PROC PARAMETERS MAY BE      * 00200002
//*          CHANGED AS NEEDED.                                       * 00210000
//*          MEM  = MEMBER NAME TO BE CREATED IN DBRMLIB.             * 00211002
//*          USER = HIGH LEVEL DSN PREFIX FOR DBRMLIB.DATA PDS.       * 00212002
//*          "SYSLMOD" MUST SPECIFY THE INFORM INSTALLATION LOADLIB.  * 00220000
//*          DO NOT ALTER THE LKED.SYSIN STATEMENTS.                  * 00230000
//*********************************************************************** 00240000
//PREP    EXEC DSNHASM,                                                 00250001
//             MEM=MARKSQL,                                             00260000
//             USER=USERID,                                             00270000
//             PARM.PC='HOST(ASM),STDSQL(86)'                           00280000
//PC.SYSIN     DD DISP=(OLD,DELETE),DSN=&&GENOUT                        00290000
//LKED.SYSLMOD DD DISP=OLD,DSN=INFORM.LOADLIB                           00300000
//LKED.SYSIN   DD *                                                     00310000
    INCLUDE SYSLIB(DSNALI)                                              00320000
    MODE AMODE(31),RMODE(ANY)                                           00330000
    NAME MARKSQLC(R)                                                    00340000
```

Figure 161. DB2CALL — JCL to Assemble and Prepare the VISION:Inform DB2 Module for the DB2 CALL Attach Facility

DB2IMS

```
//* MEMBER DB2IMS                                                        00010000
//*********************************************************************** 00020000
//* THIS JOB PERFORMS THE ASSEMBLY AND PROGRAM PREPARATION STEPS      * 00030000
//* REQUIRED FOR THE 'DB2MOD' PROGRAM FROM 'INFORM.SRCLIB' TO BE USED * 00040000
//* WITH THE DB2 IMS ATTACH FACILITY.                                 * 00050000
//*********************************************************************** 00060000
//* STEP 1 - ASSEMBLE THE INFORM DB2 MODULE.                          * 00070000
//*********************************************************************** 00080000
//GEN     EXEC PGM=ASMA90,PARM='DECK,NOOBJECT',REGION=2M                00090003
//SYSPRINT  DD SYSOUT=*                                                 00100000
//SYSPUNCH  DD DISP=(MOD,PASS),DSN=&&GENOUT,UNIT=SYSDA,                 00110000
//             SPACE=(800,(200,200)),                                   00120000
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=3200)                     00130000
//SYSUT1    DD UNIT=SYSDA,SPACE=(CYL,(1,1))                             00140000
//SYSLIB    DD DISP=SHR,DSN=SYS1.MACLIB                                 00150000
//SYSIN     DD DISP=SHR,DSN=INFORM.SRCLIB(DB2MOD)                       00160000
//*********************************************************************** 00170000
//* STEP 2 - INVOKE THE STANDARD DB2 PREPARE PROCEDURE.               * 00180000
//*      ******* N O T E *******                                       * 00190000
//*          THE "MEM" AND "USER" DSNHASM PROC PARAMETERS MAY BE      * 00200002
//*          CHANGED AS NEEDED.                                       * 00210000
//*          MEM  = MEMBER NAME TO BE CREATED IN DBRMLIB.             * 00211002
//*          USER = HIGH LEVEL DSN PREFIX FOR DBRMLIB.DATA PDS.       * 00212002
//*          "SYSLMOD" MUST SPECIFY THE INFORM INSTALLATION LOADLIB.  * 00220000
//*          DO NOT ALTER THE LKED.SYSIN STATEMENTS.                  * 00230000
//*********************************************************************** 00240000
//PREP    EXEC DSNHASM,                                                 00250001
//             MEM=MARKSQL,                                             00260000
//             USER=USERID,                                             00270000
//             PARM.PC='HOST(ASM),STDSQL(86)'                           00280000
//PC.SYSIN     DD DISP=(OLD,DELETE),DSN=&&GENOUT                        00290000
//LKED.SYSLMOD DD DISP=OLD,DSN=INFORM.LOADLIB                           00300000
//LKED.IMSLIB  DD DISP=SHR,DSN=IMSVS.RESLIB                             00310000
//LKED.SYSIN   DD *                                                     00320000
     INCLUDE IMSLIB(DFSLI000)                                           00330000
     MODE AMODE(31),RMODE(ANY)                                          00340000
     NAME MARKSQLI(R)                                                   00350000
```

Figure 162. DB2IMS — JCL to Assemble and Prepare the VISION:Inform DB2 Module for the IMS Attach Facility

DB2QS

```
//* MEMBER DB2QS                                                          00010000
//************************************************************************ 00020002
//* EXECUTE THE DB2 QUICK START UTILITY.                                 * 00030002
//*                                                                      * 00040002
//* THIS UTILITY MAY ALSO BE INVOKED INTERACTIVELY UNDER TSO/ISPF        * 00050002
//* USING THE DEFINITION PROCESSOR COMPONENT IMPORT FUNCTION.            * 00060002
//************************************************************************ 00070002
//DB2QS   PROC LOADLIB=,                                                  00080000
//             DB2LOAD=,                                                  00090000
//             DEFLIB=                                                    00100000
//DB2QS   EXEC PGM=DB2QS,REGION=1024K                                     00110000
//STEPLIB  DD  DISP=SHR,DSN=&LOADLIB                                      00120001
//          DD  DISP=SHR,DSN=&DB2LOAD                                     00130001
//SYSTERM  DD  DUMMY                                                      00140000
//SYSPRINT DD  SYSOUT=*,DCB=(DSORG=PS,RECFM=FBA,LRECL=133,BLKSIZE=1330)   00150001
//SYS004   DD  DISP=OLD,DSN=&DEFLIB                                       00160001
//SYSIN    DD  DUMMY                                                      00170000
//        PEND                                                            00180000
//************************************************************************ 00190002
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.              * 00200002
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                             * 00210002
//*                                                                      * 00220002
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                   * 00230002
//*    DB2LOAD - THE DB2 SYSTEM LOAD LIBRARY NAME.                       * 00240002
//*    DEFLIB  - THE INFORM DEFINITION LIBRARY.                          * 00250002
//*                                                                      * 00260002
//*  YOU MUST ALSO PROVIDE THE APPROPRIATE SYSIN DATA IN THE             * 00270002
//*  DB2QS.SYSIN DD OVERRIDE STMT.                                       * 00280002
//************************************************************************ 00290002
//QS      EXEC DB2QS,                                                     00300000
//             LOADLIB='INFORM.LOADLIB',                                  00310001
//             DB2LOAD='DB2.DSNLOAD',                                     00320000
//             DEFLIB='INFORM.DEFLIB'                                     00330001
//DB2QS.SYSIN DD *                                                        00340000
DB2CNTL  DB2PLAN=DB2QS,DB2SYS=DB2                                       00350000
FILEGEN NAME=DB2QS,BUFFSIZE=1024K                                       00360000
SEGMENT NAME=DEPT,NUMBER=10,LEVEL=1,TABLE=DEPT,CREATOR=DSN8230,         00370000
        PRINT=ALL                                                       00380000
NEWPAGE                                                                 00390000
SEGMENT NAME=EMPLOYEE,NUMBER=20,LEVEL=2,TABLE=EMP,CREATOR=DSN8230,      00400000
        PRINT=ALL                                                       00410000
NEWPAGE                                                                 00420000
SEGMENT NAME=PROJECT,NUMBER=30,LEVEL=2,TABLE=PROJ,CREATOR=DSN8230,      00430000
        PRINT=ALL                                                       00440000
```

Figure 163. DB2QS — JCL to Run the DB2 Quick Start Utility to Convert DB2 Table Definitions into VISION:Inform File Definitions

DB2TSO

```
//* MEMBER DB2TSO                                                        00010000
//*********************************************************************** 00020000
//* THIS JOB PERFORMS THE ASSEMBLY AND PROGRAM PREPARATION STEPS      * 00030000
//* REQUIRED FOR THE 'DB2MOD' PROGRAM FROM 'INFORM.SRCLIB' TO BE      * 00040000
//* USED WITH THE TSO ATTACH FACILITY.                                * 00050000
//*********************************************************************** 00060000
//* STEP 1 - ASSEMBLE THE INFORM DB2 MODULE.                          * 00070000
//*********************************************************************** 00080000
//GEN     EXEC PGM=ASMA90,PARM='DECK,NOOBJECT',REGION=2M                00090003
//SYSPRINT  DD SYSOUT=*                                                 00100000
//SYSPUNCH  DD DISP=(MOD,PASS),DSN=&&GENOUT,UNIT=SYSDA,                 00110000
//             SPACE=(800,(200,200)),                                   00120000
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=3200)                     00130000
//SYSUT1    DD UNIT=SYSDA,SPACE=(CYL,(1,1))                             00140000
//SYSLIB    DD DISP=SHR,DSN=SYS1.MACLIB                                 00150000
//SYSIN     DD DISP=SHR,DSN=INFORM.SRCLIB(DB2MOD)                       00160000
//*********************************************************************** 00170000
//* STEP 2 - INVOKE THE STANDARD DB2 PREPARE PROCEDURE.               * 00180000
//*      ******* N O T E *******                                       * 00190000
//*          THE "MEM" AND "USER" DSNHASM PROC PARAMETERS MAY BE      * 00200002
//*          CHANGED AS NEEDED.                                       * 00210000
//*          MEM  = MEMBER NAME TO BE CREATED IN DBRMLIB.             * 00211002
//*          USER = HIGH LEVEL DSN PREFIX FOR DBRMLIB.DATA PDS.       * 00212002
//*          "SYSLMOD" MUST SPECIFY THE INFORM INSTALLATION LOADLIB.  * 00220000
//*          DO NOT ALTER THE LKED.SYSIN STATEMENTS.                  * 00230000
//*********************************************************************** 00240000
//PREP    EXEC DSNHASM,                                                 00250001
//             MEM=MARKSQL,                                             00260000
//             USER=USERID,                                             00270000
//             PARM.PC='HOST(ASM),STDSQL(86)'                           00280000
//PC.SYSIN     DD DISP=(OLD,DELETE),DSN=&&GENOUT                        00290000
//LKED.SYSLMOD DD DISP=OLD,DSN=INFORM.LOADLIB                           00300000
//LKED.SYSIN   DD *                                                     00310000
   INCLUDE SYSLIB(DSNELI)                                               00320000
   MODE AMODE(31),RMODE(ANY)                                            00330000
   NAME MARKSQLT(R)                                                     00340000
```

Figure 164. DB2TSO — JCL to Assemble and Prepare the VISION:Inform DB2 Module for the DB2 TSO Attach Facility

DBDGEN

```
//* MEMBER DBDGEN                                                        00010000
//*********************************************************************** 00020000
//* THIS PROCEDURE GENERATES THE DBD'S.                                 * 00030000
//*********************************************************************** 00040000
//DBDGEN  PROC SRCMBR=,                                                  00050000
//             MBR=,                                                     00060000
//             SRCLIB=,                                                  00070000
//             DBDLIB=,                                                  00080000
//             RESLIB=,                                                  00090000
//             IMSMCLB=                                                  00100000
//ASM    EXEC PGM=ASMA90,REGION=1M,PARM='OBJECT,NODECK'                  00110004
//SYSLIB   DD DISP=SHR,DSN=&IMSMCLB                                      00120002
//SYSPRINT DD SYSOUT=*,DCB=BLKSIZE=1089,                                 00130000
//            SPACE=(121,(300,300),RLSE,,ROUND)                          00140000
//SYSUT1   DD UNIT=SYSDA,DISP=(,DELETE),SPACE=(1700,(100,50))            00150000
//SYSLIN   DD UNIT=SYSDA,DISP=(,PASS),SPACE=(80,(100,100),RLSE),         00160000
//            DCB=(BLKSIZE=400,RECFM=FB,LRECL=80)                        00170000
//SYSIN    DD DISP=SHR,DSN=&SRCLIB(&SRCMBR)                              00180002
//LKED   EXEC PGM=HEWL,COND=(0,LT,ASM),REGION=1M,PARM='XREF,LIST'        00190001
//STEPLIB  DD DISP=SHR,DSN=&RESLIB                                       00200002
//SYSLIN   DD DISP=(OLD,DELETE),DSN=*.ASM.SYSLIN                         00210003
//SYSPRINT DD SYSOUT=*,DCB=BLKSIZE=1089,SPACE=(121,(90,90),RLSE)         00220000
//SYSLMOD  DD DISP=SHR,DSN=&DBDLIB(&MBR)                                 00230002
//SYSUT1   DD UNIT=SYSDA,SPACE=(1024,(100,10),RLSE),DISP=(,DELETE)       00240000
//       PEND                                                            00250000
//*********************************************************************** 00260000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.  BEFORE    * 00270000
//* YOU RUN THIS PROCEDURE, SPECIFY:                                  * 00280000
//*                                                                   * 00290000
//* SRCMBR  - THE MEMBER OF THE SOURCE LIBRARY CONTAINING THE DBD'S.  * 00300005
//* MBR     - THE NAME OF THE DBD TO BE GENERATED (DBDNAME).  USE THE * 00310005
//*           SAME NAME AS SRCMBR UNLESS YOU CHANGE THE DBDNAME.      * 00320005
//* SRCLIB  - SOURCE LIBRARY CONTAINING THE DBD'S.                    * 00330000
//* DBDLIB  - THE DBD LIBRARY.                                        * 00340005
//* RESLIB  - IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.               * 00350000
//* IMSMCLB - IMS MACRO LIBRARY.  THE DEFAULT IS IMSVS.MACLIB.        * 00360000
//*********************************************************************** 00370000
//DBDGEN1 EXEC DBDGEN,SRCMBR=FGLIB,MBR=FGLIB,                            00380000
//             SRCLIB='INFORM.SRCLIB',                                   00390000
//             DBDLIB='INFORM.DBDLIB',                                   00400000
//             RESLIB='IMSVS.RESLIB',                                    00410000
//             IMSMCLB='IMSVS.MACLIB'                                    00420000
//DBDGEN2 EXEC DBDGEN,SRCMBR=INFCOM,MBR=INFCOM,                          00430000
//             SRCLIB='INFORM.SRCLIB',                                   00440000
//             DBDLIB='INFORM.DBDLIB',                                   00450000
//             RESLIB='IMSVS.RESLIB',                                    00460000
//             IMSMCLB='IMSVS.MACLIB'                                    00470000
//DBDGEN3 EXEC DBDGEN,SRCMBR=INFWORK,MBR=INFWORK,                        00480000
//             SRCLIB='INFORM.SRCLIB',                                   00490000
//             DBDLIB='INFORM.DBDLIB',                                   00500000
//             RESLIB='IMSVS.RESLIB',                                    00510000
//             IMSMCLB='IMSVS.MACLIB'                                    00520000
```

Figure 165. DBDGEN — JCL to Run the IMS DBDGEN

GLOSSARY

```
//* MEMBER GLOSSARY                                                      00010000
//*********************************************************************** 00020003
//* THIS PROCEDURE WILL CREATE A HARD COPY GLOSSARY LISTING OF        * 00030003
//* SPECIFIED DATAVIEWS.                                              * 00040003
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00050003
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00060003
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00070003
//*               CONCATENATED TO THE GLOSS.STEPLIB DD STATEMENT.     * 00080003
//*********************************************************************** 00090003
//GLOSSRY PROC LOADLIB=,                                                00100000
//            BGLIB=                                                    00110001
//GLOSS  EXEC PGM=MARKIV,REGION=2048K                                   00120001
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00130002
//M4LIST   DD SYSOUT=*                                                  00140001
//M4LIB    DD DISP=SHR,DSN=&BGLIB                                       00150001
//M4INPUT  DD DUMMY                                                     00160001
//       PEND                                                           00170001
//*********************************************************************** 00180003
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00190003
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                          * 00200003
//*                                                                   * 00210003
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                * 00220003
//*    BGLIB   - THE INFORM BACKGROUND LIBRARY.                       * 00230003
//*                                                                   * 00240003
//*  YOU MUST ALSO PROVIDE THE APPROPRIATE SYSIN DATA IN THE          * 00250003
//*  GLOSS.M4INPUT DD OVERRIDE STMT. REPLACE THE "?" CHARACTER IN     * 00260004
//*  THE SAMPLE FD STATEMENT WITH AN "X" FOR A GLOSSARY SORTED BY     * 00270004
//*  FIELD LOCATION, OR A "Y" FOR A GLOSSARY SORTED BY FIELD NAME.    * 00280004
//*********************************************************************** 00290003
//GLOSS  EXEC GLOSSRY,                                                  00300000
//            LOADLIB='INFORM.LOADLIB',                                 00310001
//            BGLIB='INFORM.BGLIB'                                      00320001
//GLOSS.M4INPUT DD *                                                    00330003
GLOSSARYRC                   B                                        00340000
FILENAMEFD         ?                                                  00350000
```

Figure 166. GLOSSARY — JCL to Obtain a Hard Copy Glossary Listing for a Data View

INFBATCH

```
//* MEMBER INFBATCH                                                     00010000
//*********************************************************************** 00020000
//* EXECUTE THE BACKGROUND PROCESSOR IN A DLI BATCH REGION.           * 00030000
//*                                                                   * 00040000
//* IF THE FOREGROUND LIBRARY AND COMMUNICATIONS FILE DDNAMES HAVE    * 00050000
//* BEEN CHANGED IN THE DBD'S FROM THE INSTALLATION DEFAULT, MAKE     * 00060000
//* SURE THEY MATCH THOSE IN THIS PROCEDURE.                          * 00070000
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00080002
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00090002
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00100002
//*               CONCATENATED TO THE INFBG.STEPLIB DD STATEMENTS.    * 00110002
//*********************************************************************** 00120000
//INFBATCH PROC RGN=,                                                   00130000
//             LOADLIB=,                                                00140001
//             RESLIB=,                                                 00150001
//             PGMLIB=,                                                 00160001
//             SORTLIB=,                                                00170001
//             PROG=,                                                   00180000
//             PSB=,                                                    00190001
//             PSBLIB=,                                                 00200000
//             DBDLIB=,                                                 00210000
//             FGLIB=,                                                  00220000
//             INFCOM=,                                                 00230000
//             INFLOG=,                                                 00240000
//             BGLIB=,                                                  00250000
//             REPORTS=,                                                00260000
//             RUNCNTL=,                                                00270000
//             HCSCFG=,                                                 00280004
//             HTMLTPL=,                                                00290004
//             M4REPO=,                                                 00300000
//             M4SORT=,                                                 00310000
//             M4REPI=                                                  00320000
//INFBG  EXEC PGM=DFSRRC00,REGION=&RGN,PARM=(DLI,&PROG,&PSB)            00330000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00340000
//         DD DISP=SHR,DSN=&RESLIB                                      00350000
//         DD DISP=SHR,DSN=&PGMLIB                                      00360000
//IMS      DD DISP=SHR,DSN=&PSBLIB                                      00370000
//         DD DISP=SHR,DSN=&DBDLIB                                      00380000
//DFSRESLB DD DISP=SHR,DSN=&RESLIB                                      00390000
//IEFRDER  DD DUMMY                                                     00400000
//M4LIB    DD DISP=SHR,DSN=&BGLIB                                       00410000
//M4REPO   DD DISP=SHR,DSN=&M4REPO                                      00420000
//SORTIN   DD DISP=SHR,DSN=&M4REPO                                      00430000
//M4SORT   DD DISP=SHR,DSN=&M4SORT                                      00440000
//SYSIN    DD DISP=SHR,DSN=&M4SORT                                      00450000
//M4REPI   DD DISP=SHR,DSN=&M4REPI                                      00460000
//SORTOUT  DD DISP=SHR,DSN=&M4REPI                                      00470000
//SORTMSG  DD SYSOUT=*                                                  00480000
//INFREPT  DD DISP=OLD,DSN=&REPORTS                                     00490000
//*INFREPT DD SYSOUT=*                                                  00500000
//INFORMLF DD DISP=OLD,DSN=&FGLIB                                       00510000
//INFORMCF DD DISP=OLD,DSN=&INFCOM                                      00520000
//INFLOG   DD DISP=OLD,DSN=&INFLOG                                      00530000
//SYSOUT   DD SYSOUT=*                                                  00540000
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB                                     00550001
//SORTWK01 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00560000
//SORTWK02 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00570000
//SORTWK03 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00580000
//HCSCFG   DD DISP=SHR,DSN=&HCSCFG                                      00590004
//M4HTBASE DD DISP=SHR,DSN=&HTMLTPL                                     00600004
//INFIN    DD DISP=SHR,DSN=&RUNCNTL                                     00610000
//       PEND                                                           00620000
//*********************************************************************** 00630000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.  BEFORE    * 00640000
```

```
//* YOU RUN THIS PROCEDURE, SPECIFY:                                    * 00650000
//*                                                                     * 00660000
//* RGN     - THE REGION SIZE.  THE DEFAULT IS 2M.                      * 00670000
//* LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                     * 00680001
//* RESLIB  - IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.                 * 00690001
//* PGMLIB  - THE IMS PROGRAM LIBRARY.                                  * 00700001
//* SORTLIB - THE SYSTEM SORT LOAD LIBRARY. DEFAULT SYS1.SORTLIB.       * 00710001
//* PROG    - BACKGROUND PROCESSOR LOAD MODULE. DEFAULT IS INFORMDE.    * 00720000
//* PSB     - BACKGROUND PROCESSOR PSBNAME. DEFAULT IS INFORMBB.        * 00730001
//* PSBLIB  - THE PSB LIBRARY.                                          * 00740000
//* DBDLIB  - THE DBD LIBRARY.                                          * 00750000
//* FGLIB   - THE INFORM FOREGROUND LIBRARY.                            * 00760000
//* INFCOM  - THE INFORM COMMUNICATION FILE.                            * 00770000
//* INFLOG  - THE INFORM HARDCOPY LOG FILE.                             * 00780000
//* BGLIB   - THE INFORM BACKGROUND LIBRARY.                            * 00790000
//* REPORTS - THE DATASET FOR PRINTED REPORTS.                          * 00800000
//* RUNCNTL - THE DATASET CONTAINING THE BACKGROUND PROCESSOR INPUT     * 00810000
//*           PARAMETERS. ****NOTE**** SAMPLE CONTROL INPUT EXISTS IN   * 00820000
//*                       MEMBER OSCNTL OF DATASET INFORM.SRCLIB.       * 00830000
//* HCSCFG  - THE CONFIGURATION FILE FOR DYNAMIC ALLOCATION OF          * 00840004
//*           ALTERNATE FORMAT OUTPUT FILES. SPECIFY A PDS AND MEMBER   * 00850004
//*           NAME OR A SEQUENTIAL FILE NAME.                           * 00860004
//* HTMPTPL - THE DATA SET NAME OF THE PDS CONTAINING THE HTML          * 00870004
//*           TEMPLATES FOR HTML OUTPUT FORMAT.  THE DEFAULT IS         * 00880004
//*           THE INSTALLATION SOURCE LIBRARY.                          * 00890004
//* M4REPO  - BACKGROUND PROCESSOR WORK FILE, SORT INPUT FILE.          * 00900000
//* M4SORT  - BACKGROUND PROCESSOR SORT CONTROL OUTPUT AND SORT         * 00910000
//*           CONTROL INPUT.                                            * 00920000
//* M4REPI  - BACKGROUND PROCESSOR INPUT, SORT OUTPUT FILE.             * 00930000
//********************************************************************** 00940000
//INFBATCH EXEC INFBATCH,                                                 00950000
//             RGN=2M,                                                    00960000
//             LOADLIB='INFORM.LOADLIB',                                  00970001
//             RESLIB='IMSVS.RESLIB',                                     00980001
//             PGMLIB='USER.IMS.PGMLIB',                                  00990001
//             SORTLIB='SYS1.SORTLIB',                                    01000001
//             PROG=INFORMDE,                                             01010001
//             PSB=INFORMBB,                                              01020001
//             PSBLIB='INFORM.PSBLIB',                                    01030000
//             DBDLIB='INFORM.DBDLIB',                                    01040000
//             FGLIB='INFORM.FGLIB',                                      01050000
//             INFCOM='INFORM.INFCOM',                                    01060000
//             INFLOG='INFORM.INFLOG',                                    01070000
//             BGLIB='INFORM.BGLIB',                                      01080000
//             REPORTS='INFORM.REPORTS',                                  01090000
//             RUNCNTL='INFORM.SRCLIB(OSCNTL)',                           01100000
//             HCSCFG='INFORM.SRCLIB(HCSCNFIG)',                          01110004
//             HTMLTPL='INFORM.SRCLIB',                                   01120004
//             M4REPO='INFORM.M4REPO',                                    01130000
//             M4SORT='INFORM.M4SORT',                                    01140000
//             M4REPI='INFORM.M4REPI'                                     01150000
//DFSVSAMP  DD *                                                         01160000
8192,11                                                                 01170003
//********************************************************************** 01180000
//* INCLUDE DD STATEMENTS FOR ALL FILES AND DATABASES AVAILABLE TO      * 01190000
//* THIS BACKGROUND PROCESSOR HERE. USE THE FOLLOWING FORMAT:           * 01200000
//*                                                                     * 01210000
//* //INFBG.USERFILE  DD .....                                          * 01220000
//*                                                                     * 01230000
//* IF YOU WANT TO ALLOW SUBFILE CREATION ENTER A DD STATEMENT FOR      * 01240000
//* EACH SUBFILE WITH THE FOLLOWING FORMAT:                             * 01250000
//*                                                                     * 01260000
//* //INFBG.USERSUBF  DD .....                                          * 01270000
//*                                                                     * 01280000
//* IF YOU WANT TO ALLOW SUBFILE DEFINITION CREATION ADD A DD           * 01290000
//* STATEMENT FOR M4SUBF0.  USE THE FOLLOWING FORMAT:                   * 01300000
```

```
//*                                                                   * 01310000
//* //INFBG.M4SUBF0 DD DISP=MOD,DSN=USER.SUBFILE.DEFS                * 01320000
//******************************************************************** 01330000
```

Figure 167. INFBATCH — JCL to Run the Background Processor in a Batch DLI Region without DB2

INFBMP

```
//* MEMBER INFBMP                                                        00010000
//*********************************************************************** 00020000
//* THIS PROCEDURE EXECUTES THE BACKGROUND PROCESSOR IN A BMP REGION. * 00030000
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00040002
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00050002
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00060002
//*               CONCATENATED TO THE INFBMP.STEPLIB DD STATEMENTS.   * 00070002
//*********************************************************************** 00080000
//INFBMP  PROC RGN=,                                                    00090000
//             LOADLIB=,                                                00100000
//             RESLIB=,                                                 00110000
//             PGMLIB=,                                                 00120000
//             SORTLIB=,                                                00130001
//             PROG=,                                                   00140000
//             PSB=,                                                    00150000
//             TRAN=,                                                   00160000
//             INFLOG=,                                                 00170000
//             BGLIB=,                                                  00180000
//             REPORTS=,                                                00190000
//             RUNCNTL=,                                                00200000
//             HCSCFG=,                                                 00210003
//             HTMLTPL=,                                                00220003
//             M4REPO=,                                                 00230000
//             M4SORT=,                                                 00240000
//             M4REPI=                                                  00250000
//INFBMP EXEC PGM=DFSRRC00,REGION=&RGN,PARM=(BMP,&PROG,&PSB,&TRAN)      00260000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00270000
//         DD DISP=SHR,DSN=&RESLIB                                      00280000
//         DD DISP=SHR,DSN=&PGMLIB                                      00290000
//INFLOG   DD DISP=OLD,DSN=&INFLOG                                      00300000
//M4LIB    DD DISP=SHR,DSN=&BGLIB                                       00310000
//M4REPO   DD DISP=SHR,DSN=&M4REPO                                      00320000
//SORTIN   DD DISP=SHR,DSN=&M4REPO                                      00330000
//M4SORT   DD DISP=SHR,DSN=&M4SORT                                      00340000
//SYSIN    DD DISP=SHR,DSN=&M4SORT                                      00350000
//M4REPI   DD DISP=SHR,DSN=&M4REPI                                      00360000
//SORTOUT  DD DISP=SHR,DSN=&M4REPI                                      00370000
//SORTMSG  DD SYSOUT=*                                                  00380000
//INFREPT  DD DISP=OLD,DSN=&REPORTS                                     00390000
//*INFREPT DD SYSOUT=*                                                  00400000
//SYSOUT   DD SYSOUT=*                                                  00410000
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB                                     00420001
//SORTWK01 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00430000
//SORTWK02 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00440000
//SORTWK03 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00450000
//HCSCFG   DD DISP=SHR,DSN=&HCSCFG                                      00460003
//M4HTBASE DD DISP=SHR,DSN=&HTMLTPL                                     00470003
//INFIN    DD DISP=SHR,DSN=&RUNCNTL                                     00480000
//       PEND                                                           00490000
//*********************************************************************** 00500000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.  BEFORE    * 00510000
//* YOU RUN THIS PROCEDURE, SPECIFY:                                  * 00520000
//*                                                                   * 00530000
//* RGN     - THE REGION SIZE.  THE DEFAULT IS 2M.                    * 00540000
//* LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                   * 00550000
//* RESLIB  - IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.               * 00560000
//* PGMLIB  - THE IMS PROGRAM LIBRARY.                                * 00570000
//* SORTLIB - THE SYSTEM SORT LOAD LIBRARY. DEFAULT SYS1.SORTLIB.     * 00580001
//* PROG    - BACKGROUND PROCESSOR LOAD MODULE. DEFAULT IS INFORMBB.  * 00590000
//* PSB     - BACKGROUND PROCESSOR PSBNAME. DEFAULT IS INFORMBB.      * 00600000
//* TRAN    - BACKGROUND PROCESSOR TRANSACTION. DEFAULT IS INFBMP.    * 00610000
//* INFLOG  - THE INFORM HARDCOPY LOG FILE.                           * 00620000
//* BGLIB   - THE BACKGROUND LIBRARY.                                 * 00630000
//* REPORTS - THE DATASET FOR PRINTED REPORTS.                        * 00640000
```

```
//* RUNCNTL - THE DATASET CONTAINING THE BACKGROUND PROCESSOR INPUT   * 00650000
//*           PARAMETERS.  **** NOTE **** PDS MEMBER "OSCNTL" IN      * 00660000
//*                        INFORM.SRCLIB HAS SAMPLE INPUT PARAMETERS. * 00670000
//* HCSCFG  - THE CONFIGURATION FILE FOR DYNAMIC ALLOCATION OF        * 00680003
//*           ALTERNATE FORMAT OUTPUT FILES. SPECIFY A PDS AND MEMBER * 00690003
//*           NAME OR A SEQUENTIAL FILE NAME.                         * 00700003
//* HTMPTPL - THE DATA SET NAME OF THE PDS CONTAINING THE HTML        * 00710003
//*           TEMPLATES FOR HTML OUTPUT FORMAT.  THE DEFAULT IS       * 00720003
//*           THE INSTALLATION SOURCE LIBRARY.                        * 00730003
//* M4REPO  - THE PROCESSOR OUTPUT WORK FILE, SORT INPUT FILE.        * 00740000
//* M4SORT  - THE PROCESSOR SORT CONTROL OUTPUT, SORT CONTROL INPUT.  * 00750000
//* M4REPI  - THE PROCESSOR INPUT, SORT OUTPUT FILE.                  * 00760000
//*********************************************************************** 00770000
//INFBMP  EXEC INFBMP,                                                  00780000
//             RGN=2M,                                                  00790000
//             LOADLIB='INFORM.LOADLIB',                                00800000
//             PGMLIB='USER.IMS.PGMLIB',                                00810000
//             RESLIB='IMSVS.RESLIB',                                   00820000
//             SORTLIB='SYS1.SORTLIB',                                  00830001
//             PROG=INFORMBB,                                           00840000
//             PSB=INFORMBB,                                            00850000
//             TRAN=INFBMP,                                             00860000
//             INFLOG='INFORM.INFLOG',                                  00870000
//             BGLIB='INFORM.BGLIB',                                    00880000
//             REPORTS='INFORM.REPORTS',                                00890000
//             RUNCNTL='INFORM.SRCLIB(OSCNTL)',                         00900000
//             HCSCFG='INFORM.SRCLIB(HCSCNFIG)',                        00910003
//             HTMLTPL='INFORM.SRCLIB',                                 00920003
//             M4REPO='INFORM.M4REPO',                                  00930000
//             M4SORT='INFORM.M4SORT',                                  00940000
//             M4REPI='INFORM.M4REPI'                                   00950000
//*********************************************************************** 00960000
//* INCLUDE DD STATEMENTS FOR ALL NON-DLI DATABASES AVAILABLE TO      * 00970000
//* THIS BACKGROUND PROCESSOR HERE. USE THE FOLLOWING FORMAT:         * 00980000
//*                                                                   * 00990000
//* //INFBMP.USERFILE  DD .....                                       * 01000000
//*                                                                   * 01010000
//* IF YOU WANT TO ALLOW SUBFILE CREATION ENTER A DD STATEMENT FOR    * 01020000
//* EACH SUBFILE WITH THE FOLLOWING FORMAT:                           * 01030000
//*                                                                   * 01040000
//* //INFBMP.USERSUBF  DD .....                                       * 01050000
//*                                                                   * 01060000
//* IF YOU WANT TO ALLOW SUBFILE DEFINITION CREATION ADD A DD         * 01070000
//* STATEMENT FOR M4SUBF0.  USE THE FOLLOWING FORMAT:                 * 01080000
//*                                                                   * 01090000
//* //INFBMP.M4SUBF0 DD DISP=MOD,DSN=USER.SUBFILE.DEFS                * 01100000
//*********************************************************************** 01110000
```

Figure 168. INFBMP — JCL to Run the Batch Processor in a BMP Region without DB2

INFOSB

```
//* MEMBER INFOSB                                                        00010000
//*********************************************************************** 00020000
//* PROCEDURE TO EXECUTE THE BATCH SIMULATOR IN A DLI BATCH REGION.   * 00030000
//* IF THE DD NAMES FOR THE COMMUNICATION FILE AND FOREGROUND LIBRARY * 00040000
//* WERE CHANGED IN THE DBD'S, MAKE SURE THEY MATCH THOSE HERE.       * 00050000
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00060002
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00070002
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00080002
//*               CONCATENATED TO THE OSB.STEPLIB DD STATEMENTS.      * 00090002
//*********************************************************************** 00100000
//INFOSB  PROC RGN=,                                                    00110000
//             LOADLIB=,                                                00120000
//             RESLIB=,                                                 00130000
//             SORTLIB=,                                                00140001
//             PROG=,                                                   00150001
//             PSB=,                                                    00160001
//             PSBLIB=,                                                 00170000
//             DBDLIB=,                                                 00180000
//             FGLIB=,                                                  00190000
//             INFCOM=,                                                 00200000
//             REPORTS=,                                                00210000
//             HCSCFG=,                                                 00220004
//             HTMLTPL=,                                                00230004
//             BGLIB=                                                   00240000
//OSB    EXEC PGM=DFSRRC00,REGION=&RGN,PARM='DLI,&PROG,&PSB'            00250000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00260000
//         DD DISP=SHR,DSN=&RESLIB                                      00270000
//IMS      DD DISP=SHR,DSN=&PSBLIB                                      00280000
//         DD DISP=SHR,DSN=&DBDLIB                                      00290000
//IEFRDER  DD DUMMY                                                     00300000
//DFSRESLB DD DISP=SHR,DSN=&RESLIB                                      00310000
//M4LIB    DD DISP=SHR,DSN=&BGLIB                                       00320000
//M4REPO   DD UNIT=SYSDA,SPACE=(TRK,(2,2))                              00330000
//SYSOUT   DD SYSOUT=*                                                  00340000
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB                                     00350001
//SORTWK01 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00360000
//SORTWK02 DD SPACE=(CYL,5,,CONTIG),UNIT=(SYSDA,SEP=SORTWK01)           00370000
//SORTWK03 DD SPACE=(CYL,5,,CONTIG),                                    00380000
//            UNIT=(SYSDA,SEP=(SORTWK01,SORTWK02))                      00390000
//INFORMLF DD DISP=OLD,DSN=&FGLIB                                       00400000
//INFORMCF DD DISP=OLD,DSN=&INFCOM                                      00410000
//INFPRINT DD SYSOUT=*                                                  00420000
//INFLIST  DD SYSOUT=*                                                  00430000
//HCSCFG   DD DISP=SHR,DSN=&HCSCFG                                      00440004
//M4HTBASE DD DISP=SHR,DSN=&HTMLTPL                                     00450004
//INFREPT  DD DISP=OLD,DSN=&REPORTS                                     00460000
//*INFREPT DD SYSOUT=*                                                  00470000
//       PEND                                                           00480000
//*********************************************************************** 00490000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00500000
//*    BEFORE YOU RUN THIS PROCEDURE,SPECIFY:                         * 00510000
//*                                                                   * 00520000
//*    RGN     - THE REGION SIZE. (DEFAULT 2M).                       * 00530000
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                * 00540000
//*    RESLIB  - THE NAME OF THE IMS RESLIB. (DEFAULT IMSVS.RESLIB)   * 00550000
//*    SORTLIB - THE SYSTEM SORT LOAD LIBRARY. DEFAULT SYS1.SORTLIB.  * 00560001
//*    PROG    - THE BATCH SIMULATOR LOAD MODULE. DEFAULT IS INFORMSB.* 00570001
//*    PSB     - THE BATCH SIMULATOR PSBNAME. DEFAULT IS INFORMSB.    * 00580001
//*    PSBLIB  - THE USER'S PSB LIBRARY.                              * 00590000
//*    DBDLIB  - THE USER'S DBD LIBRARY.                              * 00600000
//*    FGLIB   - THE INFORM FOREGROUND LIBRARY.                       * 00610000
//*    INFCOM  - THE INFORM COMMUNCATIONS FILE.                       * 00620000
//*    REPORTS - THE DATASET FOR PRINTED REPORTS.                     * 00630000
//*    HCSCFG  - THE CONFIGURATION FILE FOR DYNAMIC ALLOCATION OF     * 00640004
```

