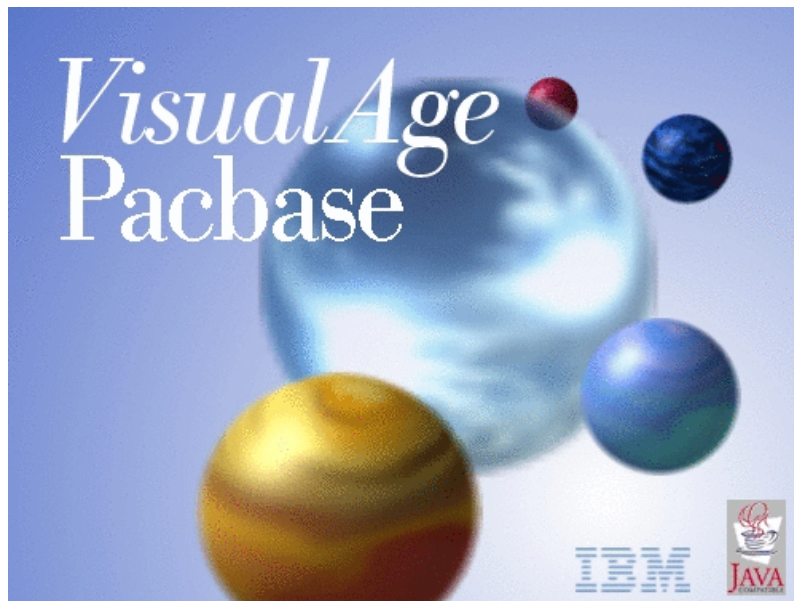VisualAge Pacbase

Installation Guide
Z/OS CICS Server & Client Components

Version 3.5

VisualAge Pacbase

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> **Note**
>
> Before using this document, read the general information under "Notices" on page vii.
>
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>
> http://www.ibm.com/support/docview.wss?rs=37&context=SSEP67&uid=swg27005478
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Chapter 1. Foreword

Introduction

The purpose of this manual is to guide the administrator through the installation of the VisualAge Pacbase:

- Server components
- Client components,
- Communication environment.

Once the installation is completed, it is recommended to run the set of tests provided on the installation media.

You will also find in this manual a description of the operations to be performed for the installation of correction versions.

A number of Administration actions must be carried out online in the Administrator workbench in order to make operational a VisualAge Pacbase installation or re-installation. These actions are documented in the 'AD workbench User's Guide', chapter 'Prior Administration Actions'.

VisualAge Pacbase Architecture

VisualAge Pacbase is used for the design, development and maintenance of graphical (GUI), textual (TUI) or web eBusiness applications, run in on-line or batch mode.

VisualAge Pacbase consists of:

- A server environment (TUI),
- A client environment (GUI).

These two environments communicate through an encapsulated middleware provided by IBM.

NOTE: The textual mode remains available for some functionalities.

You will find a detailed description of Server Components in chapter 'The Components' in this manual.

The Server environment

It consists of the following components:

- System elements: programs, files (online help included), and parameters.
- VA Pac Administration Database that contains user parameters and other parameters.
- one or more VA Pac Development Databases.

The Client environment

The client environment includes five separately installable components:
- Administrator & Developer workbench (also separately installable).

  Developer workbench includes the following modules (each running independently):
  - Batch,
  - Dialog,
  - eBusiness (includes three eBusiness Tools and Services Modeler),
  - Services Modeler.

  Each of these modules can be executed independently.
- eBusiness Tools:
  - Proxy Generator,
  - Location Editor,
  - Services Test Facility,
  - VisualAge Pacbase Connector,
  - VisualAge Pacbase Web Connection (Dialog Web Revamping Generator),
  - Web application models (WAM).
- VisualAge Pacbase WorkStation (Pacdesign, Pacbench)
- Web application models (WAM)
- Middleware

  The communication functions enable the Server and Client environments to communicate via the main communication protocols on the market.

Contents of Supply

The contents of the supply vary according to the terms of your order:
- Installation guide,
- Program Directory (for SMP/E)
- Server installation CD-ROM,
- Client installation CD-ROM,
- Documentation CD-ROM.

Bibliography

- A number of administration actions must be carried out online in Administrator workbench in order to make a VisualAge Pacbase installation or re-installation operational. These actions are documented in the 'AD workbench User's Guide', chapter 'Prior Administration Actions'.