```
//*              ALTERNATE FORMAT OUTPUT FILES. SPECIFY A PDS AND     * 00650004
//*              MEMBER NAME OR A SEQUENTIAL FILE NAME.               * 00660004
//*    HTMPTPL - THE DATA SET NAME OF THE PDS CONTAINING THE HTML     * 00670004
//*              TEMPLATES FOR HTML OUTPUT FORMAT.  THE DEFAULT IS    * 00680004
//*              THE INSTALLATION SOURCE LIBRARY.                     * 00690004
//*    BGLIB   - THE INFORM BACKGROUND LIBRARY.                       * 00700000
//*********************************************************************** 00710000
//INFOSB  EXEC INFOSB,                                                  00720000
//             RGN=2M,                                                  00730000
//             LOADLIB='INFORM.LOADLIB',                                00740001
//             RESLIB='IMSVS.RESLIB',                                   00750000
//             SORTLIB='SYS1.SORTLIB',                                  00760001
//             PROG=INFORMSB,                                           00770001
//             PSB=INFORMSB,                                            00780001
//             PSBLIB='INFORM.PSBLIB',                                  00790000
//             DBDLIB='INFORM.DBDLIB',                                  00800000
//             FGLIB='INFORM.FGLIB',                                    00810000
//             INFCOM='INFORM.INFCOM',                                  00820000
//             REPORTS='INFORM.REPORTS',                                00830000
//             HCSCFG='INFORM.SRCLIB(HCSCNFIG)',                        00840004
//             HTMLTPL='INFORM.SRCLIB',                                 00850004
//             BGLIB='INFORM.BGLIB'                                     00860000
//OSB.DFSVSAMP DD *                                                     00870000
8192,11                                                               00880003
//*********************************************************************** 00890000
//* INCLUDE DD STATEMENTS FOR ALL FILES AND DATABASES AVAILABLE TO     * 00900000
//* THIS BATCH SIMULATOR HERE. USE THE FOLLOWING FORMAT:               * 00910000
//*                                                                    * 00920000
//* //OSB.USERFILE  DD .....                                           * 00930000
//*                                                                    * 00940000
//* IF YOU WANT TO ALLOW SUBFILE CREATION ENTER A DD STATEMENT FOR     * 00950000
//* EACH SUBFILE WITH THE FOLLOWING FORMAT:                            * 00960000
//*                                                                    * 00970000
//* //OSB.USERSUBF  DD .....                                           * 00980000
//*                                                                    * 00990000
//* IF YOU WANT TO ALLOW SUBFILE DEFINITION CREATION ADD A DD          * 01000000
//* STATEMENT FOR M4SUBF0.  USE THE FOLLOWING FORMAT:                  * 01010000
//*                                                                    * 01020000
//* //OSB.M4SUBF0 DD DISP=MOD,DSN=USER.SUBFILE.DEFS                   * 01030000
//*********************************************************************** 01040000
//* PLACE BATCH SIMULATOR INPUT STATEMENTS AFTER THE INFIN DD STMT.    * 01050000
//*********************************************************************** 01060000
//OSB.INFIN DD *                                                        01070000
```

Figure 169. INFOSB — JCL to Run the Batch Simulator in a Batch DLI Region without DB2

INFOSBMP

```
//* MEMBER INFOSBMP                                                      00010000
//*********************************************************************** 00020000
//* JCL TO RUN THE VISION:INFORM BATCH SIMULATOR IN A BMP REGION.     * 00030000
//* IF THE DD NAMES FOR THE COMMUNICATION FILE AND FOREGROUND LIBRARY * 00040000
//* WERE CHANGED IN THE DBD, MAKE SURE THEY MATCH THOSE HERE.         * 00050000
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00060002
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00070002
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00080002
//*               CONCATENATED TO THE OSB.STEPLIB DD STATEMENTS.      * 00090002
//*********************************************************************** 00100000
//BMPOSB  PROC RGN=,                                                    00110000
//             LOADLIB=,                                                00120000
//             RESLIB=,                                                 00130000
//             SORTLIB=,                                                00140001
//             PROG=,                                                   00150000
//             PSB=,                                                    00160000
//             TRAN=,                                                   00170000
//             REPORTS=,                                                00180000
//             HCSCFG=,                                                 00190005
//             HTMLTPL=,                                                00200005
//             BGLIB=                                                   00210000
//OSB    EXEC PGM=DFSRRC00,REGION=&RGN,PARM='BMP,&PROG,&PSB,&TRAN'      00220000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00230000
//         DD DISP=SHR,DSN=&RESLIB                                      00240000
//M4LIB    DD DISP=SHR,DSN=&BGLIB                                       00250000
//M4REPO   DD UNIT=SYSDA,SPACE=(TRK,(2,2))                             00260000
//SYSOUT   DD SYSOUT=*                                                  00270000
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB                                     00280001
//SORTWK01 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00290000
//SORTWK02 DD SPACE=(CYL,5,,CONTIG),UNIT=(SYSDA,SEP=SORTWK01)           00300000
//SORTWK03 DD SPACE=(CYL,5,,CONTIG),                                    00310000
//            UNIT=(SYSDA,SEP=(SORTWK01,SORTWK02))                      00320000
//INFPRINT DD SYSOUT=*                                                  00330000
//INFLIST  DD SYSOUT=*                                                  00340000
//HCSCFG   DD DISP=SHR,DSN=&HCSCFG                                      00350005
//M4HTBASE DD DISP=SHR,DSN=&HTMLTPL                                     00360005
//INFREPT  DD DISP=OLD,DSN=&REPORTS                                     00370000
//*INFREPT DD SYSOUT=*                                                  00380000
//       PEND                                                           00390000
//*********************************************************************** 00400000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00410000
//*    BEFORE YOU RUN THIS PROCEDURE,SPECIFY:                         * 00420000
//*                                                                   * 00430000
//*    RGN     - THE REGION SIZE. (DEFAULT 2M).                       * 00440000
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                * 00450000
//*    RESLIB  - THE NAME OF THE IMS RESLIB. (DEFAULT IMSVS.RESLIB)   * 00460000
//*    SORTLIB - THE SYSTEM SORT LOAD LIBRARY. DEFAULT SYS1.SORTLIB.  * 00470004
//*    PROG    - THE BATCH SIMULATOR MODULE NAME. DEFAULT INFORMDL.   * 00480000
//*    PSB     - THE BATCH SIMULATOR PSBNAME. DEFAULT INFORMSB.       * 00490000
//*    TRAN    - THE BATCH SIMULATOR TRAN ID. DEFAULT BMPOSB.         * 00500000
//*    REPORTS - THE DATASET FOR PRINTED REPORTS.                     * 00510000
//*    HCSCFG  - THE CONFIGURATION FILE FOR DYNAMIC ALLOCATION OF     * 00520005
//*              ALTERNATE FORMAT OUTPUT FILES. SPECIFY A PDS AND     * 00530005
//*              MEMBER NAME OR A SEQUENTIAL FILE NAME.               * 00540005
//*    HTMPTPL - THE DATA SET NAME OF THE PDS CONTAINING THE HTML     * 00550005
//*              TEMPLATES FOR HTML OUTPUT FORMAT.  THE DEFAULT IS    * 00560005
//*              THE INSTALLATION SOURCE LIBRARY.                     * 00570005
//*    BGLIB   - THE INFORM BACKGROUND LIBRARY.                       * 00580000
//*********************************************************************** 00590000
//BMPOSB  EXEC BMPOSB,                                                  00600000
//             RGN=2M,                                                  00610000
//             LOADLIB='INFORM.LOADLIB',                                00620000
//             RESLIB='IMSVS.RESLIB',                                   00630000
//             SORTLIB='SYS1.SORTLIB',                                  00640001
```

```
//             PROG=INFORMDL,                                          00650000
//             PSB=INFORMSB,                                           00660000
//             TRAN=BMPOSB,                                            00670000
//             REPORTS='INFORM.REPORTS',                               00680004
//             HCSCFG='INFORM.SRCLIB(HCSCNFIG)',                       00690005
//             HTMLTPL='INFORM.SRCLIB',                                00700005
//             BGLIB='INFORM.BGLIB'                                    00710004
//OSB.DFSVSAMP DD *                                                    00720000
8192,11                                                              00730003
//*********************************************************************00740000
//* INCLUDE DD STATEMENTS FOR ALL FILES AND DATABASES AVAILABLE TO    * 00750000
//* THIS BATCH SIMULATOR HERE. USE THE FOLLOWING FORMAT:              * 00760000
//*                                                                   * 00770000
//* //OSB.USERFILE  DD .....                                          * 00780000
//*                                                                   * 00790000
//* IF YOU WANT TO ALLOW SUBFILE CREATION ENTER A DD STATEMENT FOR    * 00800000
//* EACH SUBFILE WITH THE FOLLOWING FORMAT:                           * 00810000
//*                                                                   * 00820000
//* //OSB.USERSUBF  DD .....                                          * 00830000
//*                                                                   * 00840000
//* IF YOU WANT TO ALLOW SUBFILE DEFINITION CREATION ADD A DD         * 00850000
//* STATEMENT FOR M4SUBF0.  USE THE FOLLOWING FORMAT:                 * 00860000
//*                                                                   * 00870000
//* //OSB.M4SUBF0 DD DISP=MOD,DSN=USER.SUBFILE.DEFS                  * 00880000
//*********************************************************************00890000
//* PLACE BATCH SIMULATOR INPUT STATEMENTS AFTER THE INFIN DD STMT.   * 00900000
//*********************************************************************00910000
//OSB.INFIN DD *                                                       00920000
```

Figure 170. INFOSBMP — JCL to Run the Batch Simulator in a BMP Region Without DB2

INIT

```
//* MEMBER INIT                                                          00010000
//*********************************************************************** 00020000
//*  THIS JOB CONTAINS FOUR PROCEDURES TO DEFINE AND INITIALIZE THE   * 00030000
//*  VISION:INFORM FOREGROUND AND BACKGROUND LIBRARIES, THE           * 00040000
//*  COMMUNICATIONS FILE, AND THE VISION:INFORM ONLINE WORK FILE.     * 00050000
//*                                                                   * 00060000
//* IF THE DDNAMES FOR THE COMMUNICATIONS FILE, WORK FILE, OR         * 00070000
//* FOREGROUND LIBRARY HAVE BEEN CHANGED FROM THE INSTALLATION        * 00080000
//* DEFAULTS, CHANGE THE APPROPRIATE DDNAMES IN THE FGINITLB,         * 00090000
//* INITCOM, INITWORK STEPS OF THE PROCEDURES.                        * 00100000
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00100103
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00100203
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00100303
//*               CONCATENATED TO THE INITBG.STEPLIB DD STATEMENT.    * 00101003
//*********************************************************************** 00110000
//FGINIT  PROC FGLIB=,                                                  00120000
//             LOADLIB=,                                                00130000
//             INITPSB=,                                                00140000
//             RESLIB=,                                                 00150000
//             PSBLIB=,                                                 00160000
//             DBDLIB=                                                  00170000
//FGLIB    EXEC PGM=IDCAMS,REGION=2M                                    00180000
//SYSPRINT  DD SYSOUT=*                                                 00190000
//FGINITLB EXEC PGM=DFSRRC00,REGION=2M,PARM='DLI,INFORMUI,&INITPSB'     00200000
//STEPLIB   DD DISP=SHR,DSN=&LOADLIB                                    00210001
//          DD DISP=SHR,DSN=&RESLIB                                     00220001
//IMS       DD DISP=SHR,DSN=&PSBLIB                                     00230001
//          DD DISP=SHR,DSN=&DBDLIB                                     00240001
//DFSRESLB  DD DISP=SHR,DSN=&RESLIB                                     00250001
//IEFRDER   DD DUMMY                                                    00260000
//INFORMLF  DD DISP=OLD,DSN=&FGLIB                                      00270001
//INFPRINT  DD SYSOUT=*                                                 00280000
//        PEND                                                          00290000
//COMINIT PROC INFCOM=,                                                 00300000
//             LOADLIB=,                                                00310000
//             INITPSB=,                                                00320000
//             RESLIB=,                                                 00330000
//             PSBLIB=,                                                 00340000
//             DBDLIB=                                                  00350000
//DEFCOM  EXEC PGM=IDCAMS,REGION=2M                                     00360000
//SYSPRINT  DD SYSOUT=*                                                 00370000
//INITCOM EXEC PGM=DFSRRC00,REGION=2M,PARM='DLI,INFORMUI,&INITPSB'      00380000
//STEPLIB   DD DISP=SHR,DSN=&LOADLIB                                    00390001
//          DD DISP=SHR,DSN=&RESLIB                                     00400001
//IMS       DD DISP=SHR,DSN=&PSBLIB                                     00410001
//          DD DISP=SHR,DSN=&DBDLIB                                     00420001
//DFSRESLB  DD DISP=SHR,DSN=&RESLIB                                     00430001
//IEFRDER   DD DUMMY                                                    00440000
//INFORMCF  DD DISP=OLD,DSN=&INFCOM                                     00450001
//INFPRINT  DD SYSOUT=*                                                 00460000
//        PEND                                                          00470000
//BGINIT  PROC BGLIB=,                                                  00480000
//             LOADLIB=                                                 00490000
//DEFBG   EXEC PGM=IDCAMS,REGION=2M                                     00500000
//SYSPRINT  DD SYSOUT=*                                                 00510000
//INITBG  EXEC PGM=MARKUTIL,REGION=2M                                   00520000
//STEPLIB   DD DISP=SHR,DSN=&LOADLIB                                    00530000
//M4LIST    DD SYSOUT=*                                                 00540000
//M4WORK    DD DUMMY                                                    00550000
//M4LIB     DD DISP=OLD,DSN=&BGLIB                                      00560000
//        PEND                                                          00570000
//WORKINIT PROC INFWORK=,                                               00580000
//             INITPSB=,                                                00590000
//             RESLIB=,                                                 00600000
```

```
//             PSBLIB=,                                                  00610000
//             DBDLIB=                                                   00620000
//DEFWORK EXEC PGM=IDCAMS,REGION=2M                                      00630000
//SYSPRINT  DD SYSOUT=*                                                  00640000
//INITWORK EXEC PGM=DFSRRC00,REGION=2M,PARM='DLI,DFSDDLT0,&INITPSB'      00650000
//STEPLIB   DD DISP=SHR,DSN=&RESLIB                                      00660001
//IMS       DD DISP=SHR,DSN=&PSBLIB                                      00670001
//          DD DISP=SHR,DSN=&DBDLIB                                      00680001
//DFSRESLB  DD DISP=SHR,DSN=&RESLIB                                      00690002
//INFORMWF  DD DISP=OLD,DSN=&INFWORK                                     00700001
//IEFRDER   DD DUMMY                                                     00710000
//PRINTDD   DD SYSOUT=*                                                  00720000
//        PEND                                                           00730000
//*********************************************************************** 00740000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THESE PROCEDURES. BEFORE  * 00750000
//*  YOU RUN THIS JOB, SPECIFY:                                       * 00760000
//*                                                                   * 00770000
//*  FGLIB   - THE INFORM FOREGROUND LIBRARY.                         * 00780000
//*  INFCOM  - THE INFORM COMMUNICATION FILE.                         * 00790000
//*  BGLIB   - THE INFORM BACKGROUND LIBRARY.                         * 00800000
//*  INFWORK - THE INFORM ONLINE WORK FILE.                           * 00810000
//*  LOADLIB - THE INFORM LOAD LIBRARY.                               * 00820000
//*  INITPSB - THE INITIALIZE PSB NAME. DEFAULT IS INFINIT.           * 00830000
//*  RESLIB  - THE IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.          * 00840000
//*  PSBLIB  - THE PSB LIBRARY.                                       * 00850000
//*  DBDLIB  - THE DBD LIBRARY.                                       * 00860000
//*********************************************************************** 00870000
//*  FOR FGINIT,  ALSO CHANGE THE FGLIB.SYSIN STATEMENTS:             * 00880000
//*                                                                   * 00890000
//*      NAME('INFORM.FGLIB')                                         * 00900000
//*      NAME('INFORM.FGLIB.DATA')                                    * 00910000
//*      VOL('USERDVOL')                                              * 00920000
//*      OWNER('USER')                                                * 00930000
//*                                                                   * 00940000
//*  REFER TO THE IBM ACCESS METHOD SERVICES MANUAL FOR INFORMATION   * 00950000
//*  ABOUT CHANGING THE DCB ATTRIBUTES.                               * 00960000
//*                                                                   * 00970000
//*  *** DO NOT MAKE ANY CHANGES IN FGINITLB.INFIN ***                * 00980000
//*  *** DELETE CLUSTER STMTS ARE PROVIDED FOR RERUNS ONLY. ***       * 00990000
//*********************************************************************** 01000000
//FGINIT  EXEC FGINIT,                                                   01010000
//             FGLIB='INFORM.FGLIB',                                     01020000
//             LOADLIB='INFORM.LOADLIB',                                 01030000
//             INITPSB=INFINIT,                                          01040000
//             RESLIB='IMSVS.RESLIB',                                    01050000
//             PSBLIB='INFORM.PSBLIB',                                   01060000
//             DBDLIB='INFORM.DBDLIB'                                    01070000
//FGLIB.SYSIN DD *                                                       01080000
      DELETE ('INFORM.FGLIB') CLUSTER PURGE                            01090000
      DEFINE CLUSTER -                                                 01100000
               (NAME('INFORM.FGLIB') -                                 01110000
               VOL('USERDVOL') NONINDEXED -                            01120000
               RECORDS(387) -                                          01130000
               RECORDSIZE(4089 4089) -                                 01140000
               CONTROLINTERVALSIZE(4096) -                             01150000
               SHAREOPTIONS(3 3) -                                     01160000
               ERASE -                                                 01170000
               OWNER('USER')) -                                        01180000
             DATA(NAME('INFORM.FGLIB.DATA'))                           01190000
//FGINITLB.INFIN DD *                                                  01200000
ULSLIB                                                                 01210000
//FGINITLB.DFSVSAMP DD *                                               01220000
8192,6                                                                 01230000
//*********************************************************************** 01240000
//*  FOR COMINIT, ALSO CHANGE THE DEFCOM.SYSIN STATEMENTS:            * 01250000
//*                                                                   * 01260000
```

```
//*      NAME('INFORM.INFCOM')                                        * 01270000
//*      NAME('INFORM.INFCOM.DATA')                                   * 01280000
//*      VOL('USERDVOL')                                              * 01290000
//*      OWNER('USER')                                                * 01300000
//*                                                                   * 01310000
//*  REFER TO THE IBM ACCESS METHOD SERVICES MANUAL FOR INFORMATION   * 01320000
//*  ABOUT CHANGING THE DCB ATTRIBUTES.                               * 01330000
//*                                                                   * 01340000
//*  *** DO NOT MAKE ANY CHANGES IN INITCOM.INFIN ***                 * 01350000
//*  *** DELETE CLUSTER STMTS ARE PROVIDED FOR RERUNS ONLY. ***       * 01360000
//******************************************************************* 01370000
//COMINIT EXEC COMINIT,                                               01380000
//             INFCOM='INFORM.INFCOM',                                01390000
//             LOADLIB='INFORM.LOADLIB',                              01400000
//             INITPSB=INFINIT,                                       01410000
//             RESLIB='IMSVS.RESLIB',                                 01420000
//             PSBLIB='INFORM.PSBLIB',                                01430000
//             DBDLIB='INFORM.DBDLIB'                                 01440000
//DEFCOM.SYSIN DD *                                                   01450000
      DELETE ('INFORM.INFCOM') CLUSTER PURGE                        01460000
      DEFINE CLUSTER -                                              01470000
               (NAME('INFORM.INFCOM') -                             01480000
               VOL('USERDVOL') -                                    01490000
               RECORDS(411) -                                       01500000
               CONTROLINTERVALSIZE(4096) -                          01510000
               RECORDSIZE(4089 4089) -                              01520000
               SHAREOPTIONS(3 3) -                                  01530000
               NONINDEXED ERASE -                                   01540000
               OWNER('USER')) -                                     01550000
             DATA(NAME('INFORM.INFCOM.DATA'))                       01560000
//INITCOM.INFIN DD *                                                01570000
ULSCOM                                                              01580000
//INITCOM.DFSVSAMP DD *                                             01590000
8192,6                                                              01600000
//******************************************************************* 01610000
//*  FOR BGINIT, ALSO CHANGE THE DEFBG.SYSIN STATEMENTS:            * 01620000
//*                                                                 * 01630000
//*      NAME('INFORM.BGLIB')                                       * 01640000
//*      NAME('INFORM.BGLIB.DATA')                                  * 01650000
//*      VOL('USERDVOL')                                            * 01660000
//*      OWNER('USER')                                              * 01670000
//*                                                                 * 01680000
//*  REFER TO THE IBM ACCESS METHOD SERVICES MANUAL FOR INFORMATION * 01690000
//*  ABOUT CHANGING THE DCB ATTRIBUTES.                             * 01700000
//*                                                                 * 01710000
//*  *** DO NOT MAKE ANY CHANGES IN INITBG.M4INPUT ***              * 01720000
//*  *** DELETE CLUSTER STMTS ARE PROVIDED FOR RERUNS ONLY. ***     * 01730000
//******************************************************************* 01740000
//BGINIT  EXEC BGINIT,                                                01750000
//             BGLIB='INFORM.BGLIB',                                  01760000
//             LOADLIB='INFORM.LOADLIB'                               01770000
//DEFBG.SYSIN DD *                                                    01780000
      DELETE  'INFORM.BGLIB' CLUSTER PURGE                          01790000
      DEFINE CLUSTER -                                              01800000
               (NAME('INFORM.BGLIB') -                              01810000
               VOL('USERDVOL') -                                    01820000
               CYLINDERS(1 1) -                                     01830000
               SHAREOPTIONS(3 3) -                                  01840000
               CONTROLINTERVALSIZE(4096) -                          01850000
               RECORDSIZE(507 507) -                                01860000
               WRITECHECK NUMBERED -                                01870000
               OWNER('USER')) -                                     01880000
             DATA(NAME('INFORM.BGLIB.DATA'))                        01890000
//INITBG.M4INPUT DD *                                               01900000
        UCINIT                                                      01910000
//******************************************************************* 01920000
```

```
//* FOR WORKINIT, ALSO CHANGE THE DEFWORK.SYSIN SPECIFICATION:        * 01930000
//*                                                                   * 01940000
//*      NAME('INFORM.INFWORK')                                       * 01950000
//*      NAME('INFORM.INFWORK.DATA')                                  * 01960000
//*      VOL('USERDVOL')                                              * 01970000
//*      OWNER('USER')                                                * 01980000
//*                                                                   * 01990000
//* REFER TO THE IBM ACCESS METHOD SERVICES MANUAL FOR INFORMATION    * 02000000
//* ABOUT CHANGING THE DCB ATTRIBUTES.                                * 02010000
//*                                                                   * 02020000
//* MAKE SURE THAT THE WORK FILE DBD NAME IN THE STATUS STATEMENT OF  * 02030000
//* INITWORK.SYSIN BELOW MATCHES THAT IN THE WORK FILE DBD (INFWORK). * 02040000
//*     ***** DO NOT MAKE ANY OTHER CHANGES IN INITWORK.SYSIN *****   * 02050000
//*       *** DELETE CLUSTER STMTS PROVIDED FOR RERUNS ONLY.  ***     * 02060000
//********************************************************************* 02070000
//WORKINIT EXEC WORKINIT,                                               02080000
//             INFWORK='INFORM.INFWORK',                                02090000
//             INITPSB=INFINIT,                                         02100000
//             RESLIB='IMSVS.RESLIB',                                   02110000
//             PSBLIB='INFORM.PSBLIB',                                  02120000
//             DBDLIB='INFORM.DBDLIB'                                   02130000
//DEFWORK.SYSIN DD *                                                    02140000
         DELETE ('INFORM.INFWORK') CLUSTER PURGE                      02150000
         DEFINE CLUSTER -                                             02160000
               (NAME('INFORM.INFWORK') NONINDEXED -                   02170000
               RECORDSIZE(4089 4089)  TRACKS(25 5)  VOL('USERDVOL') -  02180000
               CONTROLINTERVALSIZE(4096) -                            02190000
               ERASE  SHAREOPTIONS(1 3) -                             02200000
               OWNER('USER')) -                                       02210000
           DATA(NAME('INFORM.INFWORK.DATA'))                          02220000
//INITWORK.SYSIN DD *                                                 02230000
S 1 1 1 1 1    INFWORK                                                02240000
L        ISRT  LTERMABL                                               02250000
L        DATA  DUMMY                                                  02260000
//INITWORK.DFSVSAMP DD *                                              02270000
4096,6                                                                02280000
```

Figure 171. INIT — JCL to Initialize the Foreground Library, the Communication File, the Background Library, and the Online Work File

INQRYQS

```
//* MEMBER INQRYQS                                                      00010000
//*********************************************************************** 00020000
//* UTILITY TO CONVERT VISION:INQUIRY FILE DEFINITIONS INTO           * 00030000
//* VISION:INFORM FORMAT FILE DEFINITIONS.                            * 00040000
//* THE VISION:INQUIRY FILE DEFINITIONS MUST COME FROM A              * 00050000
//* VISION:INQUIRY UNLOADED SYSTEM DATABASE FILE.  SEE YOUR           * 00060000
//* VISION:INQUIRY TECHNICAL REFERENCE MANUAL FOR INFORMATION ON      * 00070000
//* HOW TO CREATE AN UNLOADED COPY OF THE SYSTEM DATABASE.            * 00080000
//*                                                                   * 00090000
//* THIS UTILITY MAY ALSO BE INVOKED INTERACTIVELY UNDER TSO/ISPF     * 00100000
//* USING THE DEFINITION PROCESSOR IMPORT FUNCTION.                   * 00110000
//*********************************************************************** 00120000
//INQRYQS PROC RGN=2M,                                                  00130000
//             LOADLIB=,                                                00140000
//             ULSYSDB=,                                                00150000
//             DEFLIB=                                                  00160000
//INQRYQS EXEC PGM=INQRYQS,REGION=&RGN                                  00170000
//STEPLIB   DD DISP=SHR,DSN=&LOADLIB                                    00180000
//SYSPRINT  DD SYSOUT=*                                                 00190000
//SYSUT1    DD DISP=SHR,DSN=&ULSYSDB                                    00200000
//SYS004    DD DISP=OLD,DSN=&DEFLIB                                     00210000
//        PEND                                                          00220000
//*********************************************************************** 00230000
//*  FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE. BEFORE YOU    * 00240000
//*  RUN THIS PROCEDURE, SPECIFY:                                     * 00250000
//*                                                                   * 00260000
//*    RGN     - THE REGION SIZE; DEFAULT IS 2M.                      * 00270000
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                * 00280000
//*    ULSYSDB - THE UNLOADED VISION:INQUIRY SYSTEM DATABASE FILE.    * 00290000
//*    DEFLIB  - THE INFORM DEFINITION LIBRARY.                       * 00300000
//*********************************************************************** 00310000
//STEP01  EXEC INQRYQS,RGN=2M,                                          00320000
//             LOADLIB='INFORM.LOADLIB',                                00330000
//             ULSYSDB='VISION.INQUIRY.UNLOADED.SYSDBASE',              00340000
//             DEFLIB='INFORM.DEFLIB'                                   00350000
//SYSIN DD *                                                            00360000
  FILEGEN NAME=VSHPLANT,FLDPREFX=PLT                                    00370000
  FILEGEN NAME=SALARIES,FLDPREFX=SAL                                    00380000
```

Figure 172. INQRYQS — JCL to Run the VISION:Inquiry Quick Start Utility to Convert VISION:Inquiry File Definitions into VISION:Inform File Definition Format

LBBACKUP

```
//* MEMBER LBBACKUP                                                    00010000
//********************************************************************* 00020000
//* THIS PROCEDURE CREATES A BACKUP COPY OF THE BACKGROUND LIBRARY    * 00030000
//* AND THE FOREGROUND LIBRARY ON TAPE.  THIS JCL MAY BE MODIFIED TO  * 00040000
//* CREATE THE BACKUP FILES ON DISK, IF DESIRED.                      * 00050000
//*                                                                   * 00060000
//* IF THE DDNAME OF THE FOREGROUND LIBARARY HAS BEEN CHANGED IN THE  * 00070000
//* DBD FROM THE INSTALLATION DEFAULT OF "INFORMLF", CHANGE THE       * 00080000
//* APPROPRIATE DDNAME IN THE "BACKFG" STEP OF THIS PROC TO MATCH.    * 00090005
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00090103
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00090203
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00090303
//*               CONCATENATED TO THE BACKBG.STEPLIB DD STATEMENT.    * 00091005
//********************************************************************* 00100000
//LBBACKUP PROC FGLIB=,                                                 00110000
//             BGLIB=,                                                  00120000
//             LOADLIB=,                                                00130000
//             PSB=,                                                    00140000
//             RESLIB=,                                                 00150000
//             PSBLIB=,                                                 00160000
//             DBDLIB=,                                                 00170000
//             NAMEFG=,                                                 00180000
//             FGFILNO=,                                                00190000
//             NAMEBG=,                                                 00200000
//             BGFILNO=,                                                00210000
//             UNIT=,                                                   00220000
//             VOLSER=                                                  00230000
//VER     EXEC PGM=IDCAMS,REGION=1200K                                  00240000
//FGLIB     DD DISP=OLD,DSN=&FGLIB                                      00250000
//BGLIB     DD DISP=SHR,DSN=&BGLIB                                      00260000
//SYSPRINT  DD SYSOUT=*                                                 00270000
//BACKBG  EXEC PGM=MARKUTIL,REGION=1200K                                00280004
//STEPLIB   DD DISP=SHR,DSN=&LOADLIB                                    00290000
//M4LIST    DD SYSOUT=*                                                 00300000
//M4LIB     DD DISP=SHR,DSN=&BGLIB                                      00310002
//M4WORK    DD DISP=(,CATLG,DELETE),DSN=&NAMEBG,                        00320000
//             UNIT=&UNIT,VOL=SER=&VOLSER,LABEL=(&BGFILNO,SL)           00330000
//BACKFG  EXEC PGM=DFSRRC00,PARM=(DLI,INFORMUD,&PSB),REGION=1200K       00340004
//STEPLIB   DD DISP=SHR,DSN=&LOADLIB                                    00350000
//          DD DISP=SHR,DSN=&RESLIB                                     00360000
//INFPRINT  DD SYSOUT=*                                                 00370000
//INFORMLF  DD DISP=OLD,DSN=&FGLIB                                      00380000
//INBACKUP  DD DISP=(NEW,KEEP),DSN=&NAMEFG,UNIT=&UNIT,VOL=SER=&VOLSER,  00390000
//             LABEL=(&FGFILNO,SL)                                      00400000
//IMS       DD DISP=SHR,DSN=&PSBLIB                                     00410002
//          DD DISP=SHR,DSN=&DBDLIB                                     00420002
//DFSRESLB  DD DISP=SHR,DSN=&RESLIB                                     00430002
//IEFRDER   DD DUMMY                                                    00440000
//        PEND                                                          00450000
//********************************************************************* 00460000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THE PROCEDURE. BEFORE     *  00470000
//* YOU RUN THIS PROCEDURE, SPECIFY:                                 *  00480000
//*                                                                  *  00490000
//* FGLIB    - THE FOREGROUND LIBRARY DATA SET NAME.                 *  00500001
//* BGLIB    - THE BACKGROUND LIBRARY DATA SET NAME.                 *  00510001
//* LOADLIB  - THE INSTALLATION LOAD LIBRARY DATA SET NAME.          *  00520001
//* PSB      - THE UTILITY PSBNAME. DEFAULT IS INFUTIL.              *  00530001
//* RESLIB   - THE IMS RESLIB. THE DEFAULT IS IMSVS.RESLIB.          *  00540000
//* PSBLIB   - THE PSB LIBRARY.                                      *  00550000
//* DBDLIB   - THE DBD LIBRARY.                                      *  00560000
//* NAMEFG   - NAME OF THE FOREGROUND LIBRARY BACKUP DATA SET.       *  00570000
//* FGFILNO  - THE NUMBER OF THE TAPE FILE TO CONTAIN THE BACKUP OF  *  00580000
//*            THE FOREGROUND LIBRARY.  THE DEFAULT IS 2.            *  00590000
//* NAMEBG   - NAME OF THE BACKGROUND LIBRARY BACKUP DATA SET.       *  00600000
```

```
//* BGFILNO  - THE NUMBER OF THE TAPE FILE TO CONTAIN THE BACKUP OF  *  00610000
//*            THE BACKGROUND LIBRARY.  THE DEFAULT IS 1.            *  00620000
//* UNIT     - THE UNIT OF THE BACKUP FILE. THE DEFAULT IS TAPE.     *  00630000
//* VOLSER   - THE VOLUME SERIAL NUMBER OF THE BACKUP FILE.          *  00640000
//*                                                                  *  00650000
//* *** NOTE *** DO NOT ALTER THE BACKBG.M4INPUT STATEMENT.          *  00660004
//******************************************************************  00670000
//BACKUP  EXEC LBBACKUP,                                               00680000
//             FGLIB='INFORM.FGLIB',                                   00690000
//             BGLIB='INFORM.BGLIB',                                   00700000
//             LOADLIB='INFORM.LOADLIB',                               00710000
//             PSB=INFUTIL,                                            00720000
//             RESLIB='IMSVS.RESLIB',                                  00730000
//             PSBLIB='INFORM.PSBLIB',                                 00740000
//             DBDLIB='INFORM.DBDLIB',                                 00750000
//             NAMEFG='INFORM.BACKUP.FGLIB',                           00760000
//             FGFILNO=2,                                              00770000
//             NAMEBG='INFORM.BACKUP.BGLIB',                           00780000
//             BGFILNO=1,                                              00790000
//             UNIT=TAPE,                                              00800000
//             VOLSER=XXXXXX                                           00810000
//VER.SYSIN DD *                                                       00820000
         VERIFY FILE(FGLIB)                                          00830000
         VERIFY FILE(BGLIB)                                          00840000
//BACKBG.M4INPUT DD *                                                00850004
        UCDUMP                                                       00860000
//BACKFG.DFSVSAMP DD *                                               00870004
8192,6                                                               00880000
```

Figure 173. LBBACKUP — JCL to Back Up the Foreground and Background Libraries

LBRESTOR

```
//* MEMBER LBRESTOR                                                     00010001
//*********************************************************************** 00020001
//* THIS PROCEDURE RESTORES THE FOREGROUND AND BACKGROUND LIBRARIES   * 00030001
//* FROM BACKUP DATASETS CREATED BY THE LBBACKUP JOB.  THIS JOB       * 00040001
//* ASSUMES THAT THE BACKUP FILES ARE ON TAPE, BUT MAY BE MODIFIED TO * 00050001
//* ACCEPT BACKUP FILES STORED ON DISK.                               * 00060001
//*                                                                   * 00070001
//* IF THE DDNAME OF THE FOREGROUND LIBRARY HAS BEEN CHANGED IN THE   * 00080001
//* DBD FROM THE INSTALLATION DEFAULT OF "INFORMLF", THEN CHANGE THE  * 00090001
//* APPROPRIATE DDNAME IN THE "RESTFG" STEP OF THIS PROC TO MATCH.    * 00100001
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00100104
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00100204
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00100304
//*               CONCATENATED TO THE RESTBG.STEPLIB DD STATEMENT.    * 00101004
//*********************************************************************** 00110001
//LBRESTOR PROC FGLIB=,                                                 00120001
//             BGLIB=,                                                  00130001
//             LOADLIB=,                                                00140001
//             PSB=,                                                    00150001
//             RESLIB=,                                                 00160001
//             PSBLIB=,                                                 00170001
//             DBDLIB=,                                                 00180001
//             NAMEFG=,                                                 00190001
//             FGFILNO=,                                                00200001
//             NAMEBG=,                                                 00210001
//             BGFILNO=,                                                00220001
//             UNIT=,                                                   00230001
//             VOLSER=                                                  00240001
//DEFBG   EXEC PGM=IDCAMS,REGION=1200K                                  00250001
//SYSPRINT  DD SYSOUT=*                                                 00260001
//RESTBG  EXEC PGM=MARKUTIL,REGION=1200K                                00270001
//STEPLIB   DD DISP=SHR,DSN=&LOADLIB                                    00280001
//M4LIB     DD DISP=OLD,DSN=&BGLIB                                      00290001
//M4LIST    DD SYSOUT=*                                                 00300001
//M4WORK    DD DISP=OLD,DSN=&NAMEBG,LABEL=(&BGFILNO,SL),                00310003
//             UNIT=&UNIT,VOL=SER=&VOLSER                               00320001
//DEFFG   EXEC PGM=IDCAMS,REGION=1200K                                  00330001
//SYSPRINT  DD SYSOUT=*                                                 00340001
//RESTFG  EXEC PGM=DFSRRC00,PARM=(DLI,INFORMUR,&PSB),REGION=1200K       00350001
//STEPLIB   DD DISP=SHR,DSN=&LOADLIB                                    00360001
//          DD DISP=SHR,DSN=&RESLIB                                     00370001
//INFPRINT  DD SYSOUT=*                                                 00380001
//INFORMLF  DD DISP=OLD,DSN=&FGLIB                                      00390001
//INBACKUP  DD DISP=OLD,DSN=&NAMEFG,UNIT=&UNIT,VOL=SER=&VOLSER,         00400001
//             LABEL=(&FGFILNO,SL)                                      00410001
//IMS       DD DISP=SHR,DSN=&PSBLIB                                     00420001
//          DD DISP=SHR,DSN=&DBDLIB                                     00430001
//DFSRESLB  DD DISP=SHR,DSN=&RESLIB                                     00440001
//IEFRDER   DD DUMMY                                                    00450001
//        PEND                                                          00460001
//*********************************************************************** 00470001
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THE PROCEDURE. BEFORE     *  00480001
//* YOU RUN THIS PROCEDURE, SPECIFY:                                 *  00490001
//*                                                                  *  00500001
//* FGLIB    - THE FOREGROUND LIBRARY DATA SET NAME.                 *  00510002
//* BGLIB    - THE BACKGROUND LIBRARY DATA SET NAME.                 *  00520002
//* LOADLIB  - THE INSTALLATION LOAD LIBRARY DATA SET NAME.          *  00530002
//* PSB      - THE INIT PSBNAME. DEFAULT IS INFINIT.                 *  00540002
//* RESLIB   - THE IMS RESLIB. THE DEFAULT IS IMSVS.RESLIB.          *  00550001
//* PSBLIB   - THE PSB LIBRARY.                                      *  00560001
//* DBDLIB   - THE DBD LIBRARY.                                      *  00570001
//* NAMEFG   - NAME OF THE BACKUP FILE FOR THE FOREGROUND LIBRARY.   *  00580001
//* FGFILNO  - THE NUMBER OF THE TAPE FILE CONTAINING THE FOREGROUND *  00590001
//*            LIBRARY BACKUP DATA.  DEFAULT = 2.                    *  00600001
```

```
//* NAMEBG   - NAME OF THE BACKUP FILE FOR THE BACKGROUND LIBRARY.   *  00610001
//* BGFILNO  - THE NUMBER OF THE TAPE FILE CONTAINING THE BACKGROUND *  00620001
//*            LIBRARY BACKUP DATA.  DEFAULT = 1.                    *  00630001
//* UNIT     - THE UNIT OF THE BACKUP FILE. THE DEFAULT IS TAPE.     *  00640001
//* VOLSER   - THE VOLUME SERIAL NUMBER OF THE BACKUP FILE.          *  00650001
//*                                                                  *  00660001
//*   CHANGE THE DEFFG.SYSIN SPECIFICATION AS YOU DID FOR THE        *  00670001
//*   INIT PROCEDURE.                                                *  00680001
//*                   NAME('INFORM.FGLIB')                           *  00690001
//*                   NAME('INFORM.FGLIB.DATA')                      *  00700001
//*                   VOL('USERDVOL')                                *  00710001
//*                   OWNER('USER')                                  *  00720001
//*                                                                  *  00730001
//* CHANGE THE DEFBG.SYSIN SPECIFICATIONS:                           *  00740001
//*                                                                  *  00750001
//*                   NAME('INFORM.BGLIB')                           *  00760001
//*                   VOL('USERDVOL')                                *  00770001
//*                   OWNER('USER')                                  *  00780001
//*                   NAME('INFORM.BGLIB.DATA')                      *  00790001
//*                                                                  *  00800001
//*   REFER TO THE IBM ACCESS METHOD SERVICES MANUAL FOR MORE        *  00810001
//*   INFORMATION.                                                   *  00820001
//******************************************************************  00830001
//* **** NOTE **** DO NOT ALTER THE RESTBG.M4INPUT STATEMENT.        *  00840001
//******************************************************************  00850001
//RESTORE EXEC LBRESTOR,                                               00860001
//             FGLIB='INFORM.FGLIB',                                   00870001
//             BGLIB='INFORM.BGLIB',                                   00880001
//             LOADLIB='INFORM.LOADLIB',                               00890001
//             PSB=INFINIT,                                            00900001
//             RESLIB='IMSVS.RESLIB',                                  00910001
//             PSBLIB='INFORM.PSBLIB',                                 00920001
//             DBDLIB='INFORM.DBDLIB',                                 00930001
//             NAMEFG='INFORM.BACKUP.FGLIB',                           00940001
//             FGFILNO=2,                                              00950001
//             NAMEBG='INFORM.BACKUP.BGLIB',                           00960001
//             BGFILNO=1,                                              00970001
//             UNIT=TAPE,                                              00980001
//             VOLSER=XXXXXX                                           00990001
//DEFBG.SYSIN DD *                                                     01000001
       DELETE 'INFORM.BGLIB' CLUSTER PURGE                           01010001
       DEFINE CLUSTER -                                              01020001
                (NAME('INFORM.BGLIB') -                              01030001
                VOL('USERDVOL') -                                    01040001
                CYL(1 1) -                                           01050001
                SHAREOPTIONS(3 3) -                                  01060001
                CONTROLINTERVALSIZE(4096) -                          01070001
                NUMBERED WRITECHECK -                                01080001
                RECORDSIZE(507 507) -                                01090001
                OWNER('USER')) -                                     01100001
              DATA(NAME('INFORM.BGLIB.DATA'))                        01110001
//RESTBG.M4INPUT DD *                                                01120001
        UCREST                                                       01130001
//DEFFG.SYSIN DD *                                                   01140001
      DELETE 'INFORM.FGLIB' CLUSTER PURGE                            01150001
      DEFINE CLUSTER -                                               01160001
                (NAME('INFORM.FGLIB') -                              01170001
                VOL('USERDVOL') -                                    01180001
                RECORDS(387) -                                       01190001
                CONTROLINTERVALSIZE(4096) -                          01200001
                RECORDSIZE(4089 4089) -                              01210001
                SHAREOPTIONS(3 3) -                                  01220001
                NONINDEXED ERASE -                                   01230001
                OWNER('USER')) -                                     01240001
              DATA(NAME('INFORM.FGLIB.DATA'))                        01250001
//RESTFG.DFSVSAMP DD *                                               01260001
```

```
8192,6                                                          01270001
```

Figure 174. LBRESTOR — JCL to Restore the Foreground and Background Libraries

LIBCOPY

```
//* MEMBER LIBCOPY
//*********************************************************************
//* THIS PROCEDURE COPIES FOREGROUND LIBRARY ITEMS OF TYPE QUERY OR   *
//* STMTS FROM ONE FOREGROUND LIBRARY TO ANOTHER.                     *
//* IF THE DD NAME FOR THE FOREGROUND LIBRARY WAS CHANGED IN THE      *
//* DBD, MAKE SURE IT MATCHES THE ONE HERE.                           *
//* *** NOTE *** THIS JOB IS SET UP TO RUN IN A DLI BATCH REGION.     *
//*********************************************************************
//LBCOPY PROC FROMLIB=,
//            TOLIB=,
//            FRMLOAD=,
//            TOLOAD=,
//            KOND=,
//            RESLIB=,
//            PSB=,
//            PSBLIB=,
//            DBDLIB=,
//            RGN=
//VER    EXEC PGM=IDCAMS,REGION=&RGN
//TOLIB    DD DISP=OLD,DSN=&TOLIB
//FROMLIB  DD DISP=OLD,DSN=&FROMLIB
//SYSPRINT DD SYSOUT=*
//FROM   EXEC PGM=DFSRRC00,REGION=&RGN,PARM='DLI,INFORMUX,&PSB'
//STEPLIB  DD DISP=SHR,DSN=&FRMLOAD
//         DD DISP=SHR,DSN=&RESLIB
//IMS      DD DISP=SHR,DSN=&PSBLIB
//         DD DISP=SHR,DSN=&DBDLIB
//IEFRDER  DD DUMMY
//DFSRESLB DD DISP=SHR,DSN=&RESLIB
//INFPRINT DD SYSOUT=*
//INFORMLF DD DISP=OLD,DSN=&FROMLIB
//INBACKUP DD DISP=(NEW,PASS),DSN=&&COPY,UNIT=SYSDA,
//            SPACE=(TRK,(20,20))
//TO     EXEC PGM=DFSRRC00,REGION=&RGN,PARM='DLI,INFORMUY,&PSB',
//            COND=&KOND
//STEPLIB  DD DISP=SHR,DSN=&TOLOAD
//         DD DISP=SHR,DSN=&RESLIB
//IMS      DD DISP=SHR,DSN=&PSBLIB
//         DD DISP=SHR,DSN=&DBDLIB
//IEFRDER  DD DUMMY
//DFSRESLB DD DISP=SHR,DSN=&RESLIB
//INFPRINT DD SYSOUT=*
//INFORMLF DD DISP=OLD,DSN=&TOLIB
//INBACKUP DD DISP=(OLD,PASS),DSN=&&COPY
//       PEND
//*********************************************************************
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           *
//* BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                          *
//*                                                                  *
//* FROMLIB  - THE SOURCE INFORM FOREGROUND LIBRARY.                 *
//* TOLIB    - THE TARGET INFORM FOREGROUND LIBRARY.                 *
//* FRMLOAD  - THE SOURCE INFORM INSTALLATION LOAD LIBRARY.          *
//* TOLOAD   - THE TARGET INFORM INSTALLATION LOAD LIBRARY.          *
//* KOND     - CONDITION CODE FOR EXECUTION OF "TO" STEP. THE        *
//*            DEFAULT IS (0,NE).                                    *
//* RESLIB   - THE NAME OF THE IMS RESLIB. DEFAULT IS IMSVS.RESLIB.  *
//* PSB      - THE UTILITY PSBNAME.  THE DEFAULT IS INFUTIL.         *
//* PSBLIB   - THE USER'S PSB LIBRARY NAME.                          *
//* DBDLIB   - THE USER'S DBD LIBRARY NAME.
//* RGN      - REGION SIZE. DEFAULT IS 2M.                           *
//*                                                                  *
//* YOU MUST ALSO SPECIFY THE ITEMS TO BE COPIED, THE NAMES TO BE    *
//* USED IN THE TARGET FOREGROUND LIBRARY, AND OPTIONALLY SPECIFY    *
//* THE REPLACE OPTION, AFTER THE "FROM.INFIN" DD STATEMENT.         *
```

```
//*********************************************************************
//COPY    EXEC LBCOPY,
//             FROMLIB='INFORM.TEST.FGLIB',
//             TOLIB='INFORM.PROD.FGLIB',
//             FRMLOAD='INFORM.TEST.LOADLIB',
//             TOLOAD='INFORM.PROD.LOADLIB',
//             KOND='(0,NE)',
//             RESLIB='IMSVS.RESLIB',
//             PSB=INFUTIL,
//             PSBLIB='INFORM.PSBLIB',
//             DBDLIB='INFORM.DBDLIB',
//             RGN=2M
//VER.SYSIN DD *
         VERIFY FILE(FROMLIB)
         VERIFY FILE(TOLIB)
//FROM.INFIN DD *
  COPY name type userid TO name type userid
  COPY name type userid TO name type userid REPLACE
//FROM.DFSVSAMP DD *
8192,6
//TO.DFSVSAMP DD *
8192,6
```

Figure 175. LIBCOPY — JCL to Copy Items of Type QUERY or STMTS from One Foreground Library to Another Foreground Library

LINKLIB

```
//* MEMBER LINKLIB                                                        00010000
//*********************************************************************  00020000
//* LINK LIBRARIAN INTERFACE MODULES WITH COBOL QUICK START UTILITY. *  00030000
//*********************************************************************  00040000
//LINKL   PROC LOADLIB=,                                                 00050000
//           LIBLOAD=                                                    00060001
//LINKL  EXEC PGM=IEWL,REGION=512K,PARM='LIST,MAP,LET,XREF,NCAL'         00070001
//SYSLIB   DD DISP=SHR,DSN=&LIBLOAD                                      00080004
//SYSPRINT DD SYSOUT=*                                                   00090001
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                               00100001
//LIBSYS   DD DISP=SHR,DSN=&LIBLOAD                                      00110001
//LLIB     DD DISP=SHR,DSN=&LOADLIB                                      00120001
//SYSLMOD  DD DISP=SHR,DSN=&LOADLIB                                      00130001
//       PEND                                                            00140001
//*********************************************************************  00150000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.          *  00160001
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                         *  00170001
//*                                                                  *  00180000
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.               *  00190001
//*    LIBLOAD - THE LIBRARIAN SYSTEM LOAD LIBRARY.                  *  00200000
//*********************************************************************  00210000
//LINK   EXEC LINKL,                                                     00220000
//           LOADLIB='INFORM.LOADLIB',                                   00230001
//           LIBLOAD='LBRARIAN.SYSTEM.LOADLIB'                           00240000
//LINKL.SYSLIN DD *                                                      00250000
  INCLUDE LIBSYS(FAIRCLS)                                              00260002
  INCLUDE LIBSYS(FAIROPN)                                              00270002
  INCLUDE LIBSYS(FAIRREC)                                              00280002
  INCLUDE LIBSYS(FAIRMOD)                                              00290002
  INCLUDE LIBSYS(FAIRERR)                                              00300002
  INCLUDE LIBSYS(FAIRLOC)                                              00310002
  INCLUDE LIBSYS(FAIRNTE)                                              00320002
  INCLUDE LIBSYS(FAIRPNT)                                              00330002
  INCLUDE LIBSYS(FAIRSEC)                                              00350002
  INCLUDE LLIB(COMLIBL)                                                00360002
    ENTRY COMLIBL                                                      00370002
    NAME COMLIBL(R)                                                    00380002
```

Figure 176. LINKLIB — JCL to Link Edit the CA-Librarian Interface Modules with the COBOL Quick Start Utility

LINKLIBR

```
//* MEMBER LINKLIBR                                                      00010000
//*********************************************************************  00020000
//* LINK LIBRARIAN INTERFACE MODULES WITH RESULTS QUICK START.       *  00030000
//*********************************************************************  00040000
//LBLNK  PROC LOADLIB=,                                                  00050000
//            LIBLOAD=                                                   00060000
//LINK   EXEC PGM=IEWL,REGION=1M,PARM='LIST,MAP,LET,NCAL'                00070000
//SYSLIB   DD DISP=SHR,DSN=&LIBLOAD                                      00080002
//SYSPRINT DD SYSOUT=*                                                   00090000
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                               00100000
//LIBSYS   DD DISP=SHR,DSN=&LIBLOAD                                      00110000
//SYSLMOD  DD DISP=SHR,DSN=&LOADLIB                                      00120000
//       PEND                                                            00130000
//*********************************************************************  00140000
//* BEFORE SUBMITTING THIS JCL, YOU MUST SPECIFY THE FOLLOWING       *  00150000
//* INFORMATION:                                                     *  00160000
//*                                                                  *  00170000
//*   LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                *  00180000
//*   LIBLOAD - THE CA-LIBRARIAN SYSTEM LOAD LIBRARY.                *  00190000
//*********************************************************************  00200000
//LIBLINK EXEC LBLNK,                                                    00210000
//             LOADLIB='INFORM.LOADLIB',                                 00220000
//             LIBLOAD='LIBRARN.SYSTEM.LOADLIB'                          00230000
//LINK.SYSLIN  DD *                                                      00240000
  INCLUDE LIBSYS(FAIRCLS)                                               00250000
  INCLUDE LIBSYS(FAIROPN)                                               00260000
  INCLUDE LIBSYS(FAIRREC)                                               00270000
  INCLUDE LIBSYS(FAIRMOD)                                               00280000
  INCLUDE LIBSYS(FAIRERR)                                               00290000
  INCLUDE LIBSYS(FAIRLOC)                                               00300000
  INCLUDE LIBSYS(FAIRNTE)                                               00310000
  INCLUDE LIBSYS(FAIRPNT)                                               00320000
  INCLUDE LIBSYS(FAIRSEC)                                               00340000
  INCLUDE SYSLMOD(DYL280LX)                                             00350000
    ENTRY DYL280L                                                       00360000
    NAME DYL280L(R)                                                     00370000
```

Figure 177. LINKLIBR — JCL to Link Edit the CA-Librarian Interface with the VISION:Results Quick Start Utility

LINKPAN

```
//* MEMBER LINKPAN                                                        00010000
//*********************************************************************  00020000
//* LINK PANVALET INTERFACE MODULES WITH COBOL QUICK START UTILITY.  *  00030000
//*********************************************************************  00040000
//LINKP   PROC LOADLIB=,                                                 00050000
//            PANLOAD=                                                   00060001
//LINKP  EXEC PGM=IEWL,REGION=512K,PARM='LIST,MAP,LET,XREF,NCAL'         00070001
//SYSLIB   DD DISP=SHR,DSN=&PANLOAD                                      00080004
//SYSPRINT DD SYSOUT=*                                                   00090001
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                               00100001
//LIBSYS   DD DISP=SHR,DSN=&PANLOAD                                      00110001
//LLIB     DD DISP=SHR,DSN=&LOADLIB                                      00120001
//SYSLMOD  DD DISP=SHR,DSN=&LOADLIB                                      00130001
//       PEND                                                            00140001
//*********************************************************************  00150000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.          *  00160001
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                         *  00170001
//*                                                                  *  00180000
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.               *  00190001
//*    PANLOAD - THE PANVALET SYSTEM LOAD LIBRARY.                   *  00200000
//*********************************************************************  00210000
//LINK   EXEC LINKP,                                                     00220000
//            LOADLIB='INFORM.LOADLIB',                                  00230001
//            PANLOAD='PANVALET.SYSTEM.LOADLIB'                          00240000
//LINKP.SYSLIN DD *                                                      00250000
  INCLUDE LIBSYS(PAM)                                                    00260000
  INCLUDE LLIB(COMLIBP)                                                  00270002
    ENTRY COMLIBP                                                        00280002
    NAME COMLIBP(R)                                                      00290003
```

Figure 178. LINKPAN — JCL to Link edit the CA-Panvalet Interface Modules with the COBOL Quick Start Utility

LINKPANR

```
//* MEMBER LINKPANR                                                      00010000
//*********************************************************************  00020000
//* LINK PANVALET INTERFACE MODULES WITH RESULTS QUICK START.        *  00030000
//*********************************************************************  00040000
//PNLNK  PROC LOADLIB=,                                                  00050000
//            PANLOAD=                                                   00060000
//LINK   EXEC PGM=IEWL,REGION=1M,PARM='LIST,MAP,LET,NCAL'                00070000
//SYSLIB   DD DISP=SHR,DSN=&PANLOAD                                      00080001
//SYSPRINT DD SYSOUT=*                                                   00090000
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                               00100000
//LIBSYS   DD DISP=SHR,DSN=&PANLOAD                                      00110000
//SYSLMOD  DD DISP=SHR,DSN=&LOADLIB                                      00120000
//       PEND                                                            00130000
//*********************************************************************  00140000
//* BEFORE SUBMITTING THIS JCL, YOU MUST SPECIFY THE FOLLOWING       *  00150000
//* INFORMATION:                                                     *  00160000
//*                                                                  *  00170000
//*   LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                *  00180000
//*   PANLOAD - THE CA-PANVALET SYSTEM LOAD LIBRARY.                 *  00190000
//*********************************************************************  00200000
//PANLINK EXEC PNLNK,                                                    00210000
//             LOADLIB='INFORM.LOADLIB',                                 00220000
//             PANLOAD='PANVALET.SYSTEM.LOADLIB'                         00230000
//LINK.SYSLIN  DD *                                                      00240000
  INCLUDE LIBSYS(PAM)                                                    00250000
  INCLUDE SYSLMOD(DYL280PX)                                              00260000
  ENTRY DYL280P                                                          00270000
  NAME DYL280P(R)                                                        00280000
```

Figure 179. LINKPANR — JCL to Link Edit the CA-Panvalet Interface with the VISION:Results Quick Start Utility

LSXASMLK

```
//* MEMBER LSXASMLK                                                      00010000
//*********************************************************************** 00020000
//* PROCEDURE TO ASSEMBLE/LINK A USER-WRITTEN INFREPT EXIT ROUTINE.   * 00030000
//*********************************************************************** 00040000
//LSXASMLK PROC SRCLIB=,                                                 00050000
//            MACLIB=,                                                   00060000
//            LOADLIB=                                                   00070000
//ASSEM  EXEC PGM=ASMA90,PARM='NODECK,OBJECT,LIST',REGION=2M             00080001
//SYSLIB   DD DISP=SHR,DSN=&MACLIB                                       00090000
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                               00100000
//SYSPRINT DD SYSOUT=*                                                   00110000
//SYSLIN   DD DISP=(,PASS),DSN=&&M4EXIT,UNIT=SYSDA,SPACE=(TRK,(1,1))    00120000
//SYSIN    DD DISP=SHR,DSN=&SRCLIB(LSTEXITR)                             00130000
//LKED   EXEC PGM=HEWL,REGION=2M,COND=(0,NE),                            00140001
//            PARM='RENT,XREF,LET,LIST,NCAL,SIZE=(200K,56K)'             00150000
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(3,2))                               00160000
//LSTEXITR DD DISP=(OLD,DELETE),DSN=&&M4EXIT                             00170000
//SYSLMOD  DD DISP=SHR,DSN=&LOADLIB                                      00180000
//SYSPRINT DD SYSOUT=*                                                   00190000
//       PEND                                                            00200000
//*********************************************************************** 00210000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00220000
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                          * 00230000
//*                                                                   * 00240000
//*  SRCLIB  - THE INFORM SOURCE LIBRARY NAME.                        * 00250000
//*  MACLIB  - THE INFORM MACRO LIBRARY NAME.                         * 00260000
//*  LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY NAME.             * 00270000
//*********************************************************************** 00280000
//LSXASMLK EXEC LSXASMLK,                                                00290000
//             SRCLIB='INFORM.SRCLIB',                                   00300000
//             MACLIB='INFORM.MACLIB',                                   00310000
//             LOADLIB='INFORM.LOADLIB'                                  00320000
//LKED.SYSLIN DD *                                                       00330000
 INCLUDE LSTEXITR                                                       00340000
 NAME    INFORMMX(R)                                                    00350000
```

Figure 180. LSXASMLK — JCL to Assemble and Link a User Written INFREPT Exit Routine

M4PASMLK

```
//* MEMBER M4PASMLK                                                      00010000
//*********************************************************************** 00020000
//* THIS PROCEDURE ASSEMBLES AND LINKS THE INSTALLATION-DEPENDENT     * 00030000
//* BACKGROUND PROCESSOR PARAMETER MODULE, M4PARAMS.                  * 00040000
//*********************************************************************** 00050000
//M4PASMLK PROC LOADLIB=,                                               00060000
//              SRCLIB=                                                 00070000
//ASSEM  EXEC PGM=ASMA90,PARM='NODECK,OBJECT,LIST',REGION=2M            00080001
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                              00090000
//SYSPRINT DD SYSOUT=*                                                  00100000
//SYSLIN   DD DSN=&&M4PARM,DISP=(,PASS),UNIT=SYSDA,SPACE=(TRK,(1,1))    00110000
//SYSIN    DD DISP=SHR,DSN=&SRCLIB(M4PARAMS)                            00120000
//LKED1  EXEC PGM=HEWL,PARM='RENT,LET,LIST,NCAL,XREF',COND=(0,NE),      00130000
//            REGION=2M                                                 00140001
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                              00150000
//M4PARAMS DD DISP=(OLD,PASS),DSN=&&M4PARM                              00160000
//SYSLMOD  DD DISP=OLD,DSN=&LOADLIB                                     00170000
//SYSPRINT DD SYSOUT=*                                                  00180000
//LKED2  EXEC PGM=HEWL,PARM='RENT,LET,LIST,NCAL,XREF',COND=(0,NE),      00190000
//            REGION=2M                                                 00200001
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                              00210000
//M4PARAMS DD DISP=(OLD,DELETE),DSN=&&M4PARM                            00220000
//SYSLMOD  DD DISP=OLD,DSN=&LOADLIB                                     00230000
//SYSPRINT DD SYSOUT=*                                                  00240000
//       PEND                                                           00250000
//*********************************************************************** 00260000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00270000
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                          * 00280000
//*                                                                   * 00290000
//*  LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                  * 00300000
//*  SRCLIB  - SOURCE LIBRARY CONTAINING THE MODIFIED M4PARAMS SOURCE.* 00310000
//*********************************************************************** 00320000
//M4PLINK EXEC M4PASMLK,                                                00330000
//            LOADLIB='INFORM.LOADLIB',                                 00340000
//            SRCLIB='INFORM.SRCLIB'                                    00350000
//LKED1.SYSLIN DD *                                                     00360000
 INCLUDE M4PARAMS                                                       00370000
 NAME    INFORMMP(R)                                                    00380000
//LKED2.SYSLIN DD *                                                     00390000
 INCLUDE M4PARAMS                                                       00400000
 NAME    M4PARAMS(R)                                                    00410000
```

Figure 181. M4PASMLK — JCL to Assemble and Link the Background Processor Parameter Module M4PARAMS

MERGDEF

```
//* MEMBER MERGDEF                                                      00010000
//*********************************************************************** 00020000
//* THIS PROCEDURE DOES THE INITIAL CONVERSION OF DEFINITIONS FROM    * 00030000
//* THE BACKGROUND LIBRARY TO THE FOREGROUND LIBRARY.  WHEN RUN, ALL  * 00040000
//* FILE DEFINITIONS AND LOGICAL DATAVIEWS IN THE FOREGROUND LIBRARY  * 00050000
//* ARE DELETED, AND THEN ALL FILE DEFINITIONS AND LOGICAL DATAVIEWS  * 00060000
//* ARE COPIED FROM THE SPECIFIED BACKGROUND LIBRARY TO THE           * 00070000
//* FOREGROUND LIBRARY.                                               * 00080000
//*                                                                   * 00090000
//* IF THE FOREGROUND LIBRARY DD NAME WAS CHANGED FROM THE            * 00100000
//* INSTALLATION DEFAULT OF 'INFORMLF', MAKE THE APPROPRIATE DD NAME  * 00110000
//* CHANGE TO THE 'COPY' STEP OF THIS PROCEDURE.                      * 00120000
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00120102
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00120202
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00120302
//*               CONCATENATED TO THE DUMP.STEPLIB DD STATEMENT.      * 00121002
//*********************************************************************** 00130000
//MERGDEF PROC FGLIB=,                                                  00140000
//             BGLIB=,                                                  00150000
//             LOADLIB=,                                                00160000
//             UTILPSB=,                                                00170000
//             RESLIB=,                                                 00180000
//             PSBLIB=,                                                 00190000
//             DBDLIB=                                                  00200000
//VERIFY EXEC PGM=IDCAMS,REGION=2M                                      00210000
//SYSPRINT DD SYSOUT=*                                                  00220000
//INFORMLF DD DISP=OLD,DSN=&FGLIB                                       00230000
//BGLIB    DD DISP=OLD,DSN=&BGLIB                                       00240000
//DUMP   EXEC PGM=MARKUTIL,REGION=2M                                    00250000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00260000
//M4LIST   DD SYSOUT=*                                                  00270000
//M4LIB    DD DISP=SHR,DSN=&BGLIB                                       00280000
//M4WORK   DD DISP=(NEW,PASS),UNIT=SYSDA,SPACE=(TRK,(10,5)),            00290000
//            DSN=&&WORK1                                               00300000
//COPY   EXEC PGM=DFSRRC00,PARM=(DLI,INFORMUC,&UTILPSB),REGION=2M       00310000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00320001
//         DD DISP=SHR,DSN=&RESLIB                                      00330001
//IMS      DD DISP=SHR,DSN=&PSBLIB                                      00340001
//         DD DISP=SHR,DSN=&DBDLIB                                      00350001
//DFSRESLB DD DISP=SHR,DSN=&RESLIB                                      00360001
//IEFRDER  DD DUMMY                                                     00370000
//M4WORK   DD DISP=(OLD,DELETE,DELETE),DSN=&&WORK1                      00380000
//INFORMLF DD DISP=OLD,DSN=&FGLIB                                       00390000
//INFPRINT DD SYSOUT=*                                                  00400000
//       PEND                                                           00410000
//*********************************************************************** 00420000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00430000
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                          * 00440000
//*                                                                   * 00450000
//*  FGLIB   - THE INFORM FOREGROUND LIBRARY.                         * 00460000
//*  BGLIB   - THE INFORM BACKGROUND LIBRARY.                         * 00470000
//*  LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                  * 00480000
//*  UTILPSB - THE INFORM UTILITY PSBNAME. DEFAULT IS INFUTIL.        * 00490000
//*  RESLIB  - IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.              * 00500000
//*  PSBLIB  - THE PSB LIBRARY.                                       * 00510000
//*  DBDLIB  - THE DBD LIBRARY.                                       * 00520000
//*                                                                   * 00530000
//*  *** NOTE *** DO NOT CHANGE THE VERIFY.SYSIN STATEMENT            * 00540000
//*                           OR THE DUMP.M4INPUT STATEMENT           * 00550000
//*                           OR THE COPY.INFIN STATEMENT BELOW.      * 00560000
//*********************************************************************** 00570000
//MERGE   EXEC MERGDEF,                                                 00580000
//             FGLIB='INFORM.FGLIB',                                    00590000
//             BGLIB='INFORM.BGLIB',                                    00600000
```

```
//             LOADLIB='INFORM.LOADLIB',                          00610000
//             UTILPSB=INFUTIL,                                   00620000
//             RESLIB='IMSVS.RESLIB',                             00630000
//             PSBLIB='INFORM.PSBLIB',                            00640000
//             DBDLIB='INFORM.DBDLIB'                             00650000
//VERIFY.SYSIN DD *                                               00660000
         VERIFY FILE(INFORMLF)                                   00670000
         VERIFY FILE(BGLIB)                                      00680000
//DUMP.M4INPUT DD *                                               00690000
        UCDUMP                                                   00700000
//COPY.INFIN   DD *                                               00710000
$PROMOTE ALL                                                     00720000
//COPY.DFSVSAMP DD *                                            00730000
8192,6                                                           00740000
```

Figure 182. MERGDEF — JCL to Convert and Copy All the File and Logical Data View Definitions from the Background Library to the Foreground Library

MERGHLP

```
//* MEMBER MERGHLP
//*********************************************************************
//* EXECUTE THE FIELD DESCRIPTION MERGE UTILITY IN A BATCH DLI REGION.*
//*                                                                   *
//* IF YOU HAVE CHANGED THE FOREGROUND LIBRARY DDNAME FROM THE        *
//* INSTALLATION DEFAULT OF 'INFORMLF', MAKE THE APPROPRIATE DDNAME   *
//* CHANGE TO THE RETRIEVE STEP OF THE PROCEDURE.                     *
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  *
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    *
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  *
//*               CONCATENATED TO THE CONVERT.STEPLIB DD STATEMENT.   *
//*********************************************************************
//MERGHLP PROC SORTLIB=,
//             LOADLIB=,
//             UTLIB=,
//             FGLIB=,
//             SRCLIB=,
//             DEFLIB=,
//             RESLIB=,
//             OLDDEF=,
//             NEWDEF=,
//             PSB=,
//             PSBLIB=,
//             DBDLIB=
//RETRIEVE EXEC PGM=DFSRRC00,REGION=2M,PARM='DLI,INFORMSB,&PSB'
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB
//         DD DISP=SHR,DSN=&RESLIB
//IMS      DD DISP=SHR,DSN=&PSBLIB
//         DD DISP=SHR,DSN=&DBDLIB
//IEFRDER  DD DUMMY
//DFSRESLB DD DISP=SHR,DSN=&RESLIB
//INFORMLF DD DISP=SHR,DSN=&FGLIB
//INFLIST  DD SYSOUT=*
//INFREPT  DD DUMMY
//INFPRINT DD DISP=(NEW,PASS,DELETE),DSN=&&TEMP01,SPACE=(TRK,(10,10)),
//         DCB=(DSORG=PS,RECFM=FBA,LRECL=133,BLKSIZE=1330),UNIT=SYSDA
//INFIN    DD DUMMY
//*
//CONVERT EXEC PGM=MARKIV,REGION=2M,COND=(0,NE)
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//M4SORT   DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//M4REPO   DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//M4LIST   DD SYSOUT=*
//SYSOUT   DD DUMMY
//M4OLD    DD DISP=(OLD,DELETE,DELETE),DSN=&&TEMP01
//M4CORD1  DD DUMMY
//M4SUBF1  DD DISP=(NEW,PASS,DELETE),DSN=&&TEMP02,SPACE=(TRK,(10,10)),
//            DCB=(DSORG=PS,RECFM=FB,LRECL=80,BLKSIZE=3120),UNIT=SYSDA
//M4SUBF2  DD DUMMY
//M4SUBF3  DD DUMMY
//M4SUBF4  DD DUMMY
//M4SUBF5  DD DUMMY
//M4SUBF6  DD DUMMY
//M4SUBF7  DD DUMMY
//M4SUBF8  DD DUMMY
//M4SUBF9  DD DUMMY
//M4LIB    DD DISP=SHR,DSN=&UTLIB
//M4INPUT  DD DISP=SHR,DSN=&SRCLIB(MERGHLP)
//*
//MERGE  EXEC PGM=IEBGENER,COND=(4,LT),REGION=2M
```

```
//SYSPRINT DD SYSOUT=*
//SYSIN    DD DUMMY
//SYSUT1   DD DISP=SHR,DSN=&DEFLIB(&OLDDEF)
//         DD DISP=(OLD,DELETE,DELETE),DSN=&&TEMP02
//SYSUT2   DD DISP=OLD,DSN=&DEFLIB(&NEWDEF)
//       PEND
//*********************************************************************
//*  A SAMPLE EXECUTION OF THIS PROCEDURE FOLLOWS.  BEFORE YOU SUBMIT *
//*  THIS JCL SPECIFY:                                                *
//*                                                                   *
//*  SORTLIB - THE SYSTEM SORT LOAD LIBRARY. DEFAULT SYS1.SORTLIB.    *
//*  LOADLIB - THE INFORM LOAD LIBRARY.                               *
//*  UTLIB   - THE INFORM UTILITY LIBRARY.                            *
//*  FGLIB   - THE INFORM FOREGROUND LIBRARY.                         *
//*  SRCLIB  - THE INFORM SOURCE LIBRARY.                             *
//*  DEFLIB  - THE INFORM DEFINITION LIBRARY.                         *
//*  RESLIB  - IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.              *
//*  OLDDEF  - THE NAME OF THE EXISTING FILE DEFINITION.              *
//*  NEWDEF  - THE NAME OF THE NEW FILE DEF BEING CREATED.            *
//*  PSB     - THE INFORM BATCH SIMULATOR PSBNAME. THE                *
//*            DEFAULT IS INFOSB.                                     *
//*  PSBLIB  - THE PSB LIBRARY.                                       *
//*  DBDLIB  - THE DBD LIBRARY.                                       *
//*********************************************************************
//MERGE   EXEC MERGHLP,
//             SORTLIB='SYS1.SORTLIB',
//             LOADLIB='INFORM.LOADLIB',
//             UTLIB='INFORM.UTLIB',
//             FGLIB='INFORM.FGLIB',
//             SRCLIB='INFORM.SRCLIB',
//             DEFLIB='INFORM.DEFLIB',
//             RESLIB='IMSVS.RESLIB',
//             OLDDEF='OLDNAME',
//             NEWDEF='NEWNAME',
//             PSB=INFOSB,
//             PSBLIB='INFORM.PSBLIB',
//             DBDLIB='INFORM.DBDLIB'
//RETRIEVE.INFIN DD *
 LOGON USER PSWD
 LIST ITEM OLDNAME TYPE FDHELP
 QUIT
//RETRIEVE.DFSVSAMP DD *
8192,6
//CONVERT.M4CORD1 DD *
OLDNAME
```

Figure 183. MERGHLP — JCL to Run the Field Descriptions from Merge Utility in a Batch DLI Region

MERGHLP1