- The procedures, used by the Administrator for the Management of Databases and versions, and utilities provided, are documented in the Administrator's procedures Guide.

- For IBM sites, the installation of a Security System, to control user codes, passwords and access authorizations, is documented in the 'Installation of Server Components' chapter, 'Additional Installations' subchapter, and also in the Online Help of Administrator workbench.

Chapter 2. Prerequisites

Prerequisites for the Server Environment

Hardware and Software

Processor: z/OS 1.12.0 or next.

Installation media: CD-ROM drive.

Monitor: CICS Transaction Server 3.2 or next.

COBOL: COBOL Enterprise 3.4.

Disk Space

The total amount of space needed for the files depends on the size of applications managed by the system.

The following table indicates approximately the disk space necessary (in millions of bytes) to install the servers:

Disk space for the installation	Total	VSAM	Non VSAM
Total installation	300	210	90
Total System	240	175	65
Total user files for installation tests	60	35	25

Prerequisites for the Client Environment

Hardware

The hardware characteristics necessary to install VisualAge Pacbase client components are the following:

- Processor: Intel Pentium III 450 Mhz minimum or compatible processor.
- Monitor: graphic monitor (800x600) VGA or higher resolution (XGA or SVGA).
- CD-ROM drive.
- Card: adapted to the site network.
- Memory (RAM): 512 Mb (1 Gb advised).

Disk Space

Required disk space:

- 100 Mb for Administrator & Developer workbench

- 30 Mb for eBusiness Tools
- 85 Mb for the "IBM SDK for Java 2"
- 25 Mb for the Middleware
- 6 Mb for WAM
- 30 Mb for the VisualAge Pacbase WorkStation (with a Methodology included)

If "IBM SDK for Java 2" is not installed on your workstation, its installation is automatically started.

For an operational installation of AD workbench for example, the minimum disk space required is 215 Mb (100 Mb for AD workbench, 85 Mb for the "IBM SDK for Java 2" and 30 Mb for the Middleware).

Software

The VisualAge Pacbase client components require that a 32 bytes-Windows be installed on your workstation.

See also chapter 'Installation of Client Components', subchapter 'Things to Know Before Installing'.

Communications

To enable the communication between the workstation components and the servers in a MVS/CICS, environment, the communication protocol must be: CPI-C and TCP-IP Socket.

Chapter 3. Installation of the Server Components

Parameterization

SMP/E context

VA Pacbase, DSMS and Pactables use common batch and online load modules.

These load-modules are supplied in the HBVP350 root FMID.

The components specific to VA Pacbase are supplied in the JBVP351 dependent FMID.

The components specific to DSMS are supplied in the JBVP352 dependent FMID.

The components specific to Pactables are supplied in the JBVP353 dependent FMID.

To install a dependent FMID, the HBVP350 root FMID must be simultaneously or previously installed.

If the HBVP350 root FMID is already installed, only the dependent JBVP35x FMID must be installed.

On the installation CD-ROM, the HBVP350 root FMID and the JBVP35x dependent FMID are systematically provided.

The RECEIVE, APPLY and ACCEPT JCLs, that are supplied, are to be used for a simultaneous installation of the two FMIDs. They must be adapted if the HBVP350 root FMID is already installed.

Preparation

The preparation to the installation process consists of three stages:

* Receiving the product with the SMP/E (System Modification Program/Extended) utility in dedicated PDSs.

  This stage must be performed by the system staff who are accustomed to installing IBM products with SMP/E.

* Allocating a PDS file where all the installation and operation JCLs will be saved.

* Executing the installation JCL from the PDS members created during the first stage.

<u>Remark in case of a previous SMP/E installation</u>

The following SMP/E stage implies that the SMP/E context is empty for the product: either the product has never been installed with SMP/E, or the files related to SMP/E have been reinitialized for the previous version, or you want to create a new SMP/E environment for this version.

Otherwise, if you want to re-use the SMP/E files of the previous version, you can execute, before stage 1, the SMP/E utility described in the Appendix at the end of this manual.

<u>Stage 1</u>

Follow these steps to install the product from the installation CD-ROM:

1 - Download to Z/OS the sample JCLs provided on the CD-ROM.

On the CD-ROM, a file contains the sample JCLs: a JCL for the allocation of the compressed RELFILEs and SMPMCS files, as well as the SMP/E configuration and installation JCLs.