```
//* MEMBER MERGHLP1
//*********************************************************************
//* EXECUTE THE FIELD DESCRIPTION MERGE UTILITY IN A BMP REGION.      *
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  *
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    *
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  *
//*               CONCATENATED TO THE CONVERT.STEPLIB DD STATEMENT.   *
//*********************************************************************
//MERGHLP PROC SORTLIB=,
//             LOADLIB=,
//             UTLIB=,
//             SRCLIB=,
//             DEFLIB=,
//             RESLIB=,
//             OLDDEF=,
//             NEWDEF=,
//             PSB=,
//             PROG=,
//             TRAN=
//RETRIEVE EXEC PGM=DFSRRC00,REGION=2M,PARM='BMP,&PROG,&PSB,&TRAN'
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB
//         DD DISP=SHR,DSN=&RESLIB
//INFLIST  DD SYSOUT=*
//INFREPT  DD DUMMY
//INFPRINT DD DISP=(NEW,PASS,DELETE),DSN=&&TEMP01,SPACE=(TRK,(10,10)),
//         DCB=(DSORG=PS,RECFM=FBA,LRECL=133,BLKSIZE=1330),UNIT=SYSDA
//INFIN    DD DUMMY
//*
//CONVERT EXEC PGM=MARKIV,REGION=2M,COND=(0,NE)
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//M4SORT   DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//M4REPO   DD UNIT=SYSDA,SPACE=(CYL,(1,1))
//M4LIST   DD SYSOUT=*
//SYSOUT   DD DUMMY
//M4OLD    DD DISP=(OLD,DELETE,DELETE),DSN=&&TEMP01
//M4CORD1  DD DUMMY
//M4SUBF1  DD DISP=(NEW,PASS,DELETE),DSN=&&TEMP02,SPACE=(TRK,(10,10)),
//            DCB=(DSORG=PS,RECFM=FB,LRECL=80,BLKSIZE=3120),UNIT=SYSDA
//M4SUBF2  DD DUMMY
//M4SUBF3  DD DUMMY
//M4SUBF4  DD DUMMY
//M4SUBF5  DD DUMMY
//M4SUBF6  DD DUMMY
//M4SUBF7  DD DUMMY
//M4SUBF8  DD DUMMY
//M4SUBF9  DD DUMMY
//M4LIB    DD DISP=SHR,DSN=&UTLIB
//M4INPUT  DD DISP=SHR,DSN=&SRCLIB(MERGHLP)
//*
//MERGE  EXEC PGM=IEBGENER,COND=(4,LT),REGION=2M
//SYSPRINT DD SYSOUT=*
//SYSIN    DD DUMMY
//SYSUT1   DD DISP=SHR,DSN=&DEFLIB(&OLDDEF)
//         DD DISP=(OLD,DELETE,DELETE),DSN=&&TEMP02
//SYSUT2   DD DISP=OLD,DSN=&DEFLIB(&NEWDEF)
//       PEND
//*********************************************************************
//*  A SAMPLE EXECUTION OF THIS PROCEDURE FOLLOWS.  BEFORE YOU SUBMIT *
//*  THIS JCL SPECIFY:                                                *
//*                                                                   *
```

```
//*  SORTLIB - THE SYSTEM SORT LOAD LIBRARY. DEFAULT SYS1.SORTLIB.    *
//*  LOADLIB - THE INFORM LOAD LIBRARY.                               *
//*  UTLIB   - THE INFORM UTILITY LIBRARY.                            *
//*  SRCLIB  - THE INFORM SOURCE LIBRARY.                             *
//*  DEFLIB  - THE INFORM DEFINITION LIBRARY.                         *
//*  RESLIB  - IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.              *
//*  OLDDEF  - THE NAME OF THE EXISTING FILE DEFINITION.              *
//*  NEWDEF  - THE NAME OF THE NEW FILE DEFINITION BEING CREATED.     *
//*  PSB     - THE INFORM BATCH SIMULATOR PSBNAME. DEFAULT IS INFOSB. *
//*  PROG    - THE INFORM BATCH SIMULATOR PROGRAM NAME. THE DEFAULT   *
//*            IS INFORMDL.                                           *
//*  TRAN    - THE INFORM BATCH SIMULATOR TRANSACTION ID. THE DEFAULT *
//*            IS BMPOSB.                                             *
//*********************************************************************
//MERGE   EXEC MERGHLP,
//             SORTLIB='SYS1.SORTLIB',
//             LOADLIB='INFORM.LOADLIB',
//             UTLIB='INFORM.UTLIB',
//             SRCLIB='INFORM.SRCLIB',
//             DEFLIB='INFORM.DEFLIB',
//             RESLIB='IMSVS.RESLIB',
//             OLDDEF='OLDNAME',
//             NEWDEF='NEWNAME',
//             PSB=INFOSB,
//             PROG=INFORMDL,
//             TRAN=BMPOSB
//RETRIEVE.INFIN DD *
 LOGON USER PSWD
 LIST ITEM OLDNAME TYPE FDHELP
 QUIT
//RETRIEVE.DFSVSAMP DD *
8192,6
//CONVERT.M4CORD1 DD *
OLDNAME
```

Figure 184. MERGHLP1 — JCL to Run the Field Description Merge Utility in a BMP Region

MFSUTL

```
//* MEMBER MFSUTL                                                        00010000
//*********************************************************************** 00020000
//* THIS PROCEDURE GENERATES THE MFS MODULES.                          * 00030000
//*********************************************************************** 00040000
//MFSUTL  PROC RGN=,                                                     00050000
//             RESLIB=,                                                  00060000
//             FORMAT=,                                                  00070000
//             IMSPCLB=,                                                 00080000
//             SRCLIB=,                                                  00090000
//             PXREF=,                                                   00100000
//             PCOMP=,                                                   00110000
//             PSUBS=,                                                   00120000
//             PDIAG=,                                                   00130000
//             COMPR=,                                                   00140000
//             DEVCHAR=,                                                 00150000
//             LN=,                                                      00160000
//             SN=,                                                      00170000
//             TSTCMP=,                                                  00180000
//             MBR=                                                      00190000
//REFALC EXEC PGM=IEFBR14                                                00200000
//DD1      DD DISP=(,PASS),DSN=&&REFER,SPACE=(CYL,(5,,20)),              00210000
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800),UNIT=SYSDA             00220000
//S1     EXEC PGM=DFSUPAA0,REGION=&RGN,                                  00230000
//            PARM=(&PXREF,&PCOMP,&PSUBS,&PDIAG,&COMPR,                  00240000
//            'LINECNT=&LN,STOPRC=&SN,DEVCHAR=&DEVCHAR')                 00250000
//STEPLIB  DD DISP=SHR,DSN=&RESLIB                                       00260000
//SYSLIB   DD DISP=SHR,DSN=&SRCLIB                                       00270000
//SYSIN    DD DISP=SHR,DSN=&SRCLIB(&MBR)                                 00280000
//REFIN    DD DISP=(OLD,DELETE),DSN=&&REFER                              00290000
//REFOUT   DD DISP=(OLD,DELETE),DSN=&&REFER,UNIT=SYSDA,VOL=REF=*.REFIN  00300000
//REFRD    DD DISP=(OLD,DELETE),DSN=&&REFER,UNIT=SYSDA,VOL=REF=*.REFIN  00310000
//SYSTEXT  DD UNIT=SYSDA,DSN=&&TXTPASS,                                  00320000
//            SPACE=(CYL,(1,1)),DCB=BLKSIZE=800                          00330000
//SYSUT3   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                               00340000
//SYSUT4   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                               00350000
//DUMMY    DD DISP=SHR,DSN=&IMSPCLB(REFCPY)                              00360000
//UTPRINT  DD SYSOUT=*                                                   00370000
//SYSPRINT DD SYSOUT=*,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=1330)            00380000
//SYSUDUMP DD SYSOUT=*                                                   00390000
//SEQBLKS  DD DISP=(NEW,PASS),DSN=&&BLKS,UNIT=SYSDA,SPACE=(CYL,(1,1))    00400000
//S2     EXEC PGM=DFSUNUB0,REGION=&RGN,COND=(8,LT,S1),                   00410000
//            PARM=(&TSTCMP,'DEVCHAR=&DEVCHAR')                          00420000
//STEPLIB  DD DISP=SHR,DSN=&RESLIB                                       00430000
//SEQBLKS  DD DISP=(OLD,DELETE),DSN=&&BLKS                               00440000
//UTPRINT  DD SYSOUT=*,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=1330)            00450000
//SYSUDUMP DD SYSOUT=*                                                   00460000
//FORMAT   DD DISP=OLD,DSN=&FORMAT                                       00470000
//DUMMY    DD DISP=SHR,DSN=&IMSPCLB(FMTCPY)                              00480000
//SYSPRINT DD SYSOUT=*                                                   00490000
//SYSUT3   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                               00500000
//SYSUT4   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                               00510000
//       PEND                                                            00520000
//*********************************************************************** 00530000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.  BEFORE    * 00540000
//* YOU RUN THIS PROCEDURE, SPECIFY:                                  * 00550000
//*                                                                   * 00560000
//* RGN     - THE REGION SIZE. DEFAULT IS 512K.                         00570000
//* RESLIB  - IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.               * 00580000
//* FORMAT  - MFS DESCRIPTOR LIBRARY.  THE DEFAULT IS IMSVS.FORMAT.   * 00590000
//* IMSPCLB - IMS PROCEDURE LIBRARY.  THE DEFAULT IS IMSVS.PROCLIB.   * 00600000
//* SRCLIB  - THE SOURCE LIBRARY CONTAINING FORMAT DEFINITIONS.       * 00610000
//* PXREF   - SPECIFIES WHETHER TO PRODUCE A CROSS REFERENCE.         * 00620000
//*           SPECIFY XREF FOR YES, NOXREF FOR NO.                    * 00630000
//* PCOMP   - SPECIFIES WHETHER TO PRINT THE COMPOSITE STATEMENT.     * 00640000
```

```
//*           SPECIFY COMP FOR YES, NOCOMP FOR NO.                    * 00650000
//* PSUBS   - SPECIFIES WHETHER TO PRINT THE SUBSTITUTION VARIABLE.   * 00660000
//*           SPECIFY SUBS FOR YES, NOSUBS FOR NO.                    * 00670000
//* PDIAG   - SPECIFIES WHETHER TO PRINT THE DIAGNOSTIC INFORMATION.  * 00680001
//*           SPECIFY DIAG FOR YES, NODIAG FOR NO.                    * 00690000
//* COMPR   - SPECIFIES WHETHER TO COMPRESS THE REFERRAL LIBRARY.     * 00700000
//*           SPECIFY COMPRESS FOR YES, NOCOMPRESS FOR NO.            * 00710000
//* DEVCHAR - SPECIFIES THE ALPHAMERIC SUFFIX TO APPEND TO DFSUDT0.   * 00720000
//* LN      - SPECIFIES LINES PER PAGE. DEFAULTS TO 55.               * 00730000
//* SN      - SPECIFIES SEVERITY LEVEL FOR BLOCKS NOT WRITTEN TO      * 00740000
//*         - THE REFERRAL LIBRARY.                                   * 00750000
//* TSTCMP  - THE OPERATIONAL MODE OF THE MFS LANGUAGE UTILITY; FOR   * 00760000
//*           MFSTEST MODE SPECIFY TEST; FOR PRODUCTION MODE SPECIFY  * 00770000
//*           COMPRESS OR NOCOMPRESS, DEPENDING ON WHETHER OR NOT     * 00780000
//*           YOU WANT THE FORMAT LIBRARY COMPRESSED BEFORE NEW       * 00790000
//*           DESCRIPTORS ARE ADDED.  REFER TO IMS UTILITIES MANUAL.  * 00800000
//* MBR     - THE MFS MODULE TO BE GENERATED.                         * 00810000
//*********************************************************************** 00820000
//GEN01   EXEC MFSUTL,                                                  00830000
//             RGN=1M,                                                  00840002
//             RESLIB='IMSVS.RESLIB',                                   00850000
//             FORMAT='IMSVS.TFORMAT',                                  00860005
//             IMSPCLB='IMSVS.PROCLIB',                                 00870000
//             SRCLIB='INFORM.SRCLIB',                                  00880000
//             PXREF=XREF,                                              00890000
//             PCOMP=NOCOMP,                                            00900000
//             PSUBS=NOSUBS,                                            00910000
//             PDIAG=NODIAG,                                            00920000
//             COMPR=NOCOMPRESS,                                        00930000
//             DEVCHAR=A,                                               00940000
//             LN=55,                                                   00950000
//             SN=8,                                                    00960000
//             TSTCMP=NOCOMPRESS,                                       00970000
//             MBR=MFSERRR                                              00980000
//GEN02   EXEC MFSUTL,                                                  00990000
//             RGN=1M,                                                  01000002
//             RESLIB='IMSVS.RESLIB',                                   01010000
//             FORMAT='IMSVS.TFORMAT',                                  01020000
//             IMSPCLB='IMSVS.PROCLIB',                                 01030000
//             SRCLIB='INFORM.SRCLIB',                                  01040000
//             PXREF=XREF,                                              01050000
//             PCOMP=NOCOMP,                                            01060000
//             PSUBS=NOSUBS,                                            01070000
//             PDIAG=NODIAG,                                            01080000
//             COMPR=NOCOMPRESS,                                        01090000
//             DEVCHAR=A,                                               01100000
//             LN=55,                                                   01110000
//             SN=8,                                                    01120000
//             TSTCMP=NOCOMPRESS,                                       01130000
//             MBR=MFSHLPE                                              01140000
//GEN03   EXEC MFSUTL,                                                  01150000
//             RGN=1M,                                                  01160002
//             RESLIB='IMSVS.RESLIB',                                   01170000
//             FORMAT='IMSVS.TFORMAT',                                  01180000
//             IMSPCLB='IMSVS.PROCLIB',                                 01190000
//             SRCLIB='INFORM.SRCLIB',                                  01200000
//             PXREF=XREF,                                              01210000
//             PCOMP=NOCOMP,                                            01220000
//             PSUBS=NOSUBS,                                            01230000
//             PDIAG=NODIAG,                                            01240000
//             COMPR=NOCOMPRESS,                                        01250000
//             DEVCHAR=A,                                               01260000
//             LN=55,                                                   01270000
//             SN=8,                                                    01280000
//             TSTCMP=NOCOMPRESS,                                       01290000
//             MBR=MFSHLPL                                              01300000
```

```
//GEN04   EXEC MFSUTL,                                          01310000
//             RGN=1M,                                          01320002
//             RESLIB='IMSVS.RESLIB',                           01330000
//             FORMAT='IMSVS.TFORMAT',                          01340000
//             IMSPCLB='IMSVS.PROCLIB',                         01350000
//             SRCLIB='INFORM.SRCLIB',                          01360000
//             PXREF=XREF,                                      01370000
//             PCOMP=NOCOMP,                                    01380000
//             PSUBS=NOSUBS,                                    01390000
//             PDIAG=NODIAG,                                    01400000
//             COMPR=NOCOMPRESS,                                01410000
//             DEVCHAR=A,                                       01420000
//             LN=55,                                           01430000
//             SN=8,                                            01440000
//             TSTCMP=NOCOMPRESS,                               01450000
//             MBR=MFSHLPQ                                      01460000
//GEN05   EXEC MFSUTL,                                          01470000
//             RGN=1M,                                          01480002
//             RESLIB='IMSVS.RESLIB',                           01490000
//             FORMAT='IMSVS.TFORMAT',                          01500000
//             IMSPCLB='IMSVS.PROCLIB',                         01510000
//             SRCLIB='INFORM.SRCLIB',                          01520000
//             PXREF=XREF,                                      01530000
//             PCOMP=NOCOMP,                                    01540000
//             PSUBS=NOSUBS,                                    01550000
//             PDIAG=NODIAG,                                    01560000
//             COMPR=NOCOMPRESS,                                01570000
//             DEVCHAR=A,                                       01580000
//             LN=55,                                           01590000
//             SN=8,                                            01600000
//             TSTCMP=NOCOMPRESS,                               01610000
//             MBR=MFSI                                         01620000
//GEN06   EXEC MFSUTL,                                          01630000
//             RGN=1M,                                          01640002
//             RESLIB='IMSVS.RESLIB',                           01650000
//             FORMAT='IMSVS.TFORMAT',                          01660000
//             IMSPCLB='IMSVS.PROCLIB',                         01670000
//             SRCLIB='INFORM.SRCLIB',                          01680000
//             PXREF=XREF,                                      01690000
//             PCOMP=NOCOMP,                                    01700000
//             PSUBS=NOSUBS,                                    01710000
//             PDIAG=NODIAG,                                    01720000
//             COMPR=NOCOMPRESS,                                01730000
//             DEVCHAR=A,                                       01740000
//             LN=55,                                           01750000
//             SN=8,                                            01760000
//             TSTCMP=NOCOMPRESS,                               01770000
//             MBR=MFSLGON                                      01780000
//GEN07   EXEC MFSUTL,                                          01790000
//             RGN=1M,                                          01800002
//             RESLIB='IMSVS.RESLIB',                           01810000
//             FORMAT='IMSVS.TFORMAT',                          01820000
//             IMSPCLB='IMSVS.PROCLIB',                         01830000
//             SRCLIB='INFORM.SRCLIB',                          01840000
//             PXREF=XREF,                                      01850000
//             PCOMP=NOCOMP,                                    01860000
//             PSUBS=NOSUBS,                                    01870000
//             PDIAG=NODIAG,                                    01880000
//             COMPR=NOCOMPRESS,                                01890000
//             DEVCHAR=A,                                       01900000
//             LN=55,                                           01910000
//             SN=8,                                            01920000
//             TSTCMP=NOCOMPRESS,                               01930000
//             MBR=MFSMENU                                      01940000
//GEN08   EXEC MFSUTL,                                          01950000
//             RGN=1M,                                          01960002
```

```
//             RESLIB='IMSVS.RESLIB',                                01970000
//             FORMAT='IMSVS.TFORMAT',                               01980000
//             IMSPCLB='IMSVS.PROCLIB',                              01990000
//             SRCLIB='INFORM.SRCLIB',                               02000000
//             PXREF=XREF,                                           02010000
//             PCOMP=NOCOMP,                                         02020000
//             PSUBS=NOSUBS,                                         02030000
//             PDIAG=NODIAG,                                         02040000
//             COMPR=NOCOMPRESS,                                     02050000
//             DEVCHAR=A,                                            02060000
//             LN=55,                                                02070000
//             SN=8,                                                 02080000
//             TSTCMP=NOCOMPRESS,                                    02090000
//             MBR=MFSMICR                                           02100000
//GEN09   EXEC MFSUTL,                                               02110000
//             RGN=1M,                                               02120002
//             RESLIB='IMSVS.RESLIB',                                02130000
//             FORMAT='IMSVS.TFORMAT',                               02140000
//             IMSPCLB='IMSVS.PROCLIB',                              02150000
//             SRCLIB='INFORM.SRCLIB',                               02160000
//             PXREF=XREF,                                           02170000
//             PCOMP=NOCOMP,                                         02180000
//             PSUBS=NOSUBS,                                         02190000
//             PDIAG=NODIAG,                                         02200000
//             COMPR=NOCOMPRESS,                                     02210000
//             DEVCHAR=A,                                            02220000
//             LN=55,                                                02230000
//             SN=8,                                                 02240000
//             TSTCMP=NOCOMPRESS,                                    02250000
//             MBR=MFSP                                              02260000
//GEN10   EXEC MFSUTL,                                               02270000
//             RGN=1M,                                               02280002
//             RESLIB='IMSVS.RESLIB',                                02290000
//             FORMAT='IMSVS.TFORMAT',                               02300000
//             IMSPCLB='IMSVS.PROCLIB',                              02310000
//             SRCLIB='INFORM.SRCLIB',                               02320000
//             PXREF=XREF,                                           02330000
//             PCOMP=NOCOMP,                                         02340000
//             PSUBS=NOSUBS,                                         02350000
//             PDIAG=NODIAG,                                         02360000
//             COMPR=NOCOMPRESS,                                     02370000
//             DEVCHAR=A,                                            02380000
//             LN=55,                                                02390000
//             SN=8,                                                 02400000
//             TSTCMP=NOCOMPRESS,                                    02410000
//             MBR=MFSQQRY                                           02420000
//GEN11   EXEC MFSUTL,                                               02430000
//             RGN=1M,                                               02440002
//             RESLIB='IMSVS.RESLIB',                                02450000
//             FORMAT='IMSVS.TFORMAT',                               02460000
//             IMSPCLB='IMSVS.PROCLIB',                              02470000
//             SRCLIB='INFORM.SRCLIB',                               02480000
//             PXREF=XREF,                                           02490000
//             PCOMP=NOCOMP,                                         02500000
//             PSUBS=NOSUBS,                                         02510000
//             PDIAG=NODIAG,                                         02520000
//             COMPR=NOCOMPRESS,                                     02530000
//             DEVCHAR=A,                                            02540000
//             LN=55,                                                02550000
//             SN=8,                                                 02560000
//             TSTCMP=NOCOMPRESS,                                    02570000
//             MBR=MFSR                                              02580000
//GEN12   EXEC MFSUTL,                                               02590000
//             RGN=1M,                                               02600002
//             RESLIB='IMSVS.RESLIB',                                02610000
//             FORMAT='IMSVS.TFORMAT',                               02620000
```

```
//             IMSPCLB='IMSVS.PROCLIB',                          02630000
//             SRCLIB='INFORM.SRCLIB',                           02640000
//             PXREF=XREF,                                       02650000
//             PCOMP=NOCOMP,                                     02660000
//             PSUBS=NOSUBS,                                     02670000
//             PDIAG=NODIAG,                                     02680000
//             COMPR=NOCOMPRESS,                                 02690000
//             DEVCHAR=A,                                        02700000
//             LN=55,                                            02710000
//             SN=8,                                             02720000
//             TSTCMP=NOCOMPRESS,                                02730000
//             MBR=MFSEDPF                                       02740000
//GEN13   EXEC MFSUTL,                                           02750000
//             RGN=1M,                                           02760002
//             RESLIB='IMSVS.RESLIB',                            02770000
//             FORMAT='IMSVS.TFORMAT',                           02780000
//             IMSPCLB='IMSVS.PROCLIB',                          02790000
//             SRCLIB='INFORM.SRCLIB',                           02800000
//             PXREF=XREF,                                       02810000
//             PCOMP=NOCOMP,                                     02820000
//             PSUBS=NOSUBS,                                     02830000
//             PDIAG=NODIAG,                                     02840000
//             COMPR=NOCOMPRESS,                                 02850000
//             DEVCHAR=A,                                        02860000
//             LN=55,                                            02870000
//             SN=8,                                             02880000
//             TSTCMP=NOCOMPRESS,                                02890000
//             MBR=MFSSUBM                                       02900000
//GEN14   EXEC MFSUTL,                                           02910000
//             RGN=1M,                                           02920002
//             RESLIB='IMSVS.RESLIB',                            02930000
//             FORMAT='IMSVS.TFORMAT',                           02940000
//             IMSPCLB='IMSVS.PROCLIB',                          02950000
//             SRCLIB='INFORM.SRCLIB',                           02960000
//             PXREF=XREF,                                       02970000
//             PCOMP=NOCOMP,                                     02980000
//             PSUBS=NOSUBS,                                     02990000
//             PDIAG=NODIAG,                                     03000000
//             COMPR=NOCOMPRESS,                                 03010000
//             DEVCHAR=A,                                        03020000
//             LN=55,                                            03030000
//             SN=8,                                             03040000
//             TSTCMP=NOCOMPRESS,                                03050000
//             MBR=MFSHLSB                                       03060000
//GEN15   EXEC MFSUTL,                                           03070000
//             RGN=1M,                                           03080002
//             RESLIB='IMSVS.RESLIB',                            03090000
//             FORMAT='IMSVS.TFORMAT',                           03100000
//             IMSPCLB='IMSVS.PROCLIB',                          03110000
//             SRCLIB='INFORM.SRCLIB',                           03120000
//             PXREF=XREF,                                       03130000
//             PCOMP=NOCOMP,                                     03140000
//             PSUBS=NOSUBS,                                     03150000
//             PDIAG=NODIAG,                                     03160000
//             COMPR=NOCOMPRESS,                                 03170000
//             DEVCHAR=A,                                        03180000
//             LN=55,                                            03190000
//             SN=8,                                             03200000
//             TSTCMP=NOCOMPRESS,                                03210000
//             MBR=MFSSOUR                                       03220000
//GEN16   EXEC MFSUTL,                                           03230000
//             RGN=1M,                                           03240002
//             RESLIB='IMSVS.RESLIB',                            03250000
//             FORMAT='IMSVS.TFORMAT',                           03260000
//             IMSPCLB='IMSVS.PROCLIB',                          03270000
//             SRCLIB='INFORM.SRCLIB',                           03280000
```

```
//             PXREF=XREF,                                          03290000
//             PCOMP=NOCOMP,                                        03300000
//             PSUBS=NOSUBS,                                        03310000
//             PDIAG=NODIAG,                                        03320000
//             COMPR=NOCOMPRESS,                                    03330000
//             DEVCHAR=A,                                           03340000
//             LN=55,                                               03350000
//             SN=8,                                                03360000
//             TSTCMP=NOCOMPRESS,                                   03370000
//             MBR=MFSHLED                                          03380000
//GEN17   EXEC MFSUTL,                                             03390000
//             RGN=1M,                                              03400002
//             RESLIB='IMSVS.RESLIB',                               03410000
//             FORMAT='IMSVS.TFORMAT',                              03420000
//             IMSPCLB='IMSVS.PROCLIB',                             03430000
//             SRCLIB='INFORM.SRCLIB',                              03440000
//             PXREF=XREF,                                          03450000
//             PCOMP=NOCOMP,                                        03460000
//             PSUBS=NOSUBS,                                        03470000
//             PDIAG=NODIAG,                                        03480000
//             COMPR=NOCOMPRESS,                                    03490000
//             DEVCHAR=A,                                           03500000
//             LN=55,                                               03510000
//             SN=8,                                                03520000
//             TSTCMP=NOCOMPRESS,                                   03530000
//             MBR=MFSHLSP                                          03540000
//GEN18   EXEC MFSUTL,                                             03550000
//             RGN=1M,                                              03560002
//             RESLIB='IMSVS.RESLIB',                               03570000
//             FORMAT='IMSVS.TFORMAT',                              03580000
//             IMSPCLB='IMSVS.PROCLIB',                             03590000
//             SRCLIB='INFORM.SRCLIB',                              03600000
//             PXREF=XREF,                                          03610000
//             PCOMP=NOCOMP,                                        03620000
//             PSUBS=NOSUBS,                                        03630000
//             PDIAG=NODIAG,                                        03640000
//             COMPR=NOCOMPRESS,                                    03650000
//             DEVCHAR=A,                                           03660000
//             LN=55,                                               03670000
//             SN=8,                                                03680000
//             TSTCMP=NOCOMPRESS,                                   03690000
//             MBR=MFSAPI                                           03700000
//GEN19   EXEC MFSUTL,                                             03710001
//             RGN=1M,                                              03720002
//             RESLIB='IMSVS.RESLIB',                               03730001
//             FORMAT='IMSVS.TFORMAT',                              03740001
//             IMSPCLB='IMSVS.PROCLIB',                             03750001
//             SRCLIB='INFORM.SRCLIB',                              03760001
//             PXREF=XREF,                                          03770001
//             PCOMP=NOCOMP,                                        03780001
//             PSUBS=NOSUBS,                                        03790001
//             PDIAG=NODIAG,                                        03800001
//             COMPR=NOCOMPRESS,                                    03810001
//             DEVCHAR=A,                                           03820001
//             LN=55,                                               03830001
//             SN=8,                                                03840001
//             TSTCMP=NOCOMPRESS,                                   03850001
//             MBR=MFSDFLD                                          03860001
//GEN20   EXEC MFSUTL,                                             03870001
//             RGN=1M,                                              03880002
//             RESLIB='IMSVS.RESLIB',                               03890001
//             FORMAT='IMSVS.TFORMAT',                              03900001
//             IMSPCLB='IMSVS.PROCLIB',                             03910001
//             SRCLIB='INFORM.SRCLIB',                              03920001
//             PXREF=XREF,                                          03930001
//             PCOMP=NOCOMP,                                        03940001
```

```
//             PSUBS=NOSUBS,                                          03950001
//             PDIAG=NODIAG,                                          03960001
//             COMPR=NOCOMPRESS,                                      03970001
//             DEVCHAR=A,                                             03980001
//             LN=55,                                                 03990001
//             SN=8,                                                  04000001
//             TSTCMP=NOCOMPRESS,                                     04010001
//             MBR=MFSDDVW                                            04020001
//GEN21   EXEC MFSUTL,                                                04030001
//             RGN=1M,                                                04040002
//             RESLIB='IMSVS.RESLIB',                                 04050001
//             FORMAT='IMSVS.TFORMAT',                                04060001
//             IMSPCLB='IMSVS.PROCLIB',                               04070001
//             SRCLIB='INFORM.SRCLIB',                                04080001
//             PXREF=XREF,                                            04090001
//             PCOMP=NOCOMP,                                          04100001
//             PSUBS=NOSUBS,                                          04110001
//             PDIAG=NODIAG,                                          04120001
//             COMPR=NOCOMPRESS,                                      04130001
//             DEVCHAR=A,                                             04140001
//             LN=55,                                                 04150001
//             SN=8,                                                  04160001
//             TSTCMP=NOCOMPRESS,                                     04170001
//             MBR=MFSDDET                                            04180001
//GEN22   EXEC MFSUTL,                                                04190002
//             RGN=1M,                                                04200002
//             RESLIB='IMSVS.RESLIB',                                 04210002
//             FORMAT='IMSVS.TFORMAT',                                04220002
//             IMSPCLB='IMSVS.PROCLIB',                               04230002
//             SRCLIB='INFORM.SRCLIB',                                04240002
//             PXREF=XREF,                                            04250002
//             PCOMP=NOCOMP,                                          04260002
//             PSUBS=NOSUBS,                                          04270002
//             PDIAG=NODIAG,                                          04280002
//             COMPR=NOCOMPRESS,                                      04290002
//             DEVCHAR=A,                                             04300002
//             LN=55,                                                 04310002
//             SN=8,                                                  04320002
//             TSTCMP=NOCOMPRESS,                                     04330002
//             MBR=MFSHLDV                                            04340004
//GEN23   EXEC MFSUTL,                                                04350002
//             RGN=1M,                                                04360002
//             RESLIB='IMSVS.RESLIB',                                 04370002
//             FORMAT='IMSVS.TFORMAT',                                04380002
//             IMSPCLB='IMSVS.PROCLIB',                               04390002
//             SRCLIB='INFORM.SRCLIB',                                04400002
//             PXREF=XREF,                                            04410002
//             PCOMP=NOCOMP,                                          04420002
//             PSUBS=NOSUBS,                                          04430002
//             PDIAG=NODIAG,                                          04440002
//             COMPR=NOCOMPRESS,                                      04450002
//             DEVCHAR=A,                                             04460002
//             LN=55,                                                 04470002
//             SN=8,                                                  04480002
//             TSTCMP=NOCOMPRESS,                                     04490002
//             MBR=MFSHLFL                                            04500004
//GEN24   EXEC MFSUTL,                                                04510003
//             RGN=1M,                                                04520002
//             RESLIB='IMSVS.RESLIB',                                 04530002
//             FORMAT='IMSVS.TFORMAT',                                04540002
//             IMSPCLB='IMSVS.PROCLIB',                               04550002
//             SRCLIB='INFORM.SRCLIB',                                04560002
//             PXREF=XREF,                                            04570002
//             PCOMP=NOCOMP,                                          04580002
//             PSUBS=NOSUBS,                                          04590002
//             PDIAG=NODIAG,                                          04600002
```

```
//             COMPR=NOCOMPRESS,                                    04610002
//             DEVCHAR=A,                                           04620002
//             LN=55,                                               04630002
//             SN=8,                                                04640002
//             TSTCMP=NOCOMPRESS,                                   04650002
//             MBR=MFSHLDT                                          04660004
```

Figure 185. MFSUTL — JCL to Generate All MFS Control Blocks

PMBASMLK

```
//* MEMBER PMBASMLK                                                      00010000
//*********************************************************************** 00020000
//* ASSEMBLE AND LINK EDIT THE SYSTEM PARAMETER MODULE "PARMBLK".     * 00030002
//*********************************************************************** 00040000
//PMBASMLK PROC SRCLIB=,                                                 00050000
//            MACLIB=,                                                   00060000
//            LOADLIB=                                                   00070000
//ASSEM  EXEC PGM=ASMA90,PARM='NODECK,OBJECT,LIST',REGION=2M             00080001
//SYSLIB   DD DISP=SHR,DSN=&MACLIB                                       00090000
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                               00100000
//SYSPRINT DD SYSOUT=*                                                   00110000
//SYSLIN   DD DISP=(,PASS),DSN=&&PRMBLK,UNIT=SYSDA,SPACE=(TRK,(1,1))    00120000
//SYSIN    DD DISP=SHR,DSN=&SRCLIB(PARMBLK)                              00130000
//LKED   EXEC PGM=HEWL,REGION=2M,COND=(4,LT),                            00140001
//            PARM='RENT,XREF,LET,LIST,NCAL,SIZE=(200K,56K)'             00150000
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(3,2))                               00160000
//PARMBLK  DD DISP=(OLD,DELETE),DSN=&&PRMBLK                             00170000
//SYSLMOD  DD DISP=SHR,DSN=&LOADLIB                                      00180000
//SYSPRINT DD SYSOUT=*                                                   00190000
//       PEND                                                            00200000
//*********************************************************************** 00210000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00220000
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                          * 00230000
//*                                                                   * 00240000
//*  SRCLIB  - THE INFORM SOURCE LIBRARY NAME.                        * 00250000
//*  MACLIB  - THE INFORM MACRO LIBRARY NAME.                         * 00260000
//*  LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY NAME.             * 00270000
//*********************************************************************** 00280000
//PMBASMLK EXEC PMBASMLK,                                                00290000
//             MACLIB='INFORM.MACLIB',                                   00300000
//             SRCLIB='INFORM.SRCLIB',                                   00310000
//             LOADLIB='INFORM.LOADLIB'                                  00320000
//LKED.SYSLIN DD *                                                       00330000
 INCLUDE PARMBLK                                                        00340000
 NAME    INFORMPB(R)                                                    00350000
```

Figure 186. PMBASMLK — JCL to Assemble and Link the VISION:Inform Parameter Module PARMBLK

PRXASMLK

```
//* MEMBER PRXASMLK                                                      00010000
//*********************************************************************** 00020000
//* PROCEDURE TO ASSEMBLE/LINK A USER-WRITTEN PROFILE EXIT ROUTINE.   * 00030000
//*********************************************************************** 00040000
//PRXASMLK PROC SRCLIB=,                                                 00050000
//            MACLIB=,                                                   00060000
//            LOADLIB=                                                   00070000
//ASSEM  EXEC PGM=ASMA90,PARM='NODECK,OBJECT,LIST',REGION=2M             00080002
//SYSLIB   DD DISP=SHR,DSN=&MACLIB                                       00090000
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                               00100000
//SYSPRINT DD SYSOUT=*                                                   00110000
//SYSLIN   DD DISP=(,PASS),DSN=&&PREXIT,UNIT=SYSDA,SPACE=(TRK,(1,1))     00120000
//SYSIN    DD DISP=SHR,DSN=&SRCLIB(PROEXITR)                             00130000
//LKED   EXEC PGM=HEWL,REGION=2M,COND=(0,NE),                            00140002
//            PARM='RENT,XREF,LET,LIST,NCAL,SIZE=(200K,56K)'             00150000
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(3,2))                               00160000
//PROEXITR DD DISP=(OLD,DELETE),DSN=&&PREXIT                             00170000
//SYSLMOD  DD DISP=SHR,DSN=&LOADLIB                                      00180000
//SYSPRINT DD SYSOUT=*                                                   00190000
//       PEND                                                            00200000
//*********************************************************************** 00210000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00220000
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                          * 00230000
//*                                                                   * 00240000
//*  SRCLIB  - THE INFORM SOURCE LIBRARY NAME.                        * 00250000
//*  MACLIB  - THE INFORM MACRO LIBRARY NAME.                         * 00260000
//*  LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY NAME.             * 00270000
//*********************************************************************** 00280000
//PRXASMLK EXEC PRXASMLK,                                                00290000
//             SRCLIB='INFORM.SRCLIB',                                   00300000
//             MACLIB='INFORM.MACLIB',                                   00310001
//             LOADLIB='INFORM.LOADLIB'                                  00320000
//LKED.SYSLIN DD *                                                       00330000
 INCLUDE PROEXITR                                                       00340000
 NAME    INFORMLX(R)                                                    00350000
```

Figure 187. PRXASMLK — JCL to Assemble and Link a User Written Profile Exit Routine

PSBGEN

```
//* MEMBER PSBGEN                                                        00010000
//*********************************************************************** 00020000
//* THIS PROCEDURE GENERATES THE PSB'S.                                 * 00030000
//*                                                                     * 00040000
//* *** N O T E *** COMMENT OUT THE PSBGEN5 STEP FOR INFORMMC, UNLESS * 00050000
//*                 YOU ARE USING VISION:JOURNEY FOR DOS OR             * 00060000
//*                 VISION:JOURNEY FOR WINDOWS RELEASE 1.7 OR LOWER.    * 00070000
//*                                                                     * 00080000
//*                 COMMENT OUT THE PSBGEN6 STEP FOR INFORMOS, UNLESS * 00090000
//*                 YOU ARE USING VISION:JOURNEY FOR WINDOWS            * 00100000
//*                 RELEASE 2.0B OR HIGHER.                             * 00110000
//*********************************************************************** 00120000
//PSBGEN  PROC SRCMBR=,                                                 00130000
//             MBR=,                                                    00140000
//             SRCLIB=,                                                 00150000
//             RESLIB=,                                                 00160000
//             IMSMCLB=,                                                00170000
//             PSBLIB=                                                  00180000
//ASM    EXEC PGM=ASMA90,REGION=1M,PARM='OBJECT,NODECK'                 00190004
//SYSLIB   DD DISP=SHR,DSN=&IMSMCLB                                     00200003
//SYSPRINT DD SYSOUT=*,DCB=BLKSIZE=1089,                                00210000
//            SPACE=(121,(300,300),RLSE,,ROUND)                         00220000
//SYSUT1   DD UNIT=SYSDA,DISP=(,DELETE),SPACE=(1700,(100,50))           00230000
//SYSLIN   DD UNIT=SYSDA,DISP=(,PASS),SPACE=(80,(100,100),RLSE),        00240000
//            DCB=(BLKSIZE=400,RECFM=FB,LRECL=80)                       00250000
//SYSIN    DD DISP=SHR,DSN=&SRCLIB(&SRCMBR)                             00260003
//LKED   EXEC PGM=HEWL,COND=(0,LT,ASM),REGION=1M,PARM='XREF,LIST'       00270003
//STEPLIB  DD DISP=SHR,DSN=&RESLIB                                      00280003
//SYSLIN   DD DISP=(OLD,DELETE),DSN=*.ASM.SYSLIN                        00290003
//SYSPRINT DD SYSOUT=*,DCB=BLKSIZE=1089,SPACE=(121,(90,90),RLSE)        00300000
//SYSLMOD  DD DISP=SHR,DSN=&PSBLIB(&MBR)                                00310003
//SYSUT1   DD UNIT=SYSDA,SPACE=(1024,(100,10),RLSE),DISP=(,DELETE)      00320000
//        PEND                                                          00330000
//*********************************************************************** 00340000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.  BEFORE    * 00350000
//* YOU RUN THIS PROCEDURE, SPECIFY:                                  * 00360000
//*                                                                   * 00370000
//* SRCMBR  - THE MEMBER OF THE SOURCE LIBRARY CONTAINING THE PSB'S.  * 00380001
//* MBR     - THE NAME OF THE PSB TO BE GENERATED (PSBNAME).  USE     * 00390001
//*           THE SAME NAME AS SRCMBR UNLESS YOU CHANGE THE PSBNAME.  * 00400001
//* SRCLIB  - SOURCE LIBRARY CONTAINING THE PSB'S.                    * 00410000
//* RESLIB  - IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.               * 00420001
//* IMSMCLB - IMS MACRO LIBRARY.  THE DEFAULT IS IMSVS.MACLIB.        * 00430001
//* PSBLIB  - THE PSB LIBRARY.                                        * 00440001
//*********************************************************************** 00450000
//PSBGEN0 EXEC PSBGEN,SRCMBR=INFORMBB,MBR=INFORMBB,                     00460000
//             SRCLIB='INFORM.SRCLIB',                                  00470002
//             RESLIB='IMSVS.RESLIB',                                   00480000
//             IMSMCLB='IMSVS.MACLIB',                                  00490000
//             PSBLIB='INFORM.PSBLIB'                                   00500000
//PSBGEN1 EXEC PSBGEN,SRCMBR=INFUTIL,MBR=INFUTIL,                       00510000
//             SRCLIB='INFORM.SRCLIB',                                  00520002
//             RESLIB='IMSVS.RESLIB',                                   00530000
//             IMSMCLB='IMSVS.MACLIB',                                  00540000
//             PSBLIB='INFORM.PSBLIB'                                   00550000
//PSBGEN2 EXEC PSBGEN,SRCMBR=INFORMOC,MBR=INFORMOC,                     00560000
//             SRCLIB='INFORM.SRCLIB',                                  00570002
//             RESLIB='IMSVS.RESLIB',                                   00580000
//             IMSMCLB='IMSVS.MACLIB',                                  00590000
//             PSBLIB='INFORM.PSBLIB'                                   00600000
//PSBGEN3 EXEC PSBGEN,SRCMBR=INFORMSB,MBR=INFORMSB,                     00610000
//             SRCLIB='INFORM.SRCLIB',                                  00620002
//             RESLIB='IMSVS.RESLIB',                                   00630000
//             IMSMCLB='IMSVS.MACLIB',                                  00640000
```

```
//             PSBLIB='INFORM.PSBLIB'                                  00650000
//PSBGEN4 EXEC PSBGEN,SRCMBR=INFINIT,MBR=INFINIT,                      00660000
//             SRCLIB='INFORM.SRCLIB',                                 00670002
//             RESLIB='IMSVS.RESLIB',                                  00680000
//             IMSMCLB='IMSVS.MACLIB',                                 00690000
//             PSBLIB='INFORM.PSBLIB'                                  00700000
//PSBGEN5 EXEC PSBGEN,SRCMBR=INFORMMC,MBR=INFORMMC,                    00710000
//             SRCLIB='INFORM.SRCLIB',                                 00720002
//             RESLIB='IMSVS.RESLIB',                                  00730000
//             IMSMCLB='IMSVS.MACLIB',                                 00740000
//             PSBLIB='INFORM.PSBLIB'                                  00750000
//PSBGEN6 EXEC PSBGEN,SRCMBR=INFORMOS,MBR=INFORMOS,                    00760000
//             SRCLIB='INFORM.SRCLIB',                                 00770002
//             RESLIB='IMSVS.RESLIB',                                  00780000
//             IMSMCLB='IMSVS.MACLIB',                                 00790000
//             PSBLIB='INFORM.PSBLIB'                                  00800000
```

Figure 188. PSBGEN — JCL to Run the IMS PSBGEN

PURGUTIL

```
//* MEMBER PURGUTIL                                                      00010000
//*********************************************************************** 00020000
//* THIS PROCEDURE RUNS THE COMMUNICATIONS FILE PURGE UTILITY. A DATE * 00030000
//* PARAMETER IS PASSED TO THE UTILITY. ALL 'READY' STATUS REPORTS    * 00040000
//* WITH A COMPLETION DATE EQUAL TO OR OLDER THAN THE SPECIFIED DATE  * 00050000
//* WILL BE PURGED FROM THE COMMUNICATIONS FILE.                      * 00060000
//* IF THE DD NAMES FOR THE COMMUNICATIONS FILE OR FOREGROUND LIBRARY * 00070003
//* WERE CHANGED IN THE DBD'S, MAKE SURE THEY MATCH THOSE HERE.       * 00080003
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00090000
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00100000
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00110000
//*               CONCATENATED TO THE STEP2.STEPLIB DD STATEMENT.     * 00120000
//* *** ALSO ***  THIS JOB IS SET UP TO RUN IN A DLI BATCH REGION.    * 00130000
//*********************************************************************** 00140000
//PRGUTIL PROC RGN=,                                                    00150000
//            LOADLIB=,                                                 00160000
//            RESLIB=,                                                  00170000
//            SORTLIB=,                                                 00180000
//            SRCLIB=,                                                  00190000
//            PROG=,                                                    00200000
//            PSB=,                                                     00210000
//            PSBLIB=,                                                  00220000
//            DBDLIB=,                                                  00230000
//            DATE=,                                                    00240000
//            UTLIB=,                                                   00250000
//            FGLIB=,                                                   00260000
//            INFCOM=                                                   00270000
//STEP1  EXEC PGM=DFSRRC00,REGION=&RGN,PARM='DLI,&PROG,&PSB'            00280001
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00290000
//         DD DISP=SHR,DSN=&RESLIB                                      00300000
//IMS      DD DISP=SHR,DSN=&PSBLIB                                      00310000
//         DD DISP=SHR,DSN=&DBDLIB                                      00320000
//IEFRDER  DD DUMMY                                                     00330000
//DFSRESLB DD DISP=SHR,DSN=&RESLIB                                      00340000
//INFORMLF DD DISP=SHR,DSN=&FGLIB                                       00350000
//INFORMCF DD DISP=SHR,DSN=&INFCOM                                      00360000
//INFPRINT DD DISP=(NEW,PASS),DSN=&&PRG,UNIT=SYSDA,SPACE=(TRK,(10,10))  00370000
//INFLIST  DD DUMMY                                                     00380000
//INFREPT  DD DUMMY                                                     00390000
//INFIN    DD DISP=SHR,DSN=&SRCLIB(PURGLIST)                            00400000
//STEP2  EXEC PGM=MARKIV,REGION=&RGN,PARM='&DATE'                       00410000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00420000
//M4LIST   DD SYSOUT=*                                                  00430000
//M4REPO   DD DISP=(NEW,PASS),DCB=(BLKSIZE=6400,BUFNO=3),               00440000
//            UNIT=SYSDA,SPACE=(TRK,(5,2),RLSE)                         00450000
//M4SORT   DD DISP=(NEW,PASS),UNIT=SYSDA,SPACE=(TRK,1)                  00460000
//SYSOUT   DD DUMMY                                                     00470000
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB                                     00480000
//SORTWK01 DD SPACE=(CYL,1,,CONTIG),UNIT=SYSDA                          00490000
//SORTWK02 DD SPACE=(CYL,1,,CONTIG),UNIT=SYSDA                          00500000
//SORTWK03 DD SPACE=(CYL,1,,CONTIG),UNIT=SYSDA                          00510000
//M4LIB    DD DISP=SHR,DSN=&UTLIB                                       00520000
//M4OLD    DD DISP=(OLD,PASS),DSN=&&PRG                                 00530000
//M4SUBF1  DD DISP=(,PASS),DSN=&&STMTS,UNIT=SYSDA,SPACE=(TRK,(10,5))    00540000
//M4INPUT  DD DISP=SHR,DSN=&SRCLIB(PURGPROG)                            00550000
//STEP3  EXEC PGM=DFSRRC00,REGION=&RGN,PARM='DLI,&PROG,&PSB',           00560001
//            COND=(0,LT,STEP2)                                         00570002
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00580000
//         DD DISP=SHR,DSN=&RESLIB                                      00590000
//IMS      DD DISP=SHR,DSN=&PSBLIB                                      00600000
//         DD DISP=SHR,DSN=&DBDLIB                                      00610000
//IEFRDER  DD DUMMY                                                     00620000
//DFSRESLB DD DISP=SHR,DSN=&RESLIB                                      00630000
//INFORMLF DD DISP=SHR,DSN=&FGLIB                                       00640000
```

```
//INFORMCF DD DISP=SHR,DSN=&INFCOM                                      00650000
//INFPRINT DD SYSOUT=*                                                  00660000
//INFLIST  DD DUMMY                                                     00670000
//INFREPT  DD DUMMY                                                     00680000
//INFIN    DD DISP=(OLD,PASS),DSN=&&STMTS                               00690000
//       PEND                                                           00700000
//*********************************************************************00710000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00720000
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                          * 00730000
//*                                                                   * 00740000
//* RGN     - THE REGION SIZE (DEFAULT 2M).                          * 00750000
//* LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                   * 00760000
//* RESLIB  - THE NAME OF THE IMS RESLIB. (DEFAULT IMSVS.RESLIB).     * 00770000
//* SORTLIB - THE LOAD LIBRARY CONTAINING THE SYSTEM SORT PROGRAM.    * 00780000
//*           THE DEFAULT IS SYS1.SORTLIB.                            * 00790000
//* SRCLIB  - THE INFORM INSTALLATION SOURCE LIBRARY.                 * 00800000
//* PROG    - THE BATCH SIMULATOR LOAD MODULE NAME. DEFAULT INFORMSB. * 00810000
//* PSB     - THE BATCH SIMULATOR PSBNAME. DEFAULT INFORMSB.          * 00820000
//* PSBLIB  - THE USER'S PSB LIBRARY NAME.                            * 00830000
//* DBDLIB  - THE USER'S DBD LIBRARY NAME.                            * 00840000
//* DATE    - THE DATE PARAMETER FOR THE PURGE UTILITY. ALL 'READY'   * 00850000
//*           STATUS REPORTS WITH A COMPLETION DATE EQUAL TO OR       * 00860000
//*           OLDER THAN THIS DATE WILL BE PURGED.                    * 00870000
//*           SPECIFY THE DATE IN MM/DD/YYYY FORMAT.                  * 00880000
//* UTLIB   - THE INFORM INSTALLATION UTILITY LIBRARY.                * 00890000
//* FGLIB   - THE INFORM FOREGROUND LIBRARY.                          * 00900000
//* INFCOM  - THE INFORM COMMUNICATION FILE.                          * 00910000
//*********************************************************************00920000
//INF    EXEC PRGUTIL,RGN=2M,                                           00930000
//            LOADLIB='INFORM.LOADLIB',                                00940000
//            RESLIB='IMSVS.RESLIB',                                   00950000
//            SORTLIB='SYS1.SORTLIB',                                  00960000
//            SRCLIB='INFORM.SRCLIB',                                  00970000
//            PROG=INFORMSB,                                           00980000
//            PSB=INFORMSB,                                            00990000
//            PSBLIB='INFORM.PSBLIB',                                  01000000
//            DBDLIB='INFORM.DBDLIB',                                  01010000
//            DATE='MM/DD/YYYY',                                       01020000
//            UTLIB='INFORM.UTLIB',                                    01030000
//            FGLIB='INFORM.FGLIB',                                    01040000
//            INFCOM='INFORM.INFCOM'                                   01050000
//STEP1.DFSVSAMP DD *                                                 01060004
8192,11                                                               01070005
//STEP3.DFSVSAMP DD *                                                 01080004
8192,11                                                               01090005
```

Figure 189. PURGUTIL — JCL to Run the Communication File Purge Utility in a Batch DLI Region

PURGUTLB

```
//* MEMBER PURGUTLB                                                      00010000
//*********************************************************************** 00020000
//* THIS PROCEDURE RUNS THE COMMUNICATIONS FILE PURGE UTILITY. A DATE * 00030000
//* PARAMETER IS PASSED TO THE UTILITY. ALL 'READY' STATUS REPORTS    * 00040000
//* WITH A COMPLETION DATE EQUAL TO OR OLDER THAN THE SPECIFIED DATE  * 00050000
//* WILL BE PURGED FROM THE COMMUNICATIONS FILE.                      * 00060000
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00070000
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00080000
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00090000
//*               CONCATENATED TO THE STEP2.STEPLIB DD STATEMENT.     * 00100000
//* *** ALSO ***  THIS JOB IS SET UP TO RUN IN A BMP REGION.          * 00110000
//*********************************************************************** 00120000
//PRGUTIL PROC RGN=,                                                    00130000
//            LOADLIB=,                                                 00140000
//            RESLIB=,                                                  00150000
//            SORTLIB=,                                                 00160000
//            SRCLIB=,                                                  00170000
//            PROG=,                                                    00180000
//            PSB=,                                                     00190000
//            TRAN=,                                                    00200000
//            DATE=,                                                    00210000
//            UTLIB=                                                    00220000
//STEP1  EXEC PGM=DFSRRC00,REGION=&RGN,PARM='BMP,&PROG,&PSB,&TRAN'      00230000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00240000
//         DD DISP=SHR,DSN=&RESLIB                                      00250000
//INFPRINT DD DISP=(NEW,PASS),DSN=&&PRG,UNIT=SYSDA,SPACE=(TRK,(10,10))  00260000
//INFLIST  DD DUMMY                                                     00270000
//INFREPT  DD DUMMY                                                     00280000
//INFIN    DD DISP=SHR,DSN=&SRCLIB(PURGLIST)                            00290000
//STEP2  EXEC PGM=MARKIV,REGION=&RGN,PARM='&DATE'                       00300000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00310000
//M4LIST   DD SYSOUT=*                                                  00320000
//M4REPO   DD DISP=(NEW,PASS),DCB=(BLKSIZE=6400,BUFNO=3),               00330000
//            UNIT=SYSDA,SPACE=(TRK,(5,2),RLSE)                         00340000
//M4SORT   DD DISP=(NEW,PASS),UNIT=SYSDA,SPACE=(TRK,1)                  00350000
//SYSOUT   DD DUMMY                                                     00360000
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB                                     00370000
//SORTWK01 DD SPACE=(CYL,1,,CONTIG),UNIT=SYSDA                          00380000
//SORTWK02 DD SPACE=(CYL,1,,CONTIG),UNIT=SYSDA                          00390000
//SORTWK03 DD SPACE=(CYL,1,,CONTIG),UNIT=SYSDA                          00400000
//M4LIB    DD DISP=SHR,DSN=&UTLIB                                       00410000
//M4OLD    DD DISP=(OLD,PASS),DSN=&&PRG                                 00420000
//M4SUBF1  DD DISP=(,PASS),DSN=&&STMTS,UNIT=SYSDA,SPACE=(TRK,(10,5))    00430000
//M4INPUT  DD DISP=SHR,DSN=&SRCLIB(PURGPROG)                            00440000
//STEP3  EXEC PGM=DFSRRC00,REGION=&RGN,PARM='BMP,&PROG,&PSB,&TRAN',     00450001
//            COND=(0,LT,STEP2)                                         00460000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00470000
//         DD DISP=SHR,DSN=&RESLIB                                      00480000
//INFPRINT DD SYSOUT=*                                                  00490000
//INFLIST  DD DUMMY                                                     00500000
//INFREPT  DD DUMMY                                                     00510000
//INFIN    DD DISP=(OLD,PASS),DSN=&&STMTS                               00520000
//       PEND                                                           00530000
//*********************************************************************** 00540000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00550000
//*  BEFORE YOU RUN THIS PROCEDURE, SPECIFY:                          * 00560000
//*                                                                   * 00570000
//* RGN     - THE REGION SIZE (DEFAULT 2M).                           * 00580000
//* LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                   * 00590000
//* RESLIB  - THE NAME OF THE IMS RESLIB. (DEFAULT IMSVS.RESLIB).     * 00600000
//* SORTLIB - THE LOAD LIBRARY CONTAINING THE SYSTEM SORT PROGRAM.    * 00610000
//*           THE DEFAULT IS SYS1.SORTLIB.                            * 00620000
//* SRCLIB  - THE INFORM INSTALLATION SOURCE LIBRARY.                 * 00630000
//* PROG    - THE BATCH SIMULATOR LOAD MODULE NAME. DEFAULT INFORMSB. * 00640000
```

```
//* PSB     - THE BATCH SIMULATOR PSBNAME. DEFAULT INFORMSB.          * 00650000
//* TRAN    - THE BATCH SIMULATOR TRAN ID. DEFAULT BMPOSB.            * 00660000
//* DATE    - THE DATE PARAMETER FOR THE PURGE UTILITY. ALL 'READY'   * 00670000
//*           STATUS REPORTS WITH A COMPLETION DATE EQUAL TO OR       * 00680000
//*           OLDER THAN THIS DATE WILL BE PURGED.                    * 00690000
//*           SPECIFY THE DATE IN MM/DD/YYYY FORMAT.                  * 00700000
//* UTLIB   - THE INFORM INSTALLATION UTILITY LIBRARY.                * 00710000
//*******************************************************************  00720000
//INF    EXEC PRGUTIL,RGN=2M,                                          00730000
//            LOADLIB='INFORM.LOADLIB',                               00740000
//            RESLIB='IMSVS.RESLIB',                                  00750000
//            SORTLIB='SYS1.SORTLIB',                                 00760000
//            SRCLIB='INFORM.SRCLIB',                                 00770000
//            PROG=INFORMSB,                                          00780000
//            PSB=INFORMSB,                                           00790000
//            TRAN=BMPOSB,                                            00800000
//            DATE='MM/DD/YYYY',                                      00810000
//            UTLIB='INFORM.UTLIB'                                    00820000
```

Figure 190. PURGUTLB — JCL to Run the Communication File Purge Utility in a BMP Region

RESULTQS

```
//* MEMBER RESULTQS                                                      00010000
//*********************************************************************** 00020000
//* EXECUTE THE RESULTS QUICK START UTILITY TO CONVERT VISION:RESULTS * 00030000
//* OR VISION:EIGHTY DEFINITIONS INTO VISION:INFORM FORMAT.           * 00040000
//*                                                                   * 00050000
//* ***** NOTE *****                                                  * 00060000
//* THE SYSCOPY DD STATEMENT IS USED FOR MVS COPYBOOK LIBRARIES.      * 00070000
//* THE PANDD1  DD STATEMENT IS USED FOR PANVALET COPYBOOK LIBRARIES. * 00080000
//* THE MASTER  DD STATEMENT IS USED FOR LIBRARIAN COPYBOOK LIBRARIES.* 00090000
//*                                                                   * 00100000
//* THIS UTILITY MAY ALSO BE INVOKED INTERACTIVELY UNDER TSO/ISPF     * 00110000
//* USING THE DEFINITION PROCESSOR COMPONENT IMPORT FUNCTION.         * 00120000
//*********************************************************************** 00130000
//RESLTQS PROC RGN=2M,                                                  00140000
//             LOADLIB=,                                                00150000
//             DEFLIB=,                                                 00160000
//             MEMBER=,                                                 00170000
//             RSLTLIB=,                                                00180000
//             RSLTDEF=                                                 00190000
//CONVRT EXEC PGM=RESULTQS,REGION=&RGN                                  00200000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00210000
//SYSPRINT DD SYSOUT=*                                                  00220000
//*SYSCOPY DD DISP=SHR,DSN=USER.RESULTS.COPYLIB                         00230000
//*PANDD1  DD DISP=SHR,DSN=USER.PANVALET.LIBRARY                        00240000
//*MASTER  DD DISP=SHR,DSN=USER.LIBR.MASTER                             00250000
//SYS004   DD DISP=OLD,DSN=&DEFLIB(&MEMBER)                             00260000
//SYSIN    DD DISP=SHR,DSN=&RSLTLIB(&RSLTDEF)                           00270000
//       PEND                                                           00280000
//*********************************************************************** 00290000
//*  FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE. BEFORE YOU    * 00300000
//*  RUN THIS PROCEDURE, SPECIFY:                                     * 00310000
//*                                                                   * 00320000
//*    RGN     - THE REGION SIZE. DEFAULT IS 2M.                      * 00330000
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                * 00340000
//*    DEFLIB  - THE LIBRARY(PDS) TO CONTAIN THE INFORM DEFINITIONS.  * 00350000
//*    MEMBER  - THE PDS MEMBER NAME FOR THE CONVERTED VISION:INFORM  * 00360000
//*              FILE DEFINITION IN THE DEFINITION LIBRARY.           * 00370000
//*    RSLTLIB - THE PDS CONTAINING THE VISION:RESULTS FILE           * 00380000
//*              DEFINITION SOURCE STATEMENTS.                        * 00390000
//*    RSLTDEF - THE PDS MEMBER NAME OF THE INPUT VISION:RESULTS      * 00400000
//*              FILE DEFINITION TO BE CONVERTED.                     * 00410000
//*                                                                   * 00420000
//* *** N O T E ***                                                   * 00430000
//*                                                                   * 00440000
//*  THIS PROCEDURE ASSUMES INPUT FROM A PDS MEMBER. OPTIONALLY, IT   * 00450000
//*  MAY ALSO COME FROM A RESULTS COPY (MVS PDS), COPYP (PANVALET),   * 00460000
//*  OR COPYL (LIBRARIAN) STATEMENT. IF SO, YOU MUST UN-COMMENT THE   * 00470000
//*  APPROPRIATE SYSCOPY (MVS PDS), PANDD1 (PANVALET), OR MASTER      * 00480000
//*  (LIBRARIAN) DD STATEMENT IN THE PROCEDURE, SPECIFYING THE        * 00490000
//*  PROPER DATA SET NAME FOR THE LIBRARY USED. PLEASE REFER TO THE   * 00500000
//*  MANUAL FOR DETAILS IN SETTING UP COPY SUPPORT.                   * 00510000
//*********************************************************************** 00520000
//STEP01 EXEC RESLTQS,RGN=2M,                                           00530000
//            LOADLIB='INFORM.LOADLIB',                                 00540000
//            DEFLIB='INFORM.DEFLIB',                                   00550000
//            MEMBER=FILENAME,                                          00560000
//            RSLTLIB='RESULTS.FILEDEFS',                               00570000
//            RSLTDEF=FILENAME                                          00580000
```

Figure 191. RESULTQS — JCL to Run the VISION:Results Quick Start Utility to Convert VISION:Results File Definitions into VISION:Inform Format

TINFBTCH

```
//* MEMBER TINFBTCH                                                      00010000
//*********************************************************************** 00020000
//* PROCEDURE TO EXECUTE THE VISION:INFORM BACKGROUND PROCESSOR IN A  * 00030000
//* DLI BATCH REGION USING TSO ATTACH FOR DB2 TABLE ACCESS.           * 00040000
//*                                                                   * 00050000
//* **NOTE - SEE TSO COMMAND PROCESSOR INPUT (SYSTSIN).               * 00060000
//*                                                                   * 00070000
//* IF THE DD NAMES FOR THE COMMUNICATION FILE AND FOREGROUND LIBRARY * 00080000
//* WERE CHANGED IN THE DBD'S, MAKE SURE THEY MATCH THOSE HERE.       * 00090000
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00100002
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00110002
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00120002
//*               CONCATENATED TO THE INFBG.STEPLIB DD STATEMENTS.    * 00130002
//*********************************************************************** 00140000
//INFBG   PROC RGN=,                                                    00150000
//             LOADLIB=,                                                00160000
//             RS1LOAD=,                                                00170000
//             DB2LOAD=,                                                00180000
//             RESLIB=,                                                 00190000
//             PGMLIB=,                                                 00200000
//             SORTLIB=,                                                00210001
//             PSBLIB=,                                                 00220000
//             DBDLIB=,                                                 00230000
//             FGLIB=,                                                  00240000
//             INFCOM=,                                                 00250000
//             INFLOG=,                                                 00260000
//             BGLIB=,                                                  00270000
//             REPORTS=,                                                00280000
//             RUNCNTL=,                                                00290000
//             HCSCFG=,                                                 00300004
//             HTMLTPL=,                                                00310004
//             M4REPO=,                                                 00320000
//             M4SORT=,                                                 00330000
//             M4REPI=                                                  00340000
//INFBG  EXEC PGM=IKJEFT01,REGION=&RGN                                  00350000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00360000
//         DD DISP=SHR,DSN=&RS1LOAD                                     00370000
//         DD DISP=SHR,DSN=&DB2LOAD                                     00380000
//         DD DISP=SHR,DSN=&RESLIB                                      00390000
//         DD DISP=SHR,DSN=&PGMLIB                                      00400000
//IMS      DD DISP=SHR,DSN=&PSBLIB                                      00410000
//         DD DISP=SHR,DSN=&DBDLIB                                      00420000
//DFSRESLB DD DISP=SHR,DSN=&RESLIB                                      00430000
//IEFRDER  DD DUMMY                                                     00440000
//M4LIB    DD DISP=SHR,DSN=&BGLIB                                       00450000
//M4REPO   DD DISP=SHR,DSN=&M4REPO                                      00460000
//SORTIN   DD DISP=SHR,DSN=&M4REPO                                      00470000
//M4SORT   DD DISP=SHR,DSN=&M4SORT                                      00480000
//SYSIN    DD DISP=SHR,DSN=&M4SORT                                      00490000
//M4REPI   DD DISP=SHR,DSN=&M4REPI                                      00500000
//SORTOUT  DD DISP=SHR,DSN=&M4REPI                                      00510000
//SORTMSG  DD SYSOUT=*                                                  00520000
//INFREPT  DD DISP=OLD,DSN=&REPORTS                                     00530000
//*INFREPT DD SYSOUT=*                                                  00540000
//SYSTSPRT DD SYSOUT=*                                                  00550000
//INFORMLF DD DISP=OLD,DSN=&FGLIB                                       00560000
//INFORMCF DD DISP=OLD,DSN=&INFCOM                                      00570000
//INFLOG   DD DISP=OLD,DSN=&INFLOG                                      00580000
//SYSOUT   DD SYSOUT=*                                                  00590000
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB                                     00600001
//SORTWK01 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00610000
//SORTWK02 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00620000
//SORTWK03 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00630000
//HCSCFG   DD DISP=SHR,DSN=&HCSCFG                                      00640004
```

```
//M4HTBASE DD DISP=SHR,DSN=&HTMLTPL                                     00650004
//INFIN    DD DISP=SHR,DSN=&RUNCNTL                                     00660000
//       PEND                                                           00670000
//*********************************************************************** 00680000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.  BEFORE    * 00690000
//* YOU RUN THIS PROCEDURE, SPECIFY:                                  * 00700000
//*                                                                   * 00710000
//* RGN     - THE REGION SIZE.  THE DEFAULT IS 2M.                    * 00720000
//* LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                   * 00730000
//* RS1LOAD - LOAD LIBRARY CONTAINING THE DB2 INTERFACE MODULE.       * 00740000
//* DB2LOAD - THE DB2 LOAD LIBRARY.                                   * 00750000
//* RESLIB  - IMS RESLIB.  THE DEFAULT IS IMSVS.RESLIB.               * 00760000
//* PGMLIB  - THE IMS PROGRAM LIBRARY.                                * 00770000
//* SORTLIB - THE SYSTEM SORT LOAD LIBRARY. DEFAULT SYS1.SORTLIB.     * 00780001
//* PSBLIB  - THE PSB LIBRARY.                                        * 00790000
//* DBDLIB  - THE DBD LIBRARY.                                        * 00800000
//* FGLIB   - THE INFORM FOREGROUND LIBRARY.                          * 00810000
//* INFCOM  - THE INFORM COMMUNICATION FILE.                          * 00820000
//* INFLOG  - THE INFORM HARDCOPY LOG FILE.                           * 00830000
//* BGLIB   - THE INFORM BACKGROUND LIBRARY.                          * 00840000
//* REPORTS - THE DATASET FOR PRINTED REPORTS.                        * 00850000
//* RUNCNTL - THE DATASET CONTAINING THE BACKGROUND PROCESSOR INPUT   * 00860000
//*           PARAMETERS.  *****NOTE**** MEMBER "OSCNTL" IN DATASET   * 00870000
//*                        INFORM.SRCLIB HAS SAMPLE INPUT PARAMETERS. * 00880000
//* HCSCFG  - THE CONFIGURATION FILE FOR DYNAMIC ALLOCATION OF        * 00890004
//*           ALTERNATE FORMAT OUTPUT FILES. SPECIFY A PDS AND MEMBER * 00900004
//*           NAME OR A SEQUENTIAL FILE NAME.                         * 00910004
//* HTMPTPL - THE DATA SET NAME OF THE PDS CONTAINING THE HTML        * 00920004
//*           TEMPLATES FOR HTML OUTPUT FORMAT.  THE DEFAULT IS       * 00930004
//*           THE INSTALLATION SOURCE LIBRARY.                        * 00940004
//* M4REPO  - THE PROCESSOR OUTPUT WORK FILE, SORT INPUT FILE.        * 00950000
//* M4SORT  - THE PROCESSOR SORT CONTROL OUTPUT, SORT CONTROL INPUT.  * 00960000
//* M4REPI  - THE PROCESSOR INPUT, SORT OUTPUT FILE.                  * 00970000
//*********************************************************************** 00980000
//INFBG    EXEC INFBG,                                                  00990000
//             RGN=2M,                                                  01000000
//             LOADLIB='INFORM.LOADLIB',                                01010000
//             RS1LOAD='INFORM.RS1LIB',                                 01020000
//             DB2LOAD='DB2.LOADLIB',                                   01030000
//             RESLIB='IMSVS.RESLIB',                                   01040000
//             PGMLIB='USER.IMS.PGMLIB',                                01050000
//             SORTLIB='SYS1.SORTLIB',                                  01060001
//             PSBLIB='INFORM.PSBLIB',                                  01070000
//             DBDLIB='INFORM.DBDLIB',                                  01080000
//             FGLIB='INFORM.FGLIB',                                    01090000
//             INFCOM='INFORM.INFCOM',                                  01100000
//             INFLOG='INFORM.INFLOG',                                  01110000
//             BGLIB='INFORM.BGLIB',                                    01120000
//             REPORTS='INFORM.REPORTS',                                01130000
//             RUNCNTL='INFORM.SRCLIB(OSCNTL)',                         01140000
//             HCSCFG='INFORM.SRCLIB(HCSCNFIG)',                        01150004
//             HTMLTPL='INFORM.SRCLIB',                                 01160004
//             M4REPO='INFORM.M4REPO',                                  01170000
//             M4SORT='INFORM.M4SORT',                                  01180000
//             M4REPI='INFORM.M4REPI'                                   01190000
//DFSVSAMP  DD *                                                        01200000
8192,11                                                                 01210003
//*********************************************************************** 01220000
//* INCLUDE DD STATEMENTS FOR ALL FILES AND DATABASES AVAILABLE TO    * 01230000
//* THIS BACKGROUND PROCESSOR HERE. USE THE FOLLOWING FORMAT:         * 01240000
//*                                                                   * 01250000
//* //INFBG.USERFILE   DD .....                                       * 01260000
//*                                                                   * 01270000
//* IF YOU WANT TO ALLOW SUBFILE CREATION ENTER A DD STATEMENT FOR    * 01280000
//* EACH SUBFILE WITH THE FOLLOWING FORMAT:                           * 01290000
//*                                                                   * 01300000
```

```
//* //INFBG.USERSUBF   DD ............                                  * 01310000
//*                                                                     * 01320000
//* IF YOU WANT TO ALLOW SUBFILE DEFINITION CREATION ADD A DD         * 01330000
//* STATEMENT FOR M4SUBF0.  USE THE FOLLOWING FORMAT:                 * 01340000
//*                                                                     * 01350000
//* //INFBG.M4SUBF0 DD DISP=MOD,DSN=USER.SUBFILE.DEFS                 * 01360000
//********************************************************************* 01370000
//*                                                                     * 01380000
//*  SET UP TSO COMMAND PROCESSOR INPUT HERE:                           * 01390000
//*                                                                     * 01400000
//********************************************************************* 01410000
//SYSTSIN DD *                                                          01420000
 DSN SYSTEM (DB2 SYSTEM NAME)                                           01430000
 RUN CP -                                                               01440000
 PLAN (PLANNAME)                                                        01450000
 CALL 'IMSVS.RESLIB(DFSRRC00)' 'DLI,INFORMDE,INFORMBB'                  01460000
 END                                                                    01470000
```

Figure 192. TINFBTCH — JCL Run the Background Processor in a Batch DLI Region for DB2 Tables Using TSO Attach

TINFOSB