1.1 - Allocate first the receiving file on Z/OS, either by parameterizing the JCL presented here below, or by directly creating it with all the required characteristics (tsouid represents the TSO user code):

```
//ALLOC1   EXEC PGM=IEFBR14
//*
//FTPALLO  DD DSN=tsouid.JBVP351.SAMPLE.JCL.BIN,
//         DISP=(NEW,CATLG,DELETE),
//         DSORG=PS,RECFM=FB,LRECL=80,BLKSIZE=6160,
//         SPACE=(TRK,(2,1)),UNIT=SYSALLDA
//*       VOL=SER=&TVOL1
```

1.2 - Download the binary-formatted files provided on the CD-ROM to the Z/OS file already created.

To do so, perform an FTP transfer as follows:

1.2.1 - Copy the FTP sample command 'ftpini_model.scr' provided on the CD-ROM to a work directory of your workstation and name it 'ftpini.scr' ; then follow the instructions (contained in this file) concerning the parameters,

1.2.2 - Execute the FTP command -s:ftpini.scr from the work directory.

2 - Decompress the sample JCLs with the TSO command RECEIVE INDA('tsouid.JBVP351.SAMPLE.JCL.BIN').

This creates the tsouid.JBVP351.TMP.JCLINST file with the following members:
- BVPALLOC
- BVPPACC
- BVPPAPP
- BVPPREC
- BVPXMIT
- BVP1DCSI
- BVP2ICSI
- BVP3ALLO
- BVP4DEFZ
- BVP5DDEF
- BVP6DDEF
- BVP7ALLO
- BVP8PDD
- BVP9PAL

3 - Download the compressed RELFILEs and the SMPMCS from the CD-ROM.

3.1 - Parameterize and submit the BVPALLOC JCL contained in tsouid.JBVP351.TMP.JCLINST in order to allocate, on Z/OS, the files required for the download operations.

To do so, follow the instructions included in the JCL.

3.2 - Download the binary-formatted files provided on the CD-ROM to the Z/OS files.

To do so, perform an FTP transfer as follows:

3.2.1 - Copy the FTP sample command 'ftpput_model.scr' provided on the CD-ROM to a work directory of your workstation and name it 'ftpput.scr' ; then follow the instructions (contained in this file) concerning the parameters.

3.2.2 - Execute the FTP command -s:ftpput.scr from the work directory.

4 - Decompress the RELFILEs files on Z/OS.

To do so, parameterize and submit the BVPXMIT JCL contained in tsouid.JBVP351.TMP.JCLINST

5 - You can then install the product with SMP/E using the JCLs contained in tsouid.JBVP351.TMP.JCLINST.

If you install in a new environment, you will have to create the SMP/E environment and install the HBVP350 and JBVP351 FMIDs with the JCLs supplied.

This stage then consists of the following steps:
- Setting up the SMP/E environment and the 'Target zone' and 'Distribution zone' files of the HBVP350 root FMID:
  - Defining the SMP/E cluster libraries (BVP1DCSI)
  - Initializing the SMP/E libraries (BVP2ICSI)
  - Allocating the SMP/E work files (BVP3ALLO)
  - Assigning the FMID (BVP4DEFZ)
  - Creating the DDDEF entries for technical files (BVP5DDEF)
  - Defining the 'Target zone' and 'Distribution zone' files (BVP6DDEF)
  - Allocating the 'Target zone' and 'Distribution zone' files (BVP7ALLO)
- Implementing the 'Target zone' and 'Distribution zone' files of the JBVP351 dependent FMID:
  - Defining the 'Target zone' and 'Distribution zone' files (BVP8PDD)
  - Allocating the 'Target zone' and 'Distribution zone' files (BVP9PAL)
- Installing the components of the HBVP350 and JBVP351 FMIDs:
  - Execution of RECEIVE (BVPPREC)
  - Execution of APPLY (BVPPAPP)
  - Execution of ACCEPT (BVPPACC)

If you install in an environment where the HBVP350 FMID and a JBVP35x FMID are already installed, you just have to install the JBVP351 dependent FMID of VA Pacbase.

Then execute steps 3 and 4 once the necessary JCLs are downloaded as described in step 1 and modify the RECEIVE, APPLY and ACCEPT JCLs to remove the HBVP350 FMID from the impacted lines.