```
//* MEMBER TINFOSB                                                      00010000
//*********************************************************************** 00020000
//* PROCEDURE TO RUN THE BATCH SIMULATOR IN A DLI BATCH REGION WITH   * 00030000
//* ACCESS TO DB2 TABLES THROUGH TSO ATTACH.                          * 00040000
//*                                                                   * 00050000
//* NOTE*** - SEE TSO COMMAND PROCESSOR INPUT (SYSTSIN).              * 00060000
//*                                                                   * 00070000
//* IF THE DD NAMES FOR THE COMMUNICATION FILE AND FOREGROUND LIBRARY * 00080000
//* WERE CHANGED IN THE DBD, MAKE SURE THEY MATCH THOSE HERE.         * 00090000
//* *** NOTE ***  IF THE LANGUAGE ENVIRONMENT LOAD LIBRARY IS NOT IN  * 00100001
//*               THE STANDARD LOAD LIBRARY LIST MADE AVAILABLE TO    * 00110001
//*               ALL BATCH PROGRAMS ON YOUR HOST SYSTEM, IT MUST BE  * 00120001
//*               CONCATENATED TO THE OSB.STEPLIB DD STATEMENTS.      * 00130001
//*********************************************************************** 00140000
//INFOSB  PROC RGN=,                                                    00150000
//             LOADLIB=,                                                00160000
//             RS1LOAD=,                                                00170000
//             DB2LOAD=,                                                00180000
//             RESLIB=,                                                 00190000
//             SORTLIB=,                                                00200000
//             PSBLIB=,                                                 00210000
//             DBDLIB=,                                                 00220000
//             FGLIB=,                                                  00230000
//             INFCOM=,                                                 00240000
//             REPORTS=,                                                00250000
//             HCSCFG=,                                                 00260003
//             HTMLTPL=,                                                00270003
//             BGLIB=                                                   00280000
//OSB    EXEC PGM=IKJEFT01,REGION=&RGN                                  00290000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00300000
//         DD DISP=SHR,DSN=&RS1LOAD                                     00310000
//         DD DISP=SHR,DSN=&DB2LOAD                                     00320000
//         DD DISP=SHR,DSN=&RESLIB                                      00330000
//IMS      DD DISP=SHR,DSN=&PSBLIB                                      00340000
//         DD DISP=SHR,DSN=&DBDLIB                                      00350000
//IEFRDER  DD DUMMY                                                     00360000
//DFSRESLB DD DISP=SHR,DSN=&RESLIB                                      00370000
//M4LIB    DD DISP=SHR,DSN=&BGLIB                                       00380000
//M4REPO   DD UNIT=SYSDA,SPACE=(TRK,(2,2))                              00390000
//SYSOUT   DD SYSOUT=*                                                  00400000
//SYSTSPRT DD SYSOUT=*                                                  00410000
//SORTLIB  DD DISP=SHR,DSN=&SORTLIB                                     00420000
//SORTWK01 DD SPACE=(CYL,5,,CONTIG),UNIT=SYSDA                          00430000
//SORTWK02 DD SPACE=(CYL,5,,CONTIG),UNIT=(SYSDA,SEP=SORTWK01)           00440000
//SORTWK03 DD SPACE=(CYL,5,,CONTIG),                                    00450000
//            UNIT=(SYSDA,SEP=(SORTWK01,SORTWK02))                      00460000
//INFORMLF DD DISP=OLD,DSN=&FGLIB                                       00470000
//INFORMCF DD DISP=OLD,DSN=&INFCOM                                      00480000
//INFPRINT DD SYSOUT=*                                                  00490000
//INFLIST  DD SYSOUT=*                                                  00500000
//HCSCFG   DD DISP=SHR,DSN=&HCSCFG                                      00510003
//M4HTBASE DD DISP=SHR,DSN=&HTMLTPL                                     00520003
//INFREPT  DD DISP=OLD,DSN=&REPORTS                                     00530000
//*INFREPT DD SYSOUT=*                                                  00540000
//       PEND                                                           00550000
//*********************************************************************** 00560000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.           * 00570000
//*    BEFORE YOU RUN THIS PROCEDURE,SPECIFY:                         * 00580000
//*                                                                   * 00590000
//*    RGN     - THE REGION SIZE. (DEFAULT 2M).                       * 00600000
//*    LOADLIB - THE INFORM INSTALLATION LOAD LIBRARY.                * 00610000
//*    RS1LOAD - LOAD LIBRARY CONTAINING THE DB2 INTERFACE MODULE.    * 00620000
//*    DB2LOAD - THE DB2 LOAD LIBRARY.                                * 00630000
//*    RESLIB  - THE NAME OF THE IMS RESLIB. (DEFAULT IMSVS.RESLIB).  * 00640000
```

```
//*    SORTLIB - THE SYSTEM SORT LOAD LIBRARY. DEFAULT SYS1.SORTLIB.  * 00650000
//*    PSBLIB  - THE USER'S PSB LIBRARY.                              * 00660000
//*    DBDLIB  - THE USER'S DBD LIBRARY.                              * 00670000
//*    FGLIB   - THE INFORM FOREGROUND LIBRARY.                       * 00680000
//*    INFCOM  - THE INFORM COMMUNICATIONS FILE.                      * 00690000
//*    REPORTS - THE DATASET FOR PRINTED REPORTS.                     * 00700000
//*    HCSCFG  - THE CONFIGURATION FILE FOR DYNAMIC ALLOCATION OF     * 00710003
//*              ALTERNATE FORMAT OUTPUT FILES. SPECIFY A PDS AND     * 00720003
//*              MEMBER NAME OR A SEQUENTIAL FILE NAME.               * 00730003
//*    HTMPTPL - THE DATA SET NAME OF THE PDS CONTAINING THE HTML     * 00740003
//*              TEMPLATES FOR HTML OUTPUT FORMAT.  THE DEFAULT IS    * 00750003
//*              THE INSTALLATION SOURCE LIBRARY.                     * 00760003
//*    BGLIB   - THE INFORM BACKGROUND LIBRARY.                       * 00770000
//*********************************************************************** 00780000
//INFOSB  EXEC INFOSB,                                                  00790000
//             RGN=2M,                                                  00800000
//             LOADLIB='INFORM.LOADLIB',                                00810000
//             RS1LOAD='INFORM.RS1LIB',                                 00820000
//             DB2LOAD='DB2.LOADLIB',                                   00830000
//             RESLIB='IMSVS.RESLIB',                                   00840000
//             SORTLIB='SYS1.SORTLIB',                                  00850000
//             PSBLIB='INFORM.PSBLIB',                                  00860000
//             DBDLIB='INFORM.DBDLIB',                                  00870000
//             FGLIB='INFORM.FGLIB',                                    00880000
//             INFCOM='INFORM.INFCOM',                                  00890000
//             REPORTS='INFORM.REPORTS',                                00900000
//             HCSCFG='INFORM.SRCLIB(HCSCNFIG)',                        00910003
//             HTMLTPL='INFORM.SRCLIB',                                 00920003
//             BGLIB='INFORM.BGLIB'                                     00930000
//OSB.DFSVSAMP DD *                                                     00940000
8192,11                                                               00950002
//*********************************************************************** 00960000
//* INCLUDE DD STATEMENTS FOR ALL FILES AND DATABASES AVAILABLE TO     * 00970000
//* THIS BATCH SIMULATOR HERE. USE THE FOLLOWING FORMAT:               * 00980000
//*                                                                    * 00990000
//* //OSB.USERFILE  DD .....                                           * 01000000
//*                                                                    * 01010000
//* IF YOU WANT TO ALLOW SUBFILE CREATION ENTER A DD STATEMENT FOR     * 01020000
//* EACH SUBFILE WITH THE FOLLOWING FORMAT:                            * 01030000
//*                                                                    * 01040000
//* //OSB.USERSUBF  DD .....                                           * 01050000
//*                                                                    * 01060000
//* IF YOU WANT TO ALLOW SUBFILE DEFINITION CREATION ADD A DD          * 01070000
//* STATEMENT FOR M4SUBF0.  USE THE FOLLOWING FORMAT:                  * 01080000
//*                                                                    * 01090000
//* //OSB.M4SUBF0 DD DISP=MOD,DSN=USER.SUBFILE.DEFS                   * 01100000
//*********************************************************************** 01110000
//*                                                                    * 01120000
//*  SET UP TSO COMMAND PROCESSOR INPUT HERE:                          * 01130000
//*                                                                    * 01140000
//*********************************************************************** 01150000
//OSB.SYSTSIN DD *                                                      01160000
 DSN SYSTEM (DB2 SYSTEM NAME)                                         01170000
 RUN CP -                                                             01180000
 PLAN (PLANNAME)                                                      01190000
 CALL 'IMSVS.RESLIB(DFSRRC00)' 'DLI,INFORMSB,INFORMSB'                01200000
 END                                                                  01210000
//*********************************************************************** 01220000
//* PLACE BATCH SIMULATOR INPUT STATEMENTS AFTER THE INFIN DD STMT.    * 01230000
//*********************************************************************** 01240000
//OSB.INFIN DD *                                                        01250000
```

Figure 193. TINFOSB — JCL to Run the Batch Simulator in a Batch Region for DB2 Tables Using TSO Attach

TRANSFER

```
//* MEMBER TRANSFER                                                      00010000
//*********************************************************************** 00020000
//* THIS PROCEDURE LINKS THE RANDOMIZING MODULE INTO IMSVS.RESLIB.    * 00030000
//* IT THEN COPIES THE LOAD MODULES NEEDED BY THE IMS ONLINE SYSTEM   * 00040000
//* FROM THE INSTALL LOADLIB TO THE ONLINE LOADLIB.  THE OUTPUT LOAD  * 00050000
//* MODULES ARE RENAMED USING THE SUPPLIED PREFIX.                    * 00060000
//*********************************************************************** 00070000
//TRANSFER PROC LOADLIB=,                                               00080000
//             RESLIB=,                                                 00090000
//             PGMLIB=,                                                 00100000
//             PREFIX=                                                  00110000
//LKED1  EXEC PGM=HEWL,REGION=1M,                                       00120000
//            PARM='RENT,XREF,MAP,LET,LIST,NCAL,SIZE=(200K,56K)'        00130000
//SYSPRINT DD SYSOUT=*                                                  00140000
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1))                              00150000
//LOAD     DD DISP=SHR,DSN=&LOADLIB                                     00160002
//SYSLMOD  DD DISP=OLD,DSN=&RESLIB                                      00170002
//BLDCNTL EXEC PGM=TRANSFER,REGION=1M,PARM='&PREFIX'                    00180000
//STEPLIB  DD DISP=SHR,DSN=&LOADLIB                                     00190002
//SYSPRINT DD SYSOUT=*                                                  00200000
//COPYCTL  DD DISP=(,PASS),DSN=&&COPY,                                  00210000
//            UNIT=SYSDA,SPACE=(TRK,1),DCB=BLKSIZE=3200                 00220000
//LINKCTL  DD DISP=(,PASS),DSN=&&LINK,                                  00230000
//            UNIT=SYSDA,SPACE=(TRK,1),DCB=BLKSIZE=3200                 00240000
//COPY   EXEC PGM=IEBCOPY,REGION=1M,COND=(4,LT,BLDCNTL)                 00250000
//SYSUT3   DD UNIT=SYSDA,SPACE=(TRK,10)                                 00260000
//SYSUT4   DD UNIT=SYSDA,SPACE=(TRK,10)                                 00270000
//SYSPRINT DD SYSOUT=*                                                  00280000
//IN       DD DISP=SHR,DSN=&LOADLIB                                     00290002
//OUT      DD DISP=OLD,DSN=&PGMLIB                                      00300002
//SYSIN    DD DISP=(OLD,DELETE),DSN=&&COPY                              00310000
//LKED2  EXEC PGM=HEWL,REGION=1M,COND=(4,LT,BLDCNTL),                   00320000
//       PARM='RENT,XREF,MAP,LET,LIST,NCAL,SIZE=(300K,56K),RMODE=ANY'   00330000
//SYSPRINT DD SYSOUT=*                                                  00340000
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(5,2))                              00350000
//LOAD     DD DISP=SHR,DSN=&LOADLIB                                     00360002
//SYSLMOD  DD DISP=OLD,DSN=&PGMLIB                                      00370002
//SYSLIN   DD DISP=(OLD,DELETE),DSN=&&LINK                              00380000
//       PEND                                                           00390000
//*********************************************************************** 00400000
//*  THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE.  BEFORE   * 00410000
//*  YOU RUN THIS PROCEDURE, SPECIFY:                                 * 00420000
//*                                                                   * 00430000
//*  LOADLIB - THE INSTALLATION LOAD LIBRARY DATA SET NAME.           * 00440001
//*  RESLIB  - NAME OF THE IMS RESLIB WHICH IS TO CONTAIN THE         * 00450000
//*            RANDOMIZING MODULE.  NOTE: THE RANDOMIZING MODULE      * 00460000
//*            (INFRM) NAME USED ON THE "NAME" STATEMENT MUST AGREE   * 00470000
//*            WITH THE NAME USED FOR THE RANDOMIZING MODULE IN THE   * 00480000
//*            DBDGEN FOR THE FOREGROUND LIBRARY AND THE              * 00490000
//*            COMMUNICATION FILE. IF THE DBD RMNAME (IN THE          * 00500003
//*            VISION:INFORM SOURCE LIBRARY MEMBERS FGLIB AND INFCOM) * 00501003
//*            WAS CHANGED FROM THE INSTALLATION DEFAULT OF 'INFRM',  * 00502003
//*            CHANGE THE NAMES ON "NAME ___(R)" STATEMENT IN THE     * 00510000
//*            LKED1.SYSLIN INPUT BELOW.                              * 00520000
//*  PGMLIB  - THE IMS ONLINE LOAD LIBRARY.                           * 00530000
//*  PREFIX  - THE 6-CHARACTER PREFIX TO BE USED ON ALL INFORM        * 00540000
//*            LOAD MODULE NAMES.                                     * 00550000
//*********************************************************************** 00560000
//TRANSF  EXEC TRANSFER,                                                00570000
//             LOADLIB='INFORM.LOADLIB',                                00580000
//             RESLIB='IMSVS.RESLIB',                                   00590000
//             PGMLIB='INFORM.PGMLIB',                                  00600000
//             PREFIX='INFORM'                                          00610000
//LKED1.SYSLIN  DD *                                                    00620000
```

```
  INCLUDE LOAD(INFRM)                                                   00630000
  NAME INFRM(R)                                                         00640000
```

Figure 194 TRANSFER — JCL to Transfer the Online Program Modules from the Installation Load Library to the IMS Online Program Load Library

Appendix

B

Writing Exit Routines

Profile Exit Routines

VISION:Inform provides you with the capability to optionally write your own profile exit routine to dynamically change profile values for the duration of a VISION:Inform session. To use the exit routine, you code and assemble your exit routine and link it with VISION:Inform, and then execute the TRANSFER step.

Using an exit routine, you can:

- Supply a database SELECT statement for a database that does not have one.
- Override an existing database SELECT statement.
- Cancel a database SELECT statement.
- Override or supply ID information in the profile for queries, tasks, or reports.

You invoke the exit routine at logon time once for each database defined in the user's profile or inherited from parent profiles. At quit time, the system invokes the exit once.

The exit routine you code can use five parameters. The address of the parameter list is stored in register 1. The parameters are the addresses of:

- A 6-byte exit indicator whose value is LOGON for logon processing or LOGOFF for quit processing.
- An 8-byte character field containing the user ID. The high order bit at this location is on when the exit gets control at logoff time.
- An 8-byte character field containing the database name.
- A 790-byte character field where your exit routine stores the override SELECT statement, if you use one. The field is logically divided into 10 sections, each 79 bytes. Each of the 79-byte sections represents one line of the SELECT statement. A comma is required at the end of each continued line. The override SELECT has the same format as the user profile's SELECT (that is, SELECT IF X Y AND X Z).

- A 30-byte character field where the ID override information is stored when you use an override.

Before returning control to VISION:Inform, code the exit to store one of the following return codes in Register 15:

0 — Normal return.

4 — Dummy exit; no action.

8 — SELECT should not be used for security purposes.

16 — Abnormal return; logoff immediately.

The following figure contains a dummy exit routine. This routine is in member PROEXITR of INFORM.SRCLIB. Sample JCL for assembling and linking it into the system is provided in member PRXASMLK of INFORM.JCL and is shown in the appendix "JCL Samples."

```
PX       TITLE 'SAMPLE USER PROFILE EXIT'
PROEXITR    CSECT
*S
*S PROEXITR IS A USER-WRITTEN INTERFACE PROGRAM USED WITH THE
*S ONLINE PORTION OF THE PRODUCT. IT WILL RECEIVE CONTROL ON A
*S LOGON AND LOGOFF EXIT FOR A USER SIGNING ON OR OFF.
*S FOR THE LOGON EXIT, IT IS INVOKED ONCE FOR EACH DATABASE THAT
*S THE USER CAN ACCESS.
*S IT IS INVOKED ONLY ONCE FOR THE LOGOFF EXIT.
*
*
*P
*P       PARAMETER LIST DESCRIPTION
*P
*P PXTYPE   DS    CL6        INPUT         TYPE OF EXIT
*P                                           VALUES: 'LOGON ' OR
*P                                                   'LOGOFF'
*P PXUSERID DS    CL8        INPUT         USERID
*P PXDBNAME DS    CL8        INPUT         DATATBASE NAME
*P PXSELECT DS    10CL79     OUTPUT        SELECT STATEMENT
*P PXID     DS    CL30       OUTPUT        ID FIELD
*P
*P REGISTER 15  = 0          OUTPUT        NORMAL RETURN
*P              = 4                        NO ACTION
*P              = 8                        DELETE EXISTING SELECT
*P              = 16                       ERROR CONDITION - LOGOFF
*
*
*N NOTE: PROEXITR SHOULD BE CODED AS A REENTRANT ASSEMBLER PROGRAM.
*
         LA    15,4                    SET DUMMY EXIT OUTPUT PARAMETER
         BR    14                      RETURN TO CALLER
*
*        INPUT PARAMETER LIST
*
PXPRMLST DSECT
PXTYPEAD DS    A                       ADDR OF EXIT TYPE
PXUSERAD DS    A                       ADDR OF USERID
PXDBAD   DS    A                       ADDR OF DATABASE NAME
PXSELAD  DS    A                       ADDR OF SELECT STATEMENT
PXIDAD   DS    A                       ADDR OF ID FIELD
*
         END
```

Figure 195. A Dummy Profile Exit Routine

Profile Exit With Password Validation Entry

The VISION:Inform Profile Exit facility can also be set up to process passwords for your users. This is especially useful if you require password validation processes to interface with your in-house security system (ACF2, Top Secret, RACF, etc.). In order to activate the password validation function of the Profile Exit facility, you must specify the PASSWDX=YES keyword in the VISION:Inform parameter module, PARMBLK. With this option specified, the Profile Exit will be invoked one additional time at logon time, just before VISION:Inform processes the user-entered password.

The user exit password verification can either completely replace VISION:Inform's password checking or can be done in addition to VISION:Inform's password checking. The parameters passed to the profile exit routine for password verification are:

- The address of a 6-byte character field containing the value PASSWD
- The address of an 8-byte character field containing the input user ID
- The address of an 8-byte character field containing the input password
- The address of a 1-byte flag identifying the calling client, which is one of the following:
  - VISION:Intraccess (x'80')
  - VISION:Inform Batch Simulator (x'40')
  - VISION:Inform 3270 (x'20)
  - VISION:Journey 1.7 or earlier (x'10)
  - VISION:Journey 2.0 or later (x'08')

The user exit for the PASSWD call communicates its results to VISION:Inform by setting the contents of Register 15 to one of the following values prior to returning to VISION:Inform:

0 Indicates the password is acceptable and that VISION:Inform should bypass its password verification.

4 Indicates the password is acceptable and that VISION:Inform should also perform its password verification.

8 Indicates the password is invalid and that VISION:Inform should issue an error indicating the password is invalid. VISION:Inform will not allow the user to log on in this instance.

Print Exit Routines

VISION:Inform provides an exit facility so that you have complete control over the processing of the INFREPT data set during a Background Processor run. To use the exit routine, you code and assemble your exit routine and link it with VISION:Inform, and then execute the TRANSFER step.

The user written exit routine has a predefined name of LSTEXITR. A default version of this routine is provided with the system. The default version leaves VISION:Inform in complete control of the INFREPT data set. The LSTEXITR routine is coded using standard IBM linkage conventions to interface with the exit facility.

- VISION:Inform initially invokes the LSTEXITR exit routine just before opening the INFREPT data set. At this time, your routine must set indicators in a mask that tell VISION:Inform at what points during INFREPT processing you want to gain control. The control mask is dynamic; that is, you can alter its value repeatedly during the processing of the INFREPT data set and one final time just before the INFREPT data set is closed, based on the settings of the control mask.

When the INFREPT exit routine gains control, register 1 points to a list of parameter addresses that point to the following:

- An 8-byte field containing the constant 'M4PRINT'
- A 1-byte field in which you must place one of the following return codes each time the exit returns to VISION:Inform:

  0 — To indicate that you want VISION:Inform to perform the operation (OPEN, CLOSE, or PUT).

  1 — To indicate that you do not want VISION:Inform to perform the operation.

  2 — To indicate that the user-written routine detected an error and wants to terminate the run immediately with an ABEND. VISION:Inform then terminates with a 3525 ABEND.

- An 8-byte field containing the function about to be performed on the INFREPT data set. This field will contain one of the following:

  OPEN — To indicate the INFREPT data set is about to be opened by VISION:Inform.

  BANNER — To indicate that a PUT is about to be done for one of the banner lines of a VISION:Bridge report.

  DETAIL — To indicate that a PUT is about to be done for a data line of the VISION:Bridge report.

  OTHER — To indicate that a non-DETAIL or non-BANNER record is about to be written to the INFREPT data set.

CLOSE — To indicate that the INFREPT data set is about to be closed by VISION:Inform.

ENDBATCH — A batch of queries has finished processing.

- The address of INFREPT DCB.
- The address of the record about to be written to the INFREPT data set. Note that the address of this field in the parameter list contains binary zeros if the function is OPEN or CLOSE.
- A 6-byte field containing the control mask for user processing of the INFREPT data set.
  - The mask is made up of six one-byte character fields, one for each of the six exit functions.
  - A mask byte is set to one if you want control for the corresponding function.
  - A mask byte is set to zero if you want no control over a particular function.

  The six-byte mask field is in the following format:

  byte 1 — Mask byte for the OPEN function.

  byte 2 — Mask byte for the CLOSE function.

  byte 3 — Mask byte for the BANNER function.

  byte 4 — Mask byte for the DETAIL function.

  byte 5 — Mask byte for the OTHER function.

  byte 6 — Mask byte for the ENDBATCH function.

The following figure contains a dummy INFREPT exit routine. This routine is also provided in member LSTEXITR of INFORM.SRCLIB. Sample JCL for assembling and linking the exit with the VISION:Inform system is in member LSXASMLK of INFORM.JCL and is shown in the appendix "JCL Samples."

```
H8       TITLE 'SAMPLE INFREPT EXIT ROUTINE'
LSTEXITR    CSECT
*
* LSTEXITR IS A USER-WRITTEN EXIT PROGRAM USED TO GAIN CONTROL
* OF THE INFREPT DATA SET. IT WILL RECEIVE CONTROL AT OPEN, CLOSE
* AND PUT PROCESSING FOR INFREPT BASED ON SETTING OF A CONTROL MASK.
*
         SR    15,15                    DUMMY EXIT
         BR    14                       RETURN TO CALLER
*
*        INPUT PARAMETER LIST
*
H8PRMLST DSECT
H8EXNAME DS    A     ADDRESS OF 8-BYTE EXIT NAME 'M4PRINT '
H8RETURN DS    A     ADDRESS OF 1 BYTE RETURN CODE FIELD
*                      C'0' = THE PRODUCT IS TO DO THE OPERATION
*                      C'1' = THE PRODUCT SHOULD NOT DO THE OPERATION
*                      C'2' = TERMINATE THE RUN WITH 3525 ABEND
H8FUNC   DS    A     ADDRESS OF 8-BYTE FUNCTION
*                      'OPEN    ' =  INFREPT ABOUT TO BE OPENED
*                      'CLOSE   ' =  INFREPT ABOUT TO BE CLOSED
*                      'BANNER  ' =  ABOUT TO DO PUT FOR A REPORT
*                                    HEADER LINE
*                      'DETAIL  ' =  ABOUT TO DO PUT FOR A REPORT
*                                    DETAIL LINE
*                      'OTHER   ' =  ABOUT TO DO PUT FOR A NON
*                                    REPORT DETAIL OR HEADER LINE.
*                      'ENDBATCH' =  A BATCH OF QUERIES HAS FINISHED
*                                    PROCESSING.
H8DCB    DS    A     ADDRESS OF DCB/DTF
H8RECORD DS    A     ADDRESS OF RECORD TO BE PUT - ***NOTE THAT THIS
*                    ADDRESS WILL BE X'00' FOR OPEN OR CLOSE FUNCTION
H8MASK   DS    A     ADDRESS OF 6-BYTE CONTROL MASK (DYNAMIC MASK WHICH
*                    CAN BE CHANGED ON THE FLY). A C'1' IN A MASK FIELD
*                    INDICATES USER WANTS CONTROL OF THAT FUNCTION, AND
*                    C'0' INDICATES NO CONTROL IS DESIRED. THE 6-BYTE
*                    MASK IS IN THE FOLLOWING FORMAT -
*
*                     BYTE 1 = 'OPEN    ' MASK CONTROL BYTE
*                     BYTE 2 = 'CLOSE   ' MASK CONTROL BYTE
*                     BYTE 3 = 'BANNER  ' MASK CONTROL BYTE
*                     BYTE 4 = 'DETAIL  ' MASK CONTROL BYTE
*                     BYTE 5 = 'OTHER   ' MASK CONTROL BYTE
*                     BYTE 6 = 'ENDBATCH' MASK CONTROL BYTE
*
         END
```

Figure 196. A Dummy INFREPT Exit Routine

Appendix

C

Definition Processor Startup CLIST

The following sample CLIST shows how you can make your Definition Processor libraries available to the ISPF environment.

```
PROC 0
CONTROL LIST MSG
  FREE  FI(SYSPROC ISPLLIB ISPMLIB ISPPLLIB ISPSLIB ISPTLIB +
          ISPTABL ISPROF M9LIST DEFTLIB)
  ALLOC FI(SYSPROC) DA( 'SYS1.CMDPROC'           +
                    'ISR.ISPF.ISRCLIB'      +
                    'INFORM.CLIST' ) SHR
/* NOTE THAT THE CLIST LIBRARY HAS BEEN COPIED FROM           */
/* THE ORIGINAL FIXED BLOCK LIBRARY THAT WAS SUPPLIED ON THE  */
/* INSTALLATION TAPE, TO A VARIABLE BLOCKED LIBRARY THAT      */
/* CONFORMS TO OUR SHOP STANDARDS FOR CLIST LIBRARIES.
ALLOC FI(ISPLLIB) DA( 'INFORM.LOADLIB')  SHR
ALLOC FI(ISPMLIB) DA( 'INFORM.MSGS'  +
                   'ISR.ISPF.ISRMLIB'      +
                   'ISP.ISPF.ISPMLIB')  SHR
ALLOC FI(ISPPLIB) DA( 'INFORM.PANELS'   +
                   'ISR.ISPF.ISRPLIB'         +
                   'ISP.ISPF.ISPPLIB')  SHR
ALLOC FI(ISPSLIB) DA( 'INFORM.SKELS'  +
                   'ISR.ISPF.ISRSLIB'  +
                   'ISP.ISPF.ISPSLIB')  SHR
ALLOC FI(ISPTLIB) DA( 'ISR.ISPF.ISRTLIB'      +
                   'ISP.ISPF.ISPTLIB')  SHR
ALLOC FI(ISPTABL) DA('ISR.ISPF.ISRTLIB')
ALLOC FI(ISPPROF) DA('&SYSUID..ISPF.PROFILE')
ALLOC FI(DEFTLIB) DA('USER.ASSIGNED.NAME')  SHR
/* NOTE:  THE FOLLOWING ALLOCATE STATEMENT SHOWS HOW YOU CAN  */
/* PRE-ALLOCATE YOUR VISION:INFORM UTILITY LIST DATASET.      */
/* THIS IS OPTIONAL. IF THIS DATASET IS NOT PRE-ALLOCATED,    */
/* VISION:INFORM WILL DYNAMICALLY ALLOCATE IT WHEN NEEDED.    */
ALLOC FI(M9LIST) DA('DEFANS.&SYSUID..M9LIST1')   OLD
ISPSTART PANEL(ISR@PRIM)
```

Figure 197. Sample Definition Processor Startup CLIST

Appendix

D Starting the Definition Processor

The following panel shows how you can start the Definition Processor from your ISPF primary menu (Definition Processor-specific items are highlighted). You can find this panel in your IBM-supplied ISPF panel library, in member ISR@PRIM.

```
%------------------------  ISPF/PDF PRIMARY OPTION MENU ----------------------
%OPTION ===>>ZCMD
%                                                          +USERID   - &ZUSER
% 0 +ISPF PARMS  - Specify terminal and user parameters    +PROC     - &ZLOGO
% 1 +BROWSE      - Display source data or output listings  +PF KEYS  - &ZKEYS
% 2 +EDIT        - Create or change source data            +TERMINAL - &ZTERM
% 3 +UTILITIES   - Perform utility functions               +TIME     - &ZTIME
% 4 +FOREGROUND  - Invoke language processors or script    +JULIAN   - &ZJDA
% 5 +BATCH       - Submit job for language processing      +DATE     - &ZDATE
% 6 +COMMAND     - Enter TSO Command or CLIST
% 7 +DIALOG TEST - Perform Library Administrator Utility Functions
+
% DP +DEFPROC    - Invoke the Definition Processor
+
% T +TUTORIAL    - Display Information About ISPF/PDF
%  X +EXIT       - Terminate ISPF using log and list defaults
%
+Enter#END+command to terminate ISPF.
%
)INIT
   &M9PRODCT = 'Workbench'  /*Required by the Definition Processor */
  .HELP    = ISR0000E
  &ZPRIM   = YES
  &ZHTOP   = ISR00003
  &ZHINDEX = ISR91000
  VPUT (ZHTOP,ZHINDEX) PROFILE
)PROC
  &ZSEL - TRANS(TRUNC(&ZCMD,'.')
             0,'PANEL(ISPOPTA)'
             1,'PGM(ISRBRO) PARM(ISRBR001)'
             2,'PGM(ISREDIT) PARM(P,ISREDM01)'
             3,'PANEL(ISRUTIL)'
             4,'PANEL(ISRFPA)'
             5,'PGM(ISRJB1) PARM(ISRJPA) NOCHECK'
             6,'PGM(ISRYXDR) NOCHECK'
             7,'PGM(ISRYXDR) NOCHECK'
            DP,'PGM(M9BOOT) PARM(PMM4) NOCHECK' /* Invokes Def./Proc.*/
             T,'PGM(ISPTUTOR) PARM(ISR00000)'
           '' , ''
          '
             X,'EXIT'
            *,'?')
   &GVNXTSEL = .TRAIL  /* Required by the Definition Processor */
   &ZTRAIL - .TRAIL
)END
```

Figure 198. ISPF/PDF Primary Option Menu

Appendix

E

SMPCNTL Data Set JCL Member List

This appendix lists the JCL members in File 1 of the installation tape, INFORM.R40.SMPCNTL. These jobs are used to define the product to SMP/E, and also to maintain it. A brief description of the JCL members appears below, followed by a listing of the jobs.

Note: There are other, non-JCL members in the SMPCNTL data set. These are input data files to the SMP/E applications, and should not be modified in any way.

Member	Description
INFCOPY1	Copy SMP/E target load library to a new load library
INFCOPY2	Copy SMP/E target load library to an existing load library
INFCOPY3	Copy the rest of the SMP/E controlled data sets to working library copies (CLIST, JCL, MACRO, MSGS, PANEL, SKELS, SOURCE)
LOADTAPE	Load the installation tape files to disk
SMPJOB01	Allocate VISION:Inform SMP/E data sets and initialize the CSI
SMPJOB02	Define VISION:Inform to the Global, Target, and Distributions zones
SMPJOB03	RECEIVE program element SYSMODS into the Global zone
SMPJOB04	RECEIVE the APAR and PTF SYSMODS into the Global zone
SMPJOB05	APPLY the program elements into the target zone
SMPJOB06	APPLY the APAR and PTF elements into the target zone
SMPJOB07	ACCEPT the program elements into the Distribution zone
SMPJOB08	ACCEPT the APAR and PTF elements into the Distribution zone
SMPREJCT	REJECT APAR and PTF elements from the Global zone
SMPREMOV	RESTORE (remove) APAR and PTF elements from the Target Zone

INFCOPY1

```
//* MEMBER INFCOPY1                                                      00010001
//*********************************************************************** 00020000
//* THIS INSTREAM PROCEDURE WILL COPY THE ENTIRE TARGET LOAD LIBRARY  * 00030001
//* FOR VISION:INFORM TO A "NEW" USER LOAD LIBRARY.                   * 00040001
//*                                                                   * 00050001
//* THE "NEW" USER LOAD LIBRARY IS DELETED FIRST, THEN RE-ALLOCATED.  * 00060001
//*********************************************************************** 00070001
//COPYLIB PROC TARGETL=,                                                00080000
//             USERLIB=,                                                00090000
//             USERUNT=                                                 00100000
//DELETE  EXEC PGM=IEFBR14,REGION=2M                                    00110001
//OLD       DD DSN=&USERLIB,DISP=(MOD,DELETE),SPACE=(TRK,(0,0)),        00120001
//             UNIT=&USERUNT                                            00130000
//ALLOC   EXEC PGM=IEFBR14,REGION=2M                                    00140001
//NEW       DD DSN=&USERLIB,SPACE=(TRK,(320,15,120)),                   00150002
//             DISP=(NEW,CATLG,DELETE),UNIT=&USERUNT,                   00160001
//             DCB=(RECFM=U,LRECL=0,BLKSIZE=32760)                      00170001
//COPY    EXEC PGM=IEBCOPY,REGION=2M                                    00180000
//SYSPRINT  DD SYSOUT=*                                                 00190000
//OUT       DD DSN=&USERLIB,DISP=OLD                                    00200001
//IN        DD DSN=&TARGETL,DISP=SHR                                    00210001
//SYSUT3    DD UNIT=SYSDA,SPACE=(TRK,60)                                00220000
//SYSUT4    DD UNIT=SYSDA,SPACE=(TRK,60)                                00230000
//         PEND                                                         00240000
//*********************************************************************** 00250000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE TO COPY THE * 00260001
//* ENTIRE TARGET LOAD LIBRARY TO A NEW USER LOAD LIBRARY.            * 00270001
//*                                                                   * 00280001
//*   BEFORE YOU RUN THIS JOB, SPECIFY:                               * 00290001
//*                                                                   * 00300001
//*    TARGETL  - THE VISION:INFORM TARGET LOAD LIBRARY NAME.         * 00310001
//*    USERLIB  - THE "NEW" USER LOAD LIBRARY NAME.                   * 00320001
//*    USERUNT  - THE USER LOAD LIBRARY UNIT.                         * 00330001
//*********************************************************************** 00340000
//COPYLIB EXEC COPYLIB,                                                 00350000
//             TARGETL='INFORM.R40.TARGET.INTLOAD',                     00360001
//             USERLIB='INFORM.LOADLIB',                                00370003
//             USERUNT='SYSDA'                                          00380001
//COPY.SYSIN DD *                                                       00390001
 COPY INDD=IN,OUTDD=OUT                                                 00400000
```

Figure 199. Copy SMP/E target load library to a new load library

INFCOPY2

```
//* MEMBER INFCOPY2                                                     00010001
//*********************************************************************00020000
//* THIS INSTREAM PROCEDURE WILL COPY THE ENTIRE VISION:INFORM TARGET *00030001
//* LOAD LIBRARY TO AN "EXISTING" USER LOAD LIBRARY.                  *00040001
//*                                                                   *00050001
//* THE "EXISTING" USER LOAD LIBRARY MEMBERS ARE REPLACED, AND THE    *00060001
//* LIBRARY IS COMPRESSED AFTER THE COPY/REPLACE.                     *00070001
//*********************************************************************00080001
//COPYLIB PROC TARGETL=,                                                00090000
//             USERLIB=                                                 00100000
//COPY    EXEC PGM=IEBCOPY,REGION=2M                                    00110000
//SYSPRINT  DD SYSOUT=*                                                 00120000
//OUT       DD DSN=&USERLIB,DISP=OLD                                    00130001
//IN        DD DSN=&TARGETL,DISP=SHR                                    00140001
//SYSUT3    DD UNIT=SYSDA,SPACE=(TRK,150)                               00150000
//SYSUT4    DD UNIT=SYSDA,SPACE=(TRK,150)                               00160000
//         PEND                                                         00170000
//*********************************************************************00180000
//* THE FOLLOWING IS A SAMPLE EXECUTION OF THIS PROCEDURE TO COPY THE *00190001
//* ENTIRE TARGET LOAD LIBRARY TO AN EXISTING USER LOAD LIBRARY.      *00200001
//*                                                                   *00210001
//*   BEFORE YOU RUN THIS JOB, SPECIFY:                               *00220001
//*                                                                   *00230001
//*    TARGETL  - THE VISION:INFORM TARGET LOAD LIBRARY NAME.         *00240001
//*    USERLIB  - THE "EXISTING" USER LOAD LIBRARY NAME.              *00250001
//*********************************************************************00260000
//COPYLIB EXEC COPYLIB,                                                 00270000
//             TARGETL='INFORM.R40.TARGET.INTLOAD',                     00280001
//             USERLIB='INFORM.LOADLIB'                                 00290002
//COPY.SYSIN     DD *                                                   00300000
 COPY INDD=((IN,R)),OUTDD=OUT                                           00310000
 COPY INDD=OUT,OUTDD=OUT                                                00320000
```

Figure 200. Copy SMP/E target load library to an existing load library

INFCOPY3

```
//* MEMBER INFCOPY3                                                     00010000
//*********************************************************************** 00020000
//* THIS INSTREAM PROCEDURE WILL COPY ALL THE VISION:INFORM TARGET    * 00030000
//* LIBRARIES TO NEW COPIES OF THESE LIBRARIES. THE COPIES ARE        * 00040000
//* INTENDED TO BE THE WORKING COPY OF THE LIBRARIES TO WHICH ALL     * 00050000
//* CUSTOMIZATIONS ARE DONE.  THE COPIED LIBRARIES ARE:               * 00060000
//*                                                                   * 00070000
//*     THE CLIST  LIBRARY -                                          * 00080000
//*     THE JCL    LIBRARY -                                          * 00090000
//*     THE MACRO  LIBRARY -                                          * 00100000
//*     THE MSGS   LIBRARY -                                          * 00110000
//*     THE PANEL  LIBRARY -                                          * 00120000
//*     THE SKELS  LIBRARY -                                          * 00130000
//*     THE SOURCE LIBRARY.                                           * 00140000
//*                                                                   * 00150000
//* THE "NEW" USER LIBRARIES ARE DELETED FIRST, THEN RE-ALLOCATED.    * 00160000
//*********************************************************************** 00170000
//COPYLIB PROC TARGETL=,                                                00180000
//             USERLIB=,                                                00190000
//             SPACE=,                                                  00200002
//             USERUNT=                                                 00210000
//DELETE  EXEC PGM=IEFBR14,REGION=2M                                    00220000
//OLD       DD DSN=&USERLIB,DISP=(MOD,DELETE),SPACE=(TRK,(0,0)),        00230000
//             UNIT=&USERUNT                                            00240000
//ALLOC   EXEC PGM=IEFBR14,REGION=2M                                    00250000
//NEW       DD DSN=&USERLIB,SPACE=&SPACE,                               00260002
//             DISP=(NEW,CATLG,DELETE),UNIT=&USERUNT,                   00270000
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=27920)                    00280002
//COPY    EXEC PGM=IEBCOPY,REGION=2M                                    00290000
//SYSPRINT  DD SYSOUT=*                                                 00300000
//OUT       DD DSN=&USERLIB,DISP=OLD                                    00310000
//IN        DD DSN=&TARGETL,DISP=SHR                                    00320000
//SYSUT3    DD UNIT=SYSDA,SPACE=(TRK,60)                                00330000
//SYSUT4    DD UNIT=SYSDA,SPACE=(TRK,60)                                00340000
//        PEND                                                          00350000
//*********************************************************************** 00360000
//* THE FOLLOWING ARE SAMPLE EXECUTIONS OF THIS PROCEDURE TO COPY THE * 00370001
//* VARIOUS TARGET LIBRARIES TO A NEW WORKING COPY OF EACH LIBRARY.   * 00380001
//*                                                                   * 00390000
//*   BEFORE YOU RUN THIS JOB, FOR EACH INVOCATION OF THE PROCEDURE,  * 00400001
//*   SPECIFY:                                                        * 00410001
//*                                                                   * 00420001
//*    TARGETL  - THE VISION:INFORM TARGET LIBRARY NAME.              * 00430001
//*    USERLIB  - THE "NEW" USER LIBRARY NAME.                        * 00440001
//*    SPACE    - THE SPACE ALLOCATION FOR THE NEW LIBRARY.           * 00450002
//*    USERUNT  - THE USER LOAD LIBRARY UNIT.                         * 00460000
//*********************************************************************** 00470000
//CPCLIST EXEC COPYLIB,                                                 00480002
//             TARGETL='INFORM.R40.TARGET.INTCLIST',                    00490001
//             USERLIB='INFORM.CLIST',                                  00500001
//             SPACE='(TRK,(25,5,15))',                                 00510002
//             USERUNT='SYSDA'                                          00520000
//COPY.SYSIN DD *                                                       00530003
 COPY INDD=IN,OUTDD=OUT                                                00540000
//CPJCL   EXEC COPYLIB,                                                 00550002
//             TARGETL='INFORM.R40.TARGET.INTJCL',                      00560002
//             USERLIB='INFORM.JCL',                                    00570002
//             SPACE='(TRK,(10,5,15))',                                 00580002
//             USERUNT='SYSDA'                                          00590002
//COPY.SYSIN DD *                                                       00600003
 COPY INDD=IN,OUTDD=OUT                                                00610002
//CPMACRO EXEC COPYLIB,                                                 00620002
//             TARGETL='INFORM.R40.TARGET.INTMAC',                      00630002
//             USERLIB='INFORM.MACLIB',                                 00640002
```

```
//             SPACE='(TRK,(10,5,10))',                                  00650002
//             USERUNT='SYSDA'                                           00660002
//COPY.SYSIN DD *                                                        00670003
 COPY INDD=IN,OUTDD=OUT                                                  00680002
//CPMSGS EXEC COPYLIB,                                                   00690002
//             TARGETL='INFORM.R40.TARGET.INTMSGS',                      00700002
//             USERLIB='INFORM.MSGS',                                    00710002
//             SPACE='(TRK,(15,5,40))',                                  00720002
//             USERUNT='SYSDA'                                           00730002
//COPY.SYSIN DD *                                                        00740003
 COPY INDD=IN,OUTDD=OUT                                                  00750002
//CPPANEL EXEC COPYLIB,                                                  00760002
//             TARGETL='INFORM.R40.TARGET.INTPANEL',                     00770002
//             USERLIB='INFORM.PANELS',                                  00780002
//             SPACE='(TRK,(100,10,250))',                               00790002
//             USERUNT='SYSDA'                                           00800002
//COPY.SYSIN DD *                                                        00810003
 COPY INDD=IN,OUTDD=OUT                                                  00820002
//CPSKELS EXEC COPYLIB,                                                  00830002
//             TARGETL='INFORM.R40.TARGET.INTSKELS',                     00840002
//             USERLIB='INFORM.SKELS',                                   00850002
//             SPACE='(TRK,(5,1,5))',                                    00860002
//             USERUNT='SYSDA'                                           00870002
//COPY.SYSIN DD *                                                        00880003
 COPY INDD=IN,OUTDD=OUT                                                  00890002
//CPSRC EXEC COPYLIB,                                                    00900002
//             TARGETL='INFORM.R40.TARGET.INTSRC',                       00910002
//             USERLIB='INFORM.SRCLIB',                                  00920002
//             SPACE='(TRK,(50,5,15))',                                  00930002
//             USERUNT='SYSDA'                                           00940002
//COPY.SYSIN DD *                                                        00950003
 COPY INDD=IN,OUTDD=OUT                                                  00960002
```

Figure 201. Copy the rest of the SMP/E controlled data sets to working library copies (CLIST, JCL, MACRO, MSGS, PANEL, SKELS, SOURCE)

LOADTAPE

```
//* MEMBER LOADTAPE                                                      00010000
//*********************************************************************** 00020000
//*  THIS JOB LOADS FILES 2-13 FROM THE INSTALLATION TAPE.             * 00030000
//*  FILE 1, THE SMP/E CONTROL PDS WHICH CONTAINS THIS MEMBER, WAS     * 00040000
//*  LOADED IN AN EARLIER INSTALLATION STEP.                           * 00050000
//*********************************************************************** 00060000
//GENER  PROC NAME=,                                                     00070000
//            TUNIT=,                                                    00080000
//            TVOLSER=,                                                  00090000
//            FILENUM=,                                                  00100000
//            TRK=,                                                      00110000
//            DUNIT=,                                                    00120000
//            DVOLSER=                                                   00130000
//GENER  EXEC PGM=IEBGENER,REGION=2M                                     00140000
//SYSPRINT DD SYSOUT=*                                                   00150000
//SYSIN    DD DUMMY                                                      00160000
//SYSUT1   DD DSN=INFORM.IMS.FILE&FILENUM,UNIT=&TUNIT,DISP=OLD,          00170001
//            VOL=(PRIVATE,RETAIN,SER=&TVOLSER),LABEL=(&FILENUM,SL)      00180000
//SYSUT2   DD DSN=&NAME,DISP=(,CATLG,DELETE),VOL=SER=&DVOLSER,           00190000
//            UNIT=&DUNIT,SPACE=(TRK,&TRK,RLSE)                          00200000
//       PEND                                                            00210000
//COPY   PROC NAME=,                                                     00220000
//            TUNIT=,                                                    00230000
//            TVOLSER=,                                                  00240000
```

```
//            FILENUM=,                                                    00250000
//            TRK=,                                                        00260000
//            DUNIT=,                                                      00270000
//            DVOLSER=                                                     00280000
//COPY   EXEC PGM=IEBCOPY,REGION=2M                                        00290000
//SYSPRINT DD SYSOUT=*                                                     00300000
//SYSUT3   DD UNIT=SYSDA,SPACE=(CYL,(5,5))                                 00310000
//SYSUT4   DD UNIT=SYSDA,SPACE=(CYL,(5,5))                                 00320000
//IN       DD DSN=INFORM.IMS.FILE&FILENUM,UNIT=&TUNIT,DISP=OLD,            00330001
//            VOL=(PRIVATE,RETAIN,SER=&TVOLSER),LABEL=(&FILENUM,SL)        00340000
//OUT      DD DSN=&NAME,DISP=(,CATLG,DELETE),VOL=SER=&DVOLSER,             00350000
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=3120),UNIT=&DUNIT,            00360000
//            SPACE=(TRK,&TRK)                                             00370000
//       PEND                                                              00380000
//COPYL  PROC NAME=,                                                       00390000
//            TUNIT=,                                                      00400000
//            TVOLSER=,                                                    00410000
//            FILENUM=,                                                    00420000
//            TRK=,                                                        00430000
//            DUNIT=,                                                      00440000
//            DVOLSER=                                                     00450000
//COPYL  EXEC PGM=IEBCOPY,REGION=2M                                        00460000
//SYSPRINT DD SYSOUT=*                                                     00470000
//SYSUT3   DD UNIT=SYSDA,SPACE=(CYL,(5,5))                                 00480000
//SYSUT4   DD UNIT=SYSDA,SPACE=(CYL,(5,5))                                 00490000
//IN       DD DSN=INFORM.IMS.FILE&FILENUM,UNIT=&TUNIT,DISP=OLD,            00500001
//            VOL=(PRIVATE,RETAIN,SER=&TVOLSER),LABEL=(&FILENUM,SL)        00510000
//OUT      DD DSN=&NAME,DISP=(,CATLG,DELETE),VOL=SER=&DVOLSER,             00520000
//            DCB=(RECFM=U,LRECL=0,BLKSIZE=32760),UNIT=&DUNIT,             00530000
//            SPACE=(TRK,&TRK)                                             00540000
//       PEND                                                              00550000
//*********************************************************************** 00560000
//*   THE FOLLOWING IS A SAMPLE EXECUTION OF THESE PROCEDURES.          * 00570000
//*   BEFORE YOU RUN THESE PROCEDURES, SPECIFY:                         * 00580000
//*                                                                     * 00590000
//*   NAME    - DISK DATASET IN WHICH TO LOAD THE TAPE FILE.            * 00600000
//*   TVOLSER - VOLUME SERIAL NUMBER OF THE INSTALLATION TAPE.          * 00610000
//*   FILENUM - NUMBER OF THE TAPE FILE TO LOAD.                        * 00620000
//*   TRK     - SPACE ALLOCATION FOR DASD DATASETS. THE SAMPLES ARE     * 00630000
//*             FOR 3390 DEVICES.                                       * 00640000
//*   DVOLSER - VOLUME SERIAL NUMBER OF A DASD.                         * 00650000
//*   TUNIT   - UNIT TYPE FOR THE INSTALLATION TAPE (DEFAULT TO TAPE).* 00660000
//*   DUNIT   - UNIT TYPE FOR A DASD. THE DEFAULT IS SYSDA.             * 00670000
//*********************************************************************** 00680000
//* FILE2  : ALLOCATES THE JCL LIBRARY AND LOADS IT FROM TAPE.          * 00690000
//*********************************************************************** 00700000
//FILE2  EXEC COPY,                                                        00710000
//       NAME='INFORM.R40.INFJCL',                                         00720000
//       TUNIT=TAPE,                                                       00730000
//       TVOLSER=TAPVOL,                                                   00740000
//       FILENUM=2,                                                        00750000
//       TRK='(15,5,10)',                                                  00760000
//       DUNIT=SYSDA,                                                      00770000
//       DVOLSER=DSKVOL                                                    00780000
//SYSIN  DD *                                                              00790000
  C I=IN,O=OUT                                                           00800000
//*********************************************************************** 00810000
//* FILE3  : ALLOCATES THE MACRO LIBRARY AND LOADS IT FROM THE TAPE.    * 00820000
//*********************************************************************** 00830000
//FILE3  EXEC COPY,                                                        00840000
//       NAME='INFORM.R40.INFMAC',                                         00850000
//       TUNIT=TAPE,                                                       00860000
//       TVOLSER=TAPVOL,                                                   00870000
//       FILENUM=3,                                                        00880000
//       TRK='(10,3,2)',                                                   00890000
//       DUNIT=SYSDA,                                                      00900000
```

```
//       DVOLSER=DSKVOL                                                 00910000
//SYSIN  DD *                                                           00920000
  C I=IN,O=OUT                                                          00930000
//*********************************************************************** 00940000
//* FILE4  : ALLOCATES THE SOURCE LIBRARY AND LOADS IT FROM THE TAPE. *  00950000
//*********************************************************************** 00960000
//FILE4  EXEC COPY,                                                     00970000
//       NAME='INFORM.R40.INFSRC',                                      00980000
//       TUNIT=TAPE,                                                    00990000
//       TVOLSER=TAPVOL,                                                01000000
//       FILENUM=4,                                                     01010000
//       TRK='(50,10,10)',                                              01020000
//       DUNIT=SYSDA,                                                   01030000
//       DVOLSER=DSKVOL                                                 01040000
//SYSIN  DD *                                                           01050000
  C I=IN,O=OUT                                                          01060000
//*********************************************************************** 01070000
//* FILE5  : ALLOCATES AND LOADS THE SYSTEM LOAD LIBRARY.             * 01080000
//*********************************************************************** 01090000
//FILE5  EXEC COPYL,                                                    01100000
//       NAME='INFORM.R40.INFLOAD',                                     01110000
//       TUNIT=TAPE,                                                    01120000
//       TVOLSER=TAPVOL,                                                01130000
//       FILENUM=5,                                                     01140000
//       TRK='(400,50,200)',                                            01150000
//       DUNIT=SYSDA,                                                   01160000
//       DVOLSER=DSKVOL                                                 01170000
//SYSIN  DD *                                                           01180000
  C I=IN,O=OUT                                                          01190000
//*********************************************************************** 01200000
//* FILE6  : COPIES FINANCE FILE TO A TEMPORARY DISK FILE.            * 01210000
//*********************************************************************** 01220000
//FILE6  EXEC GENER,                                                    01230000
//       NAME='INFORM.R40.TEMPFIN',                                     01240000
//       TUNIT=TAPE,                                                    01250000
//       TVOLSER=TAPVOL,                                                01260000
//       FILENUM=6,                                                     01270000
//       TRK='(5,5)',                                                   01280000
//       DUNIT=SYSDA,                                                   01290000
//       DVOLSER=DSKVOL                                                 01300000
//*********************************************************************** 01310000
//* FILE7  : ALLOCATES AND LOADS SAMPLE DEFINITION LIBRARY FROM TAPE. * 01320002
//*********************************************************************** 01330000
//FILE7  EXEC COPY,                                                     01340000
//       NAME='INFORM.R40.DEFLIB',                                      01350000
//       TUNIT=TAPE,                                                    01360000
//       TVOLSER=TAPVOL,                                                01370000
//       FILENUM=7,                                                     01380000
//       TRK='(30,15,20)',                                              01390000
//       DUNIT=SYSDA,                                                   01400000
//       DVOLSER=DSKVOL                                                 01410000
//SYSIN  DD *                                                           01420000
  C I=IN,O=OUT                                                          01430000
//*********************************************************************** 01440000
//* FILE8  : ALLOCATES THE PANEL LIBRARY AND LOADS IT FROM THE TAPE.  * 01450000
//*********************************************************************** 01460000
//FILE8  EXEC COPY,                                                     01470000
//       NAME='INFORM.R40.INFPANEL',                                    01480000
//       TUNIT=TAPE,                                                    01490000
//       TVOLSER=TAPVOL,                                                01500000
//       FILENUM=8,                                                     01510000
//       TRK='(100,20,250)',                                            01520000
//       DUNIT=SYSDA,                                                   01530000
//       DVOLSER=DSKVOL                                                 01540000
//SYSIN  DD *                                                           01550000
  C I=IN,O=OUT                                                          01560000
```

```
//********************************************************************* 01570000
//* FILE9  : ALLOCATES THE MESSAGE LIBRARY AND LOADS IT FROM TAPE.    * 01580000
//********************************************************************* 01590000
//FILE9  EXEC COPY,                                                     01600000
//       NAME='INFORM.R40.INFMSGS',                                     01610000
//       TUNIT=TAPE,                                                    01620000
//       TVOLSER=TAPVOL,                                                01630000
//       FILENUM=9,                                                     01640000
//       TRK='(15,5,50)',                                               01650000
//       DUNIT=SYSDA,                                                   01660000
//       DVOLSER=DSKVOL                                                 01670000
//SYSIN  DD *                                                           01680000
  C I=IN,O=OUT                                                          01690000
//********************************************************************* 01700000
//* FILE10 : ALLOCATES THE SKEL LIBRARY AND LOADS IT FROM TAPE.       * 01710000
//********************************************************************* 01720000
//FILE10 EXEC COPY,                                                     01730000
//       NAME='INFORM.R40.INFSKELS',                                    01740000
//       TUNIT=TAPE,                                                    01750000
//       TVOLSER=TAPVOL,                                                01760000
//       FILENUM=10,                                                    01770000
//       TRK='(5,2,5)',                                                 01780000
//       DUNIT=SYSDA,                                                   01790000
//       DVOLSER=DSKVOL                                                 01800000
//SYSIN  DD *                                                           01810000
  C I=IN,O=OUT                                                          01820000
//********************************************************************* 01830000
//* FILE11 : ALLOCATES THE CLIST LIBRARY AND LOADS IT FROM THE TAPE.  * 01840000
//********************************************************************* 01850000
//FILE11 EXEC COPY,                                                     01860000
//       NAME='INFORM.R40.INFCLIST',                                    01870000
//       TUNIT=TAPE,                                                    01880000
//       TVOLSER=TAPVOL,                                                01890000
//       FILENUM=11,                                                    01900000
//       TRK='(25,5,15)',                                               01910000
//       DUNIT=SYSDA,                                                   01920000
//       DVOLSER=DSKVOL                                                 01930000
//SYSIN  DD *                                                           01940000
  C I=IN,O=OUT                                                          01950000
//********************************************************************* 01960000
//* FILE12 : ALLOCATES AND LOADS THE DB2 DBRM LIBRARY FROM TAPE.      * 01970000
//********************************************************************* 01980000
//FILE12 EXEC COPY,                                                     01990000
//       NAME='INFORM.R40.DBRM',                                        02000000
//       TUNIT=TAPE,                                                    02010000
//       TVOLSER=TAPVOL,                                                02020000
//       FILENUM=12,                                                    02030000
//       TRK='(5,5,10)',                                                02040000
//       DUNIT=SYSDA,                                                   02050000
//       DVOLSER=DSKVOL                                                 02060000
//SYSIN  DD *                                                           02070000
  C I=IN,O=OUT                                                          02080000
//********************************************************************* 02090000
//* FILE13 : MOVE UTLITY LIBRARY TO TEMPORARY DISK FILE.              * 02100000
//********************************************************************* 02110000
//FILE13 EXEC GENER,                                                    02120000
//       NAME='INFORM.R40.TEMPUTL',                                     02130000
//       TUNIT=TAPE,                                                    02140000
//       TVOLSER=TAPVOL,                                                02150000
//       FILENUM=13,                                                    02160000
//       TRK='(5,5)',                                                   02170000
//       DUNIT=SYSDA,                                                   02180000
//       DVOLSER=DSKVOL                                                 02190000
```

Figure 202. Load the installation tape files to disk

SMPJOB01

```
//* MEMBER SMPJOB01                                                     00010010
//*********************************************************************** 00020001
//* ALLOCATE ALL VISION:INFORM SMP/E DATA SETS AND INITIALIZE THE CSI.* 00030002
//*********************************************************************** 00040005
//* ALL CHANGES NECESSARY TO RUN THIS JOB MAY BE SAFELY MADE WITH A   * 00050014
//* GLOBAL CHANGE COMMAND.                                            * 00060012
//* TAILOR THIS JCL BY MAKING THE FOLLOWING CHANGES:                  * 00070012
//*                                                                   * 00080005
//*  1) SUPPLY A VALID "JOB" JCL STATEMENT.                           * 00090012
//*  2) CHANGE THE "VOLUMES(VOLSER)" PARAMETER IN THE STEP1 IDCAMS    * 00100012
//*     DEFINE CLUSTER STATEMENT TO POINT TO A VALID VOLSER OR VOLSER * 00110012
//*     LIST FOR THE CSI DEFINITION.                                  * 00120012
//*  3) CHANGE THE HI-LEVEL DSN OF ALL DATASETS FROM THE DEFAULT OF   * 00130012
//*     'INFORM.' OR 'INFORM.R40.' TO ONE THAT MEETS YOUR SITE        * 00140005
//*     STANDARDS.  IT IS NOT RECOMMENDED THAT THE LOW DEVEL DSNS BE  * 00150013
//*     CHANGED.                                                      * 00160005
//*  4) CHANGE THE UNIT ALLOCATION FROM THE DEFAULT 'UNIT=SYSDA' TO   * 00170012
//*     WHATEVER IS PROPER FOR YOUR SITE STANDARDS.                   * 00180005
//*********************************************************************** 00190005
//* ALLOCATE THE CSI.                                                 * 00200002
//*********************************************************************** 00210002
//STEP1  EXEC PGM=IDCAMS,REGION=4M                                      00220001
//SYSPRINT DD SYSOUT=*                                                  00230001
//SYSIN    DD *                                                         00240001
  DELETE (INFORM.R40.CSI) CLUSTER                                       00250001
  SET MAXCC=0                                                           00260001
  DEFINE CLUSTER (NAME(INFORM.R40.CSI)        -                         00270001
                  FREESPACE(10,5)             -                         00280001
                  KEYS(24 0)                  -                         00290001
                  RECORDSIZE(24 143)          -                         00300001
                  SHAREOPTIONS(2 3)           -                         00310001
                  VOLUMES(VOLSER)             -                         00320008
                  UNIQUE)                     -                         00330001
             DATA(NAME(INFORM.R40.CSI.DATA)   -                         00340001
                  CONTROLINTERVALSIZE(4096)   -                         00350001
                  CYLINDERS(60 20))           -                         00360001
            INDEX(NAME(INFORM.R40.CSI.INDEX)  -                         00370001
                  CYLINDERS(5 5)              -                         00380001
                  IMBED)                                                00390004
//*********************************************************************** 00400002
//* INITIALIZE THE CSI.                                               * 00410002
//*********************************************************************** 00420002
//STEP2  EXEC PGM=IDCAMS,REGION=4M                                      00430001
//SYSPRINT DD SYSOUT=*                                                  00440001
//SMPECSI  DD DSN=INFORM.R40.CSI,DISP=OLD                               00450001
//ZPOOL    DD DSN=SYS1.MACLIB(GIMZPOOL),DISP=SHR                        00460001
//SYSIN    DD *                                                         00470001
  REPRO OUTFILE(SMPECSI) INFILE(ZPOOL)                                  00480001
//*********************************************************************** 00490002
//* DELETE PREVIOUS PTS DATASET.                                      * 00500002
//*********************************************************************** 00510002
//STEP3  EXEC PGM=IEFBR14                                               00520001
//DD1      DD DSN=INFORM.R40.SMPPTS,DISP=(MOD,DELETE),                  00530001
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                            00540002
//*********************************************************************** 00550002
//* ALLOCATE PTS DATASET.                                             * 00560002
//*********************************************************************** 00570002
//STEP4  EXEC PGM=IEFBR14                                               00580001
//SMPPTS   DD DSN=INFORM.R40.SMPPTS,DISP=(NEW,CATLG,DELETE),            00590001
//            DSNTYPE=LIBRARY,UNIT=SYSDA,SPACE=(CYL,(5,5,50)),          00600002
//            DCB=(RECFM=FB,LRECL=80)                                   00610001
//*********************************************************************** 00620002
//* DELETE PREVIOUS SMP/E DATA SETS: MTS, SCDS, STS, LOG, LOGA.       * 00630002
//*********************************************************************** 00640002
```

```
//STEP5  EXEC PGM=IEFBR14                                                00650001
//DD1      DD DSN=INFORM.R40.SMPMTS,DISP=(MOD,DELETE),                   00660001
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                               00670002
//DD2      DD DSN=INFORM.R40.SMPSCDS,DISP=(MOD,DELETE),                  00680001
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                               00690002
//DD3      DD DSN=INFORM.R40.SMPSTS,DISP=(MOD,DELETE),                   00700001
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                               00710002
//DD4      DD DSN=INFORM.R40.SMPLOG,DISP=(MOD,DELETE),                   00720001
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                               00730002
//DD5      DD DSN=INFORM.R40.SMPLOGA,DISP=(MOD,DELETE),                  00740006
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                               00750002
//*******************************************************************   00760002
//* ALLOCATE SMP/E DATA SETS: MTS, SCDS, STS, LOG, LOGA.              *   00770002
//*******************************************************************   00780002
//STEP6  EXEC PGM=IEFBR14                                                00790001
//SMPMTS   DD DSN=INFORM.R40.SMPMTS,DISP=(NEW,CATLG,DELETE),             00800001
//            UNIT=SYSDA,SPACE=(CYL,(2,1,50)),DCB=(RECFM=FB,LRECL=80)    00810002
//SMPSCDS  DD DSN=INFORM.R40.SMPSCDS,DISP=(NEW,CATLG,DELETE),            00820001
//            UNIT=SYSDA,SPACE=(CYL,(2,1,50)),DCB=(RECFM=FB,LRECL=80)    00830002
//SMPSTS   DD DSN=INFORM.R40.SMPSTS,DISP=(NEW,CATLG,DELETE),             00840001
//            UNIT=SYSDA,SPACE=(CYL,(2,1,50)),DCB=(RECFM=FB,LRECL=80)    00850002
//SMPLOG   DD DSN=INFORM.R40.SMPLOG,DISP=(NEW,CATLG,DELETE),             00860001
//            UNIT=SYSDA,SPACE=(CYL,(5,2)),                              00870002
//            DCB=(RECFM=VB,LRECL=510,BLKSIZE=27900)                     00880001
//SMPLOGA  DD DSN=INFORM.R40.SMPLOGA,DISP=(NEW,CATLG,DELETE),            00890001
//            UNIT=SYSDA,SPACE=(CYL,(5,2)),                              00900002
//            DCB=(RECFM=VB,LRECL=510,BLKSIZE=27900)                     00910001
//*******************************************************************   00920006
//* DELETE PREVIOUS SMP/E DISTRIBUTION LIBRARIES.                     *   00930006
//*******************************************************************   00940006
//STEP7  EXEC PGM=IEFBR14                                                00950006
//DD1      DD DSN=INFORM.R40.DISTRIB.INDLOAD,DISP=(MOD,DELETE),          00960006
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                               00970006
//DD2      DD DSN=INFORM.R40.DISTRIB.INDMAC,DISP=(MOD,DELETE),           00980006
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                               00990006
//DD3      DD DSN=INFORM.R40.DISTRIB.INDSRC,DISP=(MOD,DELETE),           01000006
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                               01010006
//DD4      DD DSN=INFORM.R40.DISTRIB.INDJCL,DISP=(MOD,DELETE),           01020006
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                               01030006
//DD5      DD DSN=INFORM.R40.DISTRIB.INDCLIST,DISP=(MOD,DELETE),         01040006
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                               01050006
//DD6      DD DSN=INFORM.R40.DISTRIB.INDPANEL,DISP=(MOD,DELETE),         01060006
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                               01070006
//DD7      DD DSN=INFORM.R40.DISTRIB.INDMSGS,DISP=(MOD,DELETE),          01080006
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                               01090006
//DD8      DD DSN=INFORM.R40.DISTRIB.INDSKELS,DISP=(MOD,DELETE),         01100006
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                               01110006
//*******************************************************************   01120006
//* ALLOCATE SMP/E DISTRIBUTION LIBRARIES.                            *   01130006
//*******************************************************************   01140006
//STEP8   EXEC PGM=IEFBR14                                               01150006
//INDLOAD  DD DSN=INFORM.R40.DISTRIB.INDLOAD,DISP=(NEW,CATLG,DELETE),    01160006
//            UNIT=SYSDA,SPACE=(TRK,(360,15,150)),                       01170006
//            DCB=(RECFM=U,LRECL=0,BLKSIZE=32760)                        01180006
//INDMAC   DD DSN=INFORM.R40.DISTRIB.INDMAC,DISP=(NEW,CATLG,DELETE),     01190006
//            UNIT=SYSDA,SPACE=(TRK,(10,5,10)),                          01200006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                          01210006
//INDSRC   DD DSN=INFORM.R40.DISTRIB.INDSRC,DISP=(NEW,CATLG,DELETE),     01220006
//            UNIT=SYSDA,SPACE=(TRK,(50,5,15)),                          01230006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                          01240006
//INDJCL   DD DSN=INFORM.R40.DISTRIB.INDJCL,DISP=(NEW,CATLG,DELETE),     01250006
//            UNIT=SYSDA,SPACE=(TRK,(10,5,10)),                          01260006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                          01270006
//INDCLIST DD DSN=INFORM.R40.DISTRIB.INDCLIST,DISP=(NEW,CATLG,DELETE),   01280006
//            UNIT=SYSDA,SPACE=(TRK,(20,5,10)),                          01290006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                          01300006
```

```
//INDPANEL DD DSN=INFORM.R40.DISTRIB.INDPANEL,DISP=(NEW,CATLG,DELETE),  01310006
//            UNIT=SYSDA,SPACE=(TRK,(120,5,250)),                       01320006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                         01330006
//INDMSGS  DD DSN=INFORM.R40.DISTRIB.INDMSGS,DISP=(NEW,CATLG,DELETE),   01340006
//            UNIT=SYSDA,SPACE=(TRK,(15,1,40)),                         01350006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                         01360006
//INDSKELS DD DSN=INFORM.R40.DISTRIB.INDSKELS,DISP=(NEW,CATLG,DELETE),  01370006
//            UNIT=SYSDA,SPACE=(TRK,(5,1,5)),                           01380006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                         01390006
//*****************************************************************    01400006
//* DELETE PREVIOUS SMP/E TARGET LIBRARIES.                       *     01410006
//*****************************************************************    01420006
//STEP9   EXEC PGM=IEFBR14                                              01430006
//DD1      DD DSN=INFORM.R40.TARGET.INTLOAD,DISP=(MOD,DELETE),          01440007
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                              01450006
//DD2      DD DSN=INFORM.R40.TARGET.INTMAC,DISP=(MOD,DELETE),           01460007
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                              01470006
//DD3      DD DSN=INFORM.R40.TARGET.INTSRC,DISP=(MOD,DELETE),           01480007
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                              01490006
//DD4      DD DSN=INFORM.R40.TARGET.INTJCL,DISP=(MOD,DELETE),           01500007
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                              01510006
//DD5      DD DSN=INFORM.R40.TARGET.INTCLIST,DISP=(MOD,DELETE),         01520007
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                              01530006
//DD6      DD DSN=INFORM.R40.TARGET.INTPANEL,DISP=(MOD,DELETE),         01540007
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                              01550006
//DD7      DD DSN=INFORM.R40.TARGET.INTMSGS,DISP=(MOD,DELETE),          01560007
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                              01570006
//DD8      DD DSN=INFORM.R40.TARGET.INTSKELS,DISP=(MOD,DELETE),         01580007
//            SPACE=(TRK,(0,0)),UNIT=SYSDA                              01590006
//*****************************************************************    01600006
//* ALLOCATE SMP/E TARGET LIBRARIES.                              *     01610006
//*****************************************************************    01620006
//STEP10  EXEC PGM=IEFBR14                                              01630006
//INTLOAD  DD DSN=INFORM.R40.TARGET.INTLOAD,DISP=(NEW,CATLG,DELETE),    01640008
//            UNIT=SYSDA,SPACE=(TRK,(360,15,150)),                      01650006
//            DCB=(RECFM=U,LRECL=0,BLKSIZE=32760)                       01660006
//INTMAC   DD DSN=INFORM.R40.TARGET.INTMAC,DISP=(NEW,CATLG,DELETE),     01670008
//            UNIT=SYSDA,SPACE=(TRK,(10,5,10)),                         01680006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                         01690006
//INTSRC   DD DSN=INFORM.R40.TARGET.INTSRC,DISP=(NEW,CATLG,DELETE),     01700008
//            UNIT=SYSDA,SPACE=(TRK,(50,5,15)),                         01710006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                         01720006
//INTJCL   DD DSN=INFORM.R40.TARGET.INTJCL,DISP=(NEW,CATLG,DELETE),     01730008
//            UNIT=SYSDA,SPACE=(TRK,(10,5,10)),                         01740006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                         01750006
//INTCLIST DD DSN=INFORM.R40.TARGET.INTCLIST,DISP=(NEW,CATLG,DELETE),   01760008
//            UNIT=SYSDA,SPACE=(TRK,(20,5,10)),                         01770006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                         01780006
//INTPANEL DD DSN=INFORM.R40.TARGET.INTPANEL,DISP=(NEW,CATLG,DELETE),   01790008
//            UNIT=SYSDA,SPACE=(TRK,(120,5,250)),                       01800006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                         01810006
//INTMSGS  DD DSN=INFORM.R40.TARGET.INTMSGS,DISP=(NEW,CATLG,DELETE),    01820008
//            UNIT=SYSDA,SPACE=(TRK,(15,1,40)),                         01830006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                         01840006
//INTSKELS DD DSN=INFORM.R40.TARGET.INTSKELS,DISP=(NEW,CATLG,DELETE),   01850008
//            UNIT=SYSDA,SPACE=(TRK,(5,1,5)),                           01860006
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=0)                         01870006
```

Figure 203. Allocate VISION:Inform SMP/E data sets and initialize the CSI

SMPJOB02