At the end of this first stage, all the components required for the installation are located in the following PDSs ; 'hlq' indicates the common prefix of the elements supplied (High-Level Qualifier):
- hlq.SBVPINST: all the 80-long files:
  - The error messages file (BVPAE)
  - The initial installation JCL (BVPPINIT)

- A file which contains the installation and operation JCLs and procedures (BVPPTTAL)
- The SMP/E sample JCLs.
- The BVPAMIAM file which contains the parameters of the MIAM procedure.
- hlq.SBVPPF2: PC and PE initialization files
- hlq.SBVPMBR8: batch load-modules (the BVPDS600 and BVPDS610 load-modules for the interface between VA Pacbase and DSMS 2.5 are provided in standard; if DSMS is to be used, you must adapt the DEXP procedure to use these new load-modules in place of PDS600 and PDS610, no longer compatible since VA Pacbase 3.0) ; moreover you must add the AN and AR files from VA Pac version Y04C onwards.
- hlq.SBVPMTR8: online load-modules
- hlq.SBVPPF5: SA SG SN SP SR SS skeletons
- hlq.SBVPPF6: SC skeleton
- hlq.SBVPPF7: SF skeleton
- hlq.SBVPPF8: Administration Model and Development Model update files
- hlq.SBVPSRC: source files with a length of 80
- hlq.SBVPDIC: Dictionary complementary files

Stage 2

This stage is optional but recommended. It consists in allocating a PDS file with the following characteristics:
- Lrecl=80
- Size: around 100 tracks of a 3390 disk, 30 pads directory.

Stage 3

Stage 3 consists in copying the 'hlq.SBVPINST(BVPPINIT)' JCL to the PDS mentioned in stage 2, modifying its parameters to match the constraints of the site and executing it to obtain the complete installation and operation JCL.

The BVPPINIT JCL executes the BVPMMJCL program loaded into the hlq.SBVPMBR8 PDS.

It must be completed as follows:
- Fill in '&hlq' with the value of the 'hlq' parameter used in the SMP/E first stage.
- In the '//SYSUT2 DD DSN=' field, enter the name of the file into which the complete JCL is to be loaded.

This file can be either a PDS member initially created to receive all the JCLs, or a sequential file selected by the user.

- Enter the parameters (see details in the next chapter).

The BVPMMJCL program execution must be saved: it can be used for a further re-installation.

<u>Warning</u>

The TEST and ADMIN users are automatically provided with their passwords in the Administration Database and are used in the provided JCLs.

The site administrator will have to delete these users after the product installation tests.