```
//* MEMBER SMPJOB02                                                      00010000
//*********************************************************************** 00020000
//* DEFINE THE VISION:INFORM PRODUCT IN THE GLOBAL, TARGET, AND       * 00030000
//* DISTRIBUTION ZONES.                                               * 00040000
//*********************************************************************** 00050000
//* ALL CHANGES NECESSARY TO RUN THIS JOB MAY BE SAFELY MADE WITH A   * 00060005
//* GLOBAL CHANGE COMMAND.                                            * 00070003
//* TAILOR THIS JCL BY MAKING THE FOLLOWING CHANGES:                  * 00080003
//*                                                                   * 00090003
//* 1) SUPPLY A VALID "JOB" JCL STATEMENT.                            * 00100003
//* 2) CHANGE 'INFORM.' OR 'INFORM.R40.' TO THE HIGH LEVEL DSN VALUE  * 00110003
//*    USED IN THE PREVIOUS JOB (SMPJOB01).  IT IS NOT RECOMMENDED    * 00120004
//*    THAT THE LOW LEVEL DSNS BE CHANGED.                            * 00130004
//* 3) FIND THE TWO OCCURRENCES OF 'IMS.RESLIB', AND CHANGE THE DSN   * 00140003
//*    TO THAT OF THE IMS SYSTEM RESIDENCE LIBRARY.                   * 00150000
//* 4) FIND THE TWO OCCURRENCES OF 'DB2.SDSNLOAD', AND CHANGE THE DSN * 00160003
//*    TO THAT OF THE DB2 SYSTEM LOAD LIBRARY.                        * 00170000
//*********************************************************************** 00180000
//SMPE   EXEC PGM=GIMSMP,REGION=4M                                      00190000
//SMPCSI   DD DSN=INFORM.R40.CSI,DISP=SHR                               00200000
//SMPLOG   DD DSN=INFORM.R40.SMPLOG,DISP=MOD                            00210000
//SMPLOGA  DD DSN=INFORM.R40.SMPLOGA,DISP=MOD                           00220000
//SMPPTS   DD DSN=INFORM.R40.SMPPTS,DISP=SHR                            00230000
//SMPOUT   DD SYSOUT=*                                                  00240000
//SMPSNAP  DD SYSOUT=*                                                  00250000
//SYSPRINT DD SYSOUT=*                                                  00260000
//SMPRPT   DD SYSOUT=*                                                  00270002
//SMPCNTL  DD *                                                         00280000
  SET BDY(GLOBAL). /* DEFINE GLOBAL ZONE ENTRIES */                    00290000
  UCLIN.                                                               00300000
  ADD GLOBALZONE SREL (Z038) FMID (CDAD400) OPTIONS(IN40IOP)           00310000
      ZONEDESCRIPTION(ADVANTAGE VISION:INFORM RELEASE 4.0)             00320000
      ZONEINDEX((IN40IDZ,INFORM.R40.CSI,DLIB)                          00330000
                (IN40ITZ,INFORM.R40.CSI,TARGET)).                      00340000
  ADD OPTIONS(IN40IOP) AMS(AMS) ASM(ASSEM) COMP(COMPRESS) COPY(COPY)   00350000
      LKED(LINKEDIT) NOPURGE NOREJECT RETRY(RETRY) UPDATE(UPDATE)      00360000
      ZAP(IMASPZAP).                                                   00370000
  ADD UTILITY(AMS)      NAME(IDCAMS).                                  00380000
  ADD UTILITY(ASSEM)    NAME(ASMA90) PARM(XREF,NOOBJECT,DECK) RC(04).  00390000
  ADD UTILITY(COMPRESS) NAME(IEBCOPY).                                 00400000
  ADD UTILITY(COPY)     NAME(IEBCOPY).                                 00410000
  ADD UTILITY(LINKEDIT) NAME(IEWL) PARM(LET,LIST,NCAL,XREF) RC(08).    00420000
  ADD UTILITY(RETRY)    NAME(IEBCOPY).                                 00430000
  ADD UTILITY(UPDATE)   NAME(IEBUPDTE).                                00440000
  ADD UTILITY(IMASPZAP) NAME(IMASPZAP) PARM(IGNIDRFULL) RC(04).        00450000
  ADD DDDEF(SMPLOG)   DA (INFORM.R40.SMPLOG) MOD.                      00460000
  ADD DDDEF(SMPLOGA)  DA (INFORM.R40.SMPLOGA) MOD.                     00470000
  ADD DDDEF(SMPPTS)   DA (INFORM.R40.SMPPTS) OLD.                      00480000
  ADD DDDEF(SMPOUT)   SYSOUT(*).                                       00490000
  ADD DDDEF(SMPRPT)   SYSOUT(*).                                       00500000
  ADD DDDEF(SMPLIST)  SYSOUT(*).                                       00510000
  ADD DDDEF(SYSPRINT) SYSOUT(*).                                       00520000
  ADD DDDEF(SMPTLIB)  UNIT(SYSDA).                                     00530000
  ADD DDDEF(SYSUT1)   UNIT(SYSDA) CYL SPACE(5,2) NEW DELETE.           00540000
  ADD DDDEF(SYSUT2)   UNIT(SYSDA) CYL SPACE(5,2) NEW DELETE.           00550000
  ADD DDDEF(SYSUT3)   UNIT(SYSDA) CYL SPACE(5,2) NEW DELETE.           00560000
  ADD DDDEF(SYSUT4)   UNIT(SYSDA) CYL SPACE(5,2) NEW DELETE.           00570000
  ENDUCL.                                                              00580000
  SET BDY(IN40IDZ). /* DEFINE DISTRIBUTION ZONE ENTRIES */             00590000
  UCLIN.                                                               00600000
  ADD DLIBZONE(IN40IDZ) SREL (Z038) RELATED(IN40ITZ) OPTIONS(IN40IOP).  00610000
  ADD DDDEF(SMPSCDS)  DA (INFORM.R40.SMPSCDS) OLD.                     00620000
  ADD DDDEF(SMPMTS)   DA (INFORM.R40.SMPMTS) OLD.                      00630000
  ADD DDDEF(SMPPTS)   DA (INFORM.R40.SMPPTS) SHR.                      00640000
```

```
ADD DDDEF(SMPSTS)   DA (INFORM.R40.SMPSTS) OLD.                          00650000
ADD DDDEF(SMPLOG)   DA (INFORM.R40.SMPLOG) MOD.                          00660000
ADD DDDEF(SMPLOGA)  DA (INFORM.R40.SMPLOGA) MOD.                         00670000
ADD DDDEF(INTLOAD)  DA (INFORM.R40.TARGET.INTLOAD) SHR.                  00680000
ADD DDDEF(INTMAC)   DA (INFORM.R40.TARGET.INTMAC) SHR.                   00690000
ADD DDDEF(INTSRC)   DA (INFORM.R40.TARGET.INTSRC) SHR.                   00700000
ADD DDDEF(INTJCL)   DA (INFORM.R40.TARGET.INTJCL) SHR.                   00710000
ADD DDDEF(INTPANEL) DA (INFORM.R40.TARGET.INTPANEL) SHR.                 00720000
ADD DDDEF(INTMSGS)  DA (INFORM.R40.TARGET.INTMSGS) SHR.                  00730000
ADD DDDEF(INTSKELS) DA (INFORM.R40.TARGET.INTSKELS) SHR.                 00740000
ADD DDDEF(INTCLIST) DA (INFORM.R40.TARGET.INTCLIST) SHR.                 00750000
ADD DDDEF(INDLOAD)  DA (INFORM.R40.DISTRIB.INDLOAD) SHR.                 00760000
ADD DDDEF(INDMAC)   DA (INFORM.R40.DISTRIB.INDMAC) SHR.                  00770000
ADD DDDEF(INDSRC)   DA (INFORM.R40.DISTRIB.INDSRC) SHR.                  00780000
ADD DDDEF(INDJCL)   DA (INFORM.R40.DISTRIB.INDJCL) SHR.                  00790000
ADD DDDEF(INDPANEL) DA (INFORM.R40.DISTRIB.INDPANEL) SHR.                00800000
ADD DDDEF(INDMSGS)  DA (INFORM.R40.DISTRIB.INDMSGS) SHR.                 00810000
ADD DDDEF(INDSKELS) DA (INFORM.R40.DISTRIB.INDSKELS) SHR.                00820000
ADD DDDEF(INDCLIST) DA (INFORM.R40.DISTRIB.INDCLIST) SHR.                00830000
ADD DDDEF(SYSMAC)   DA (SYS1.MACLIB) SHR.                                00840000
ADD DDDEF(RESLIB)   DA (IMS.RESLIB) SHR.                                 00850000
ADD DDDEF(DB2LOAD)  DA (DB2.SDSNLOAD) SHR.                               00860000
ADD DDDEF(SYSLIB)   CONCAT(SYSMAC RESLIB DB2LOAD).                       00870000
ADD DDDEF(SMPOUT)   SYSOUT(*).                                           00880000
ADD DDDEF(SMPPUNCH) SYSOUT(*).                                           00890000
ADD DDDEF(SMPRPT)   SYSOUT(*).                                           00900000
ADD DDDEF(SMPLIST)  SYSOUT(*).                                           00910000
ADD DDDEF(SMPSNAP)  SYSOUT(*).                                           00920000
ADD DDDEF(SYSPRINT) SYSOUT(*).                                           00930000
ADD DDDEF(SYSUDUMP) SYSOUT(*).                                           00940000
ADD DDDEF(SMPTLIB)  UNIT(SYSDA).                                         00950000
ADD DDDEF(SMPWRK1)  UNIT(SYSDA) CYL SPACE(5,5) DIR(50) NEW DELETE.       00960000
ADD DDDEF(SMPWRK2)  UNIT(SYSDA) CYL SPACE(5,5) DIR(50) NEW DELETE.       00970000
ADD DDDEF(SMPWRK3)  UNIT(SYSDA) CYL SPACE(5,5) DIR(50) NEW DELETE.       00980000
ADD DDDEF(SMPWRK4)  UNIT(SYSDA) CYL SPACE(5,5) DIR(50) NEW DELETE.       00990000
ADD DDDEF(SMPWRK6)  UNIT(SYSDA) CYL SPACE(5,5) DIR(50) NEW DELETE.       01000000
ADD DDDEF(SYSUT1)   UNIT(SYSDA) CYL SPACE(5,2) NEW DELETE.               01010000
ADD DDDEF(SYSUT2)   UNIT(SYSDA) CYL SPACE(5,2) NEW DELETE.               01020000
ADD DDDEF(SYSUT3)   UNIT(SYSDA) CYL SPACE(5,2) NEW DELETE.               01030000
ADD DDDEF(SYSUT4)   UNIT(SYSDA) CYL SPACE(5,2) NEW DELETE.               01040000
ENDUCL.                                                                  01050000
SET BDY(IN40ITZ). /* DEFINE TARGET ZONE ENTRIES */                       01060000
UCLIN.                                                                   01070000
ADD TARGETZONE(IN40ITZ) SREL (Z038)                                      01080000
    RELATED(IN40IDZ) OPTIONS(IN40IOP).                                   01090000
ADD DDDEF(SMPSCDS)  DA (INFORM.R40.SMPSCDS) OLD.                         01100000
ADD DDDEF(SMPMTS)   DA (INFORM.R40.SMPMTS) OLD.                          01110000
ADD DDDEF(SMPPTS)   DA (INFORM.R40.SMPPTS) SHR.                          01120000
ADD DDDEF(SMPSTS)   DA (INFORM.R40.SMPSTS) OLD.                          01130000
ADD DDDEF(SMPLOG)   DA (INFORM.R40.SMPLOG) MOD.                          01140000
ADD DDDEF(SMPLOGA)  DA (INFORM.R40.SMPLOGA) MOD.                         01150000
ADD DDDEF(INDLOAD)  DA (INFORM.R40.DISTRIB.INDLOAD) SHR.                 01160000
ADD DDDEF(INDMAC)   DA (INFORM.R40.DISTRIB.INDMAC) SHR.                  01170000
ADD DDDEF(INDSRC)   DA (INFORM.R40.DISTRIB.INDSRC) SHR.                  01180000
ADD DDDEF(INDJCL)   DA (INFORM.R40.DISTRIB.INDJCL) SHR.                  01190001
ADD DDDEF(INDPANEL) DA (INFORM.R40.DISTRIB.INDPANEL) SHR.                01200000
ADD DDDEF(INDMSGS)  DA (INFORM.R40.DISTRIB.INDMSGS) SHR.                 01210000
ADD DDDEF(INDSKELS) DA (INFORM.R40.DISTRIB.INDSKELS) SHR.                01220000
ADD DDDEF(INDCLIST) DA (INFORM.R40.DISTRIB.INDCLIST) SHR.                01230000
ADD DDDEF(INTLOAD)  DA (INFORM.R40.TARGET.INTLOAD) SHR.                  01240000
ADD DDDEF(INTMAC)   DA (INFORM.R40.TARGET.INTMAC) SHR.                   01250000
ADD DDDEF(INTSRC)   DA (INFORM.R40.TARGET.INTSRC) SHR.                   01260000
ADD DDDEF(INTJCL)   DA (INFORM.R40.TARGET.INTJCL) SHR.                   01270000
ADD DDDEF(INTPANEL) DA (INFORM.R40.TARGET.INTPANEL) SHR.                 01280000
ADD DDDEF(INTMSGS)  DA (INFORM.R40.TARGET.INTMSGS) SHR.                  01290000
ADD DDDEF(INTSKELS) DA (INFORM.R40.TARGET.INTSKELS) SHR.                 01300000
```

```
ADD DDDEF(INTCLIST) DA (INFORM.R40.TARGET.INTCLIST) SHR.              01310000
ADD DDDEF(SYSMAC)   DA (SYS1.MACLIB) SHR.                            01320000
ADD DDDEF(RESLIB)   DA (IMS.RESLIB) SHR.                             01330000
ADD DDDEF(DB2LOAD)  DA (DB2.SDSNLOAD) SHR.                           01340000
ADD DDDEF(SYSLIB)   CONCAT(SYSMAC RESLIB DB2LOAD).                   01350000
ADD DDDEF(SMPOUT)   SYSOUT(*).                                       01360000
ADD DDDEF(SMPPUNCH) SYSOUT(*).                                       01370000
ADD DDDEF(SMPRPT)   SYSOUT(*).                                       01380000
ADD DDDEF(SMPLIST)  SYSOUT(*).                                       01390000
ADD DDDEF(SMPSNAP)  SYSOUT(*).                                       01400000
ADD DDDEF(SYSPRINT) SYSOUT(*).                                       01410000
ADD DDDEF(SYSUDUMP) SYSOUT(*).                                       01420000
ADD DDDEF(SMPTLIB)  UNIT(SYSDA).                                     01430000
ADD DDDEF(SMPWRK1)  UNIT(SYSDA) CYL SPACE(5,5) DIR(50) NEW DELETE.   01440000
ADD DDDEF(SMPWRK2)  UNIT(SYSDA) CYL SPACE(5,5) DIR(50) NEW DELETE.   01450000
ADD DDDEF(SMPWRK3)  UNIT(SYSDA) CYL SPACE(5,5) DIR(50) NEW DELETE.   01460000
ADD DDDEF(SMPWRK4)  UNIT(SYSDA) CYL SPACE(5,5) DIR(50) NEW DELETE.   01470000
ADD DDDEF(SMPWRK6)  UNIT(SYSDA) CYL SPACE(5,5) DIR(50) NEW DELETE.   01480000
ADD DDDEF(SYSUT1)   UNIT(SYSDA) CYL SPACE(5,2) NEW DELETE.           01490000
ADD DDDEF(SYSUT2)   UNIT(SYSDA) CYL SPACE(5,2) NEW DELETE.           01500000
ADD DDDEF(SYSUT3)   UNIT(SYSDA) CYL SPACE(5,2) NEW DELETE.           01510000
ADD DDDEF(SYSUT4)   UNIT(SYSDA) CYL SPACE(5,2) NEW DELETE.           01520000
ENDUCL.                                                              01530000
```

Figure 204. Define VISION:Inform to the Global, Target, and Distributions zones

SMPJOB03

```
//* MEMBER SMPJOB03                                                      00010005
//*********************************************************************** 00020001
//* THIS JOB RECEIVES THE MODIFICATION CONTROL STATEMENTS (MCS) AND   * 00030001
//* THE ELEMENTS (SYSMODS) INTO THE GLOBAL ZONE/DATA SETS.            * 00040001
//*********************************************************************** 00050001
//* ALL CHANGES NECESSARY TO RUN THIS JOB MAY BE SAFELY MADE WITH A   * 00060008
//* GLOBAL CHANGE COMMAND.                                            * 00070007
//* TAILOR THIS JCL BY MAKING THE FOLLOWING CHANGES:                  * 00080007
//*                                                                   * 00090007
//* 1) SUPPLY A VALID "JOB" JCL STATEMENT.                            * 00100007
//* 2) CHANGE THE HIGH LEVEL DSN OF 'INFORM.' OR 'INFORM.R40.' TO     * 00110007
//*    THE HIGH LEVEL DSN USED PREVIOUSLY IN THE INSTALLATION         * 00120007
//*    (SMPJOB01 AND SMPJOB02).                                       * 00130007
//*********************************************************************** 00140002
//RECEIVE EXEC PGM=GIMSMP,REGION=4M                                     00150001
//SMPCSI    DD DSN=INFORM.R40.CSI,DISP=SHR                              00160006
//SMPPTFIN  DD DSN=INFORM.R40.SMPCNTL(MCSHDR),DISP=SHR                  00170005
//          DD DSN=INFORM.R40.SMPCNTL(MCSINF),DISP=SHR                  00180005
//          DD DSN=INFORM.R40.SMPCNTL(MCSBLDR),DISP=SHR                 00190005
//          DD DSN=INFORM.R40.SMPCNTL(MCSCOML),DISP=SHR                 00200005
//          DD DSN=INFORM.R40.SMPCNTL(MCSWKB),DISP=SHR                  00210005
//          DD DSN=INFORM.R40.SMPCNTL(MCSSASC),DISP=SHR                 00220005
//SMPCNTL   DD *                                                        00230001
  SET BDY(GLOBAL).                                                      00240001
  RECEIVE SYSMODS LIST.                                                 00250001
  LIST.                                                                 00260001
```

Figure 205. RECEIVE program element SYSMODS into the Global zone

SMPJOB04

```
//* MEMBER SMPJOB04                                                      00010002
//*********************************************************************** 00020000
//* RECEIVE THE PTF AND APAR SYSMODS INTO THE GLOBAL ZONE/DATA SETS.  * 00030001
//*********************************************************************** 00040000
//* ALL CHANGES NECESSARY TO RUN THIS JOB MAY BE SAFELY MADE WITH A   * 00050008
//* GLOBAL CHANGE COMMAND.                                            * 00060005
//* TAILOR THIS JCL BY MAKING THE FOLLOWING CHANGES:                  * 00070005
//*                                                                   * 00080005
//* 1) SUPPLY A VALID "JOB" JCL STATEMENT.                            * 00090005
//* 2) CHANGE THE HIGH LEVEL DSN FROM 'INFORM.' OR 'INFORM.R40.' TO   * 00100005
//*    THE HIGH LEVEL DSN USED DURING THIS INSTALLATION. IT IS NOT    * 00110006
//*    RECOMMENDED THAT THE LOW LEVEL DSNS BE CHANGED.                * 00120006
//*********************************************************************** 00130002
//RECPTF EXEC PGM=GIMSMP,REGION=4M                                      00140001
//SMPCSI   DD DSN=INFORM.R40.CSI,DISP=SHR                               00150001
//SMPPTFIN DD DSN=INFORM.R40.SMPCNTL(PTFS),DISP=SHR                     00160002
//         DD DSN=INFORM.R40.SMPCNTL(APARS),DISP=SHR                    00170002
//SMPCNTL  DD *                                                         00180001
  SET BDY(GLOBAL).                                                      00190000
  RECEIVE SYSMODS LIST.                                                 00200000
  LIST.                                                                 00210000
```

Figure 206. RECEIVE the APAR and PTF SYSMODS into the Global zone

SMPJOB05

```
//* MEMBER SMPJOB05                                                      00010000
//*********************************************************************** 00020000
//* APPLY THE ELEMENTS (MODULES) INTO THE TARGET ZONE/LIBRARIES.      * 00030000
//*********************************************************************** 00040000
//* ALL CHANGES NECESSARY TO RUN THIS JOB MAY BE SAFELY MADE WITH A   * 00050002
//* GLOBAL CHANGE COMMAND.                                            * 00060001
//* TAILOR THIS JCL BY MAKING THE FOLLOWING CHANGES:                  * 00070001
//*                                                                   * 00080001
//* 1) SUPPLY A VALID "JOB" JCL STATEMENT.                            * 00090001
//* 2) CHANGE THE HIGH LEVEL DSN FROM 'INFORM.' OR 'INFORM.R40.' TO   * 00100001
//*    THE HIGH LEVEL DSN USED DURING THIS INSTALLATION.  IT IS NOT   * 00110001
//*    RECOMMENDED THAT THE LOW LEVEL DSNS BE CHANGED.                * 00120001
//*********************************************************************** 00130000
//APPLY  EXEC PGM=GIMSMP,REGION=4M                                      00140000
//SMPCSI   DD DSN=INFORM.R40.CSI,DISP=SHR                               00150000
//IJCLIN   DD DSN=INFORM.R40.SMPCNTL,DISP=SHR                           00160000
//INFLOAD  DD DSN=INFORM.R40.INFLOAD,DISP=SHR                           00170000
//INFMAC   DD DSN=INFORM.R40.INFMAC,DISP=SHR                            00180000
//INFSRC   DD DSN=INFORM.R40.INFSRC,DISP=SHR                            00190000
//INFJCL   DD DSN=INFORM.R40.INFJCL,DISP=SHR                            00200000
//INFCLIST DD DSN=INFORM.R40.INFCLIST,DISP=SHR                          00210000
//INFPANEL DD DSN=INFORM.R40.INFPANEL,DISP=SHR                          00220000
//INFMSGS  DD DSN=INFORM.R40.INFMSGS,DISP=SHR                           00230000
//INFSKELS DD DSN=INFORM.R40.INFSKELS,DISP=SHR                          00240000
//SMPCNTL  DD *                                                         00250000
  SET BDY(IN40ITZ).                                                     00260000
  APPLY SELECT(CDAD400).                                                00270000
  LIST.                                                                 00280000
```

Figure 207. APPLY the program elements into the target zone

SMPJOB06

```
//* MEMBER SMPJOB06                                                      00010000
//*********************************************************************** 00020001
//* APPLY THE APARS/PTFS INTO THE TARGET ZONE/LIBRARIES USING AN      * 00030001
//* IN-STREAM PROCEDURE EXECUTED ONCE PER APAR/PTF.                   * 00040001
//*********************************************************************** 00050001
//* TAILOR THIS JCL BY MAKING THE FOLLOWING CHANGES:                  * 00060001
//*                                                                   * 00070001
//* 1) SUPPLY A VALID "JOB" JCL STATEMENT.                            * 00080001
//* 2) CHANGE THE HIGH LEVEL DSN FROM 'INFORM.' OR 'INFORM.R40.' TO   * 00090001
//*    THE HIGH LEVEL DSN USED DURING THIS INSTALLATION.  IT IS NOT   * 00100001
//*    RECOMMENDED THAT THE LOW LEVEL DSN BE CHANGED.                 * 00110001
//* 3) CHANGE THE "APPLY SELECT(NNNNNNN)" TO NAME THE APAR/PTF THAT   * 00120001
//*    IS TO BE APPLIED. CHANGE ONLY THE 'NNNNNNN' PORTION OF THE     * 00130001
//*    STATEMENT.                                                     * 00140001
//* 4) APPLY APARS/PTFS ONE AT A TIME, SPECIFYING ONLY ONE ITEM ON    * 00150001
//*    EACH INVOCATION OF THE PROCEDURE.                              * 00160001
//*********************************************************************** 00170001
//* THIS JOB IS MEANT TO BE USED IN TWO WAYS:                         * 00180001
//*                                                                   * 00190001
//*    1) DURING THE INSTALLATION PROCESS, TO APPLY THE INITIAL PTFS  * 00200004
//*       AND APARS THAT ARE DELIVERED WITH THE SYSTEM.               * 00210004
//*    2) AFTER PRODUCT INSTALLATION, TO APPLY MAINTENANCE TO THE     * 00220004
//*       PRODUCT WHEN NECESSARY.                                     * 00230004
//*                                                                   * 00240004
//*  WHEN RUNNING THIS JOB DURING PRODUCT INSTALLATION, YOU MUST USE  * 00250004
//*  THE OUTPUT OF THE SMP/E "LIST" FUNCTION FROM SMPJOB04 TO         * 00260004
//*  DETERMINE THE NAMES OF THE PTFS AND APARS YOU NEED TO APPLY.     * 00270004
//*  REMEMBER THAT APARS ARE OPTIONAL, BUT ALL THE PTFS THAT WERE     * 00280004
//*  RECEIVED IN SMPJOB04 MUST BE APPLIED. PTFS AND APARS MUST BE     * 00290004
//*  APPLIED IN ASCENDING SEQUENCE BY NAME.                           * 00300004
//*                                                                   * 00310004
//*  THIS SAMPLE JCL CONTAINS A SINGLE EXECUTION OF AN IN-STREAM      * 00320004
//*  PROCEDURE TO APPLY PTFS AND APARS. ADD ADDITIONAL STEPS FOR EACH * 00330004
//*  PTF AND APAR TO BE APPLIED, AS FOLLOWS:                          * 00340004
//*                                                                   * 00350001
//*           //STEP2 EXEC APPLY                                      * 00360001
//*           //SMPCNTL DD *                                          * 00370001
//*             SET BDY(IN40ITZ).                                     * 00380003
//*             APPLY SELECT(NNNNNNN).                                * 00390004
//*********************************************************************** 00400001
//APPLY  PROC                                                           00410000
//APPLY1 EXEC PGM=GIMSMP,REGION=4M                                      00420000
//SMPCSI   DD DSN=INFORM.R40.CSI,DISP=SHR                               00430000
//       PEND                                                           00440000
//STEP1  EXEC APPLY                                                     00450000
//SMPCNTL  DD *                                                         00460000
  SET BDY(IN40ITZ).                                                     00470000
  APPLY SELECT(NNNNNNN).                                                00480000
```

Figure 208. APPLY the APAR and PTF elements into the target zone

SMPJOB07

```
//* MEMBER SMPJOB07                                                      00010000
//*********************************************************************** 00020000
//* ACCEPT THE ELEMENTS INTO THE DISTRIBUTION ZONE/LIBRARIES.         * 00030000
//*********************************************************************** 00040000
//* ALL CHANGES NECESSARY TO RUN THIS JOB MAY BE SAFELY MADE WITH A   * 00050002
//* GLOBAL CHANGE COMMAND.                                            * 00060001
//* TAILOR THIS JCL BY MAKING THE FOLLOWING CHANGES:                  * 00070001
//*                                                                   * 00080001
//* 1) SUPPLY A VALID "JOB" JCL STATEMENT.                            * 00090001
//* 2) CHANGE THE HIGH LEVEL DSN FROM 'INFORM.' OR 'INFORM.R40.' TO   * 00100001
//*    THE HIGH LEVEL DSN USED DURING THIS INSTALLATION.  IT IS NOT   * 00110001
//*    RECOMMENDED THAT THE LOW LEVEL DSNS BE CHANGED.                * 00120001
//*********************************************************************** 00130000
//ACCEPT EXEC PGM=GIMSMP,REGION=4M                                      00140000
//SMPCSI   DD DSN=INFORM.R40.CSI,DISP=SHR                               00150000
//IJCLIN   DD DSN=INFORM.R40.SMPCNTL,DISP=SHR                           00160000
//INFLOAD  DD DSN=INFORM.R40.INFLOAD,DISP=SHR                           00170000
//INFMAC   DD DSN=INFORM.R40.INFMAC,DISP=SHR                            00180000
//INFSRC   DD DSN=INFORM.R40.INFSRC,DISP=SHR                            00190000
//INFJCL   DD DSN=INFORM.R40.INFJCL,DISP=SHR                            00200000
//INFCLIST DD DSN=INFORM.R40.INFCLIST,DISP=SHR                          00210000
//INFPANEL DD DSN=INFORM.R40.INFPANEL,DISP=SHR                          00220000
//INFMSGS  DD DSN=INFORM.R40.INFMSGS,DISP=SHR                           00230000
//INFSKELS DD DSN=INFORM.R40.INFSKELS,DISP=SHR                          00240000
//SMPCNTL   DD *                                                        00250000
  SET BDY(IN40IDZ).                                                     00260000
  ACCEPT SELECT(CDAD400).                                               00270000
  LIST.                                                                 00280000
```

Figure 209. ACCEPT the program elements into the Distribution zone

SMPJOB08

```
//* MEMBER SMPJOB08                                                      00010000
//*********************************************************************** 00020001
//* ACCEPT THE APARS/PTFS INTO THE DISTRIBUTION ZONE/LIBRARIES USING  * 00030003
//* AN IN-STREAM PROCEDURE EXECUTED ONCE PER APAR/PTF.                * 00040003
//*********************************************************************** 00050001
//* TAILOR THIS JCL BY MAKING THE FOLLOWING CHANGES:                  * 00060001
//*                                                                   * 00070001
//* 1) SUPPLY A VALID "JOB" JCL STATEMENT.                            * 00080001
//* 2) CHANGE THE HIGH LEVEL DSN FROM 'INFORM.' OR 'INFORM.R40.' TO   * 00090001
//*    THE HIGH LEVEL DSN USED DURING THIS INSTALLATION.  IT IS NOT   * 00100001
//*    RECOMMENDED THAT THE LOW LEVEL DSN BE CHANGED.                 * 00110001
//* 3) CHANGE THE "ACCEPT SELECT(NNNNNNN)" TO NAME THE APAR/PTF THAT  * 00120001
//*    IS TO BE ACCEPTED. CHANGE ONLY THE 'NNNNNNN' PORTION OF THE    * 00130001
//*    STATEMENT.                                                     * 00140001
//* 4) ACCEPT APARS/PTFS ONE AT A TIME, SPECIFYING ONLY ONE ITEM ON   * 00150001
//*    EACH INVOCATION OF THE PROCEDURE.                              * 00160001
//*********************************************************************** 00170001
//* THIS JOB IS MEANT TO BE USED IN TWO WAYS:                         * 00180001
//*                                                                   * 00190001
//*    1) DURING THE INSTALLATION PROCESS, TO ACCEPT THE INITIAL PTFS * 00200003
//*       AND APARS THAT ARE DELIVERED WITH THE SYSTEM.               * 00210003
//*    2) AFTER PRODUCT INSTALLATION, TO ACCEPT MAINTENANCE TO THE    * 00220003
//*       PRODUCT WHEN NECESSARY.                                     * 00230003
//*                                                                   * 00240003
//*  WHEN RUNNING THIS JOB DURING PRODUCT INSTALLATION, YOU SHOULD    * 00250003
//*  REFER TO THE LIST OF PTFS AND APARS THAT YOU USED TO APPLY THE   * 00260003
```

```
//*  MAINTENANCE IN SMPJOB06. USE THE SAME MEMBER LIST TO SPECIFY THE * 00270003
//*  PTFS AND APARS TO BE ACCEPTED. PTFS AND APARS MUST BE ACCEPTED   * 00280003
//*  IN ASCENDING SEQUENCE BY NAME.                                   * 00290003
//*                                                                   * 00300003
//*  THIS SAMPLE JCL CONTAINS A SINGLE EXECUTION OF AN IN-STREAM      * 00310003
//*  PROCEDURE TO ACCEPT PTFS AND APARS. ADD ADDITIONAL STEPS FOR     * 00320003
//*  EACH PTF AND APAR TO BE ACCEPTED, AS FOLLOWS:                    * 00330003
//*                                                                   * 00340001
//*           //STEP2 EXEC ACCEPT                                     * 00350001
//*           //SMPCNTL DD *                                          * 00360001
//*             SET BDY(IN40IDZ).                                     * 00370002
//*             ACCEPT SELECT(NNNNNNN).                               *00380003
//******************************************************************** 00390001
//ACCEPT  PROC                                                        00400000
//ACCEPT1 EXEC PGM=GIMSMP,REGION=4M                                   00410000
//SMPCSI    DD DSN=INFORM.R40.CSI,DISP=SHR                            00420000
//        PEND                                                        00430000
//STEP1   EXEC ACCEPT                                                 00440000
//SMPCNTL   DD *                                                      00450000
  SET BDY(IN40IDZ).                                                 00460000
  ACCEPT SELECT(NNNNNNN).                                           00470000
```

Figure 210. ACCEPT the APAR and PTF elements into the Distribution zone

SMPREJCT

```
//* MEMBER SMPREJCT                                                  00010000
//******************************************************************** 00020000
//* A MODEL TO REJECT (REMOVE) APAR/PTF SYSMODS FROM THE GLOBAL ZONE  * 00030002
//* DATA SETS USING AN INSTREAM PROCEDURE.                           * 00040001
//******************************************************************** 00050000
//* TAILOR THIS JCL BY MAKING THE FOLLOWING CHANGES:                 * 00060002
//*                                                                  * 00070002
//* 1) SUPPLY A VALID "JOB" JCL STATEMENT.                           * 00080002
//* 2) CHANGE THE HIGH LEVEL DSN FROM 'INFORM.' OR 'INFORM.R40.' TO  * 00090002
//*    THE HIGH LEVEL DSN USED DURING THIS INSTALLATION.  IT IS NOT  * 00100002
//*    RECOMMENDED THAT THE LOW LEVEL DSN BE CHANGED.                * 00110002
//* 3) CHANGE THE "REJECT SELECT(NNNNNNN)" TO NAME THE APAR/PTF THAT * 00120002
//*    IS TO BE REJECTED. CHANGE ONLY THE 'NNNNNNN' PORTION OF THE   * 00130000
//*    STATEMENT.                                                    * 00140000
//* 4) TO REJECT MORE THAN ONE APAR/PTF AT A TIME, SPECIFY A LIST IN * 00150002
//*    THE "SELECT" OPERAND, SUCH AS:                                * 00160001
//*    REJECT  SELECT(1111111, 2222222).                             * 00170001
//******************************************************************** 00180000
//REJECT  PROC                                                        00190000
//REJECT1 EXEC PGM=GIMSMP,REGION=4M                                   00200000
//SMPCSI    DD DSN=INFORM.R40.CSI,DISP=SHR                            00210000
//        PEND                                                        00220000
//STEP1   EXEC REJECT                                                 00230000
//SMPCNTL   DD *                                                      00240000
  SET BDY(GLOBAL).                                                  00250000
  REJECT  SELECT(NNNNNNN).                                          00260000
```

Figure 211. REJECT APAR and PTF elements from the Global zone

SMPREMOV

```
//* MEMBER SMPREMOV                                                     00010000
//********************************************************************* 00020000
//* A MODEL TO RESTORE (REMOVE) APAR/PTF SYSMODS FROM THE TARGET ZONE * 00030001
//* AND LIBRARIES USING AN INSTREAM PROCEDURE.                        * 00040000
//********************************************************************* 00050000
//* TAILOR THIS JCL BY MAKING THE FOLLOWING CHANGES:                  * 00060001
//*                                                                   * 00070001
//* 1) SUPPLY A VALID "JOB" JCL STATEMENT.                            * 00080001
//* 2) CHANGE THE HIGH LEVEL DSN FROM 'INFORM.' OR 'INFORM.R40.' TO   * 00090001
//*    THE HIGH LEVEL DSN USED DURING THIS INSTALLATION.  IT IS NOT   * 00100001
//*    RECOMMENDED THAT THE LOW LEVEL DSN BE CHANGED.                 * 00110001
//* 3) CHANGE THE "RESTORE SELECT(NNNNNNN)" TO NAME THE APAR/PTF THAT * 00120001
//*    IS TO BE REMOVED. CHANGE ONLY THE 'NNNNNNN' PORTION OF THE     * 00130000
//*    STATEMENT.                                                     * 00140000
//* 4) TO REMOVE MORE THAN ONE APAR/PTF AT A TIME, SPECIFY A LIST IN  * 00150001
//*    THE "SELECT" OPERAND, SUCH AS:                                 * 00160000
//*    RESTORE SELECT(1111111, 2222222).                              * 00170000
//********************************************************************* 00180000
//RESTORE PROC                                                        00190000
//REST    EXEC PGM=GIMSMP,REGION=4M                                   00200000
//SMPCSI    DD DSN=INFORM.R40.CSI,DISP=SHR                            00210000
//        PEND                                                        00220000
//STEP1   EXEC RESTORE                                                00230000
//SMPCNTL   DD *                                                      00240000
  SET BDY(IN40ITZ).                                                 00250000
  RESTORE SELECT(NNNNNNN).                                          00260000
```

Figure 212. RESTORE (remove) APAR and PTF elements from the Target Zone

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