<u>Execution JCL</u>

```
//VAPACBAS  JOB (---),'JCL INSTALLATION',CLASS=D,MSGCLASS=A
//MM1JCL EXEC PGM=BVPMMJCL
//STEPLIB  DD DISP=SHR,DSN=&HLQ.SBVPMBR8
//         DD DISP=SHR,DSN=---.---.---     LE LIBRARY
//SYSOUT   DD SYSOUT=A
//SYSUT1   DD DSN=&HLQ.SBVPINST(BVPPTTAL),DISP=SHR
//SYSUT3   DD UNIT=SYSDA,SPACE=(CYL,(5,2)),DCB=BLKSIZE=4160
//SYSUT4   DD UNIT=SYSDA,SPACE=(CYL,(5,2)),DCB=BLKSIZE=4160
//SYSUT8   DD DUMMY,DCB=BLKSIZE=1370
//SYSUT9   DD DUMMY,DCB=BLKSIZE=1370
//********************************************************************
//*                                                                  *
//*     CREATION OF INSTALLATION JCL THROUGH 'BVPMMJCL'              *
//*     --------------------------------------------                 *
//*                                                                  *
//*     MODIFY THE LIST OF THE SUPPLIED COMMANDS BY ASKING,          *
//*     IF NECESSARY, A SELECTION OF PARTS OF INSTALLATION JCL       *
//*     (JCL MODULES), BY GIVING THE APPROPRIATE VALUES TO THE       *
//*     INSTALLATION PARAMETERS, AND, IF NECESSARY, BY SPECIFYING    *
//*     THE LINES TO BE ADDED AT THE BEGINNING OR AT THE END OF      *
//*     EACH JCL MODULE.                                             *
//********************************************************************
//SYSPRM DD DUMMY
//SYSUT2   DD ---------   PDS MEMBER OR SEQUENTIAL FILE RECEIVING
//*                       THE INSTALLATION JCL (LRECL=80)
//SYSIN DD *
===PRM PRFJ=BVPJ          .JOB NAMES PREFIXES (MAX OF 5 CHARACTERS)
===PRM CCPT=<>            .JOB ACCOUNTING CODES (JOB CARDS)
===PRM CLASSJ=1           .JOB EXECUTION CLASS (JOB CARDS)
===PRM MSGCL=A            .JCL OUTPUT CLASS (MSGCLASS)
===PRM INDSV='EXP.BVP3V'  .SYSTEM VSAM FILES INDEX VA-PAC
===PRM INDSVE='EXP.BVP3VE' .SYSTEM VSAM FILES INDEX ENDEVOR
===PRM INDSN='EXP.BVP3N'   .SYSTEM NON VSAM FILES INDEX VA-PAC
===PRM INDSNE='EXP.BVP3NE' .SYSTEM NON VSAM FILES INDEX ENDEVOR
===PRM INDUV='UTI.BVP3V'   .USER VSAM FILES INDEX
```

```
===PRM INDUN='UTI.BVP3N'   .USER NON VSAM FILES INDEX VA-PAC
===PRM INDUNE='UTI.BVP3NE' .USER NON VSAM FILES INDEX ENDEVOR
===PRM BASE='BASE'         .NAME OF DATABASE DEVELOPMENT (4 CHAR)
===PRM OUT=H               .JOB SYSOUT CLASS
===PRM UWK=SYSDA           .WORK FILES UNIT
===PRM UNITSN=SYSDA        .NON VSAM SYSTEM FILES UNIT
===PRM UNITUN=SYSDA        .NON VSAM USER FILES UNIT
===PRM VOLSN=              .SYSTEM NON VSAM FILES VOL=SER=
===PRM VOLSV=              .SYSTEM VSAM FILES VOLUME
===PRM VOLUN=              .USER NON VSAM FILES VOL=SER
===PRM VOLUV=              .USER VSAM FILES VOLUME
===PRM VCAT=               .USER FILES VSAM CATALOG
===PRM SCAT=               .SYSTEM FILES VSAM CATALOG
===PRM LSK='A'             .LANGAGE OF SKELETON FILES
===PRM DSCB='BVP.DSCB'     .DSCB MODEL FILE DSNAME
===PRM BIBP='SYS1.PROCLIB' .PROCEDURE LIBRARY
===PRM HLQ='HLQ'           .HIGH LEVEL QUALIFIER
===PRM BIBT='SYS1.SORTLIB'   .SORT LIBRARY
===PRM BCOB='SYS1.SCEERUN'   .COBOL ROUTINE LIBRARY
===PRM LDLIB='NDVR.LOADLIB'  .ENDEVOR LOADLIB (AUTHORISED LIB)
===PRM CONLIB='NDVR.CONLIB'  .ENDEVOR CONLIB
===PRM MSGLIB='NDVR.MSGLIB'  .ENDEVOR ISPMLIB
===PRM MSGSX='50'            .SUFFIX MSGS ENDEVOR ISPMLIB (00->
===PRM MSGSXH='F5F0'         .IDEM ===PRM MSGX BUT IN HEXA
===PRM CSDL='CICS410.SDFHLOAD' .DFHCSDUP STEPLIB DSN
===PRM DFHCSD='BVP.DFHCSD'   .CSD DSN
===PRM DFHEXC='BVP.DFHEXCI'  .EXCI DSN
===PRM GROUE='BVPGR'         .'GROUP' NAME FOR EXCI
===PRM GROUF='BVPGR'         .'GROUP' NAME FOR FILE
===PRM GROUP='BVPGR'         .'GROUP' NAME FOR PROGRAM
===PRM GROUT='BVPGR'         .'GROUP' NAME FOR TRANSACTION
===PRM LIST=<>              .'LIST' NAME
===PRM TABTDF=<>            .DSN OF TABLES DESCRIPTION FILE
===PRM DSMS=NULLFILE        .DSN OF PRODUCT ELEMENTS (DC)
===PRM EXCN=BVPC           .CONNECTION FOR EXCI (4 CHAR)
===PRM EXSS=BVPS           .SESSION FOR EXCI
===PRM EXPF=EX             .PREFIX OF VIRTUAL TERM FOR EXCI
===PRM CSOC='DBSS'         .TRANSACTION CODE "SOCKET" (4 CHAR)
===PRM CPIC='DBST'         .TRANSACTION CODE "CPIC" (4 CHAR)
===BEGMOD
./ ADD NAME=$ZMODUL
/*
//
```

JCL Installation

The BVPMMJCL module reads the skeleton JCL file and produces an
appropriate JCL, with commands which enable you to:

- Select portions of the skeleton JCL, which are called 'JCL modules',
- Parameterize the skeleton in order to obtain a JCL which requires a
  minimum of modifications to be operational,
- Add lines before and/or after the JCL modules to separate each one.

This step can be executed as many times as necessary to generate an appropriate JCL.

USER INPUT

Command	Parameters	Comments
===PRM	PPPP=pppp (1)	Parameter
===SELM	JCL1 JCL2	Selected JCL modules
===BEGMOD		Insertion of lines at the beginning of module
....1		Lines to be added before each module
....n		
===ENDMOD		Insertion of lines at the end of module
....1		Lines to be added after each module
....n		

(1) PPPP = parameter name, pppp = parameter value

Notes

- Lines ===PRM

  You can add a comment but it must be preceded by a dot and it should not exceed column 72.

  The default values are only examples. You must therefore enter values adapted to your site.

- Lines ===SELM

  These lines can be used to select modules.

  Since the standard installation provides all the modules, this line is not used.

- Lines ===BEGMOD

  ./ ADD NAME=$ZMODUL

  As a result, a line is inserted before each JCL module, in the form:

  ./ ADD NAME=<JCL-module>

RESULT: the complete JCL

The file obtained in SYSUT2 contains all the installation and operation JCLs. This file must be open with an editor to launch the installation process.

Two operations must be performed on the complete JCL:

1. Overall modifications (if necessary)

Adaptations can be performed on all the JCLs.

The VSAM catalogs appear as comments in the JCL obtained after the installation:
- In the DELETE/DEFINE*/
- In the JCL STEPCATs
- In the declarations of the procedures' parameters

When these parameters are not required on the site, the resulting JCL can remain as it is.

When these parameters are required on the site, the relevant lines should be changed into command lines. To do so, you must:
- Transform all '//*:' into '//',
- And then replace '/*:' and '*/' with blanks.

Caution: SMS
- In the installation jobs which include the 'GenerationDataGroup' allocation, you must delete the lines DD //GDGMOD from the definition IDCAMS.
- If the UNIT and VOL parameters cannot be used on the site, you can delete them in the whole JCL via an exclude command (EXCLUDE command in TSO/EDIT).

It is usually recommended to perform any other overall modifications on the JCLs before splitting these JCLs.

Caution: LSR

JCLs are standardly provided with the LSR option for the optimization of the batch access to VSAM files.

If the LSR option is not implemented on the site, you must replace the following lines in the procedures:

```
//xxLSR DD DSN=&INDxx..file,DISP=SHR
//PACxx DD SUBSYS=(&LSR,'DDNAME=xxLSR','BUFND=10','BUFNI=10
```

with a line:

```
   //PACxx DD DSN=&INDxx..file,DISP=SHR.
```

2. JCL splitting

Before each module of a standard complete JCL, there is a ./ ADD NAME=<JCL-module> line, where <JCL-module> is the code of the ===MOD line found (see the following table of JCL modules).

This allows the complete JCL to be split into as many members as JCL modules in a PDS. The complete JCL file is to be used as SYSIN in the PDS update utility: IEBUPDTE.

Note: Because of this default option, all './' characters found in JCL modules containing IEBUPDTE were replaced with ':/'.

Once the JCL is split, the replacement must be performed the other way round before executing jobs which contain IEBUPDTE.

REPORT

BVPMMJCL produces a list for each JCL module created, with the parameters taken into account and according to the variants requested.

Note:

Since the parameters of the skeleton JCL are formatted as $xxxx, if BVPMMJCL encounters, upon execution, a $ character which does not correspond to a defined parameter, it sends error messages such as: 'Unknown symbolic parameter' or 'Invalid position or length' or 'Syntax error in symbolic parameter'.

These messages do not stop the execution and should be ignored: they apply to '$' characters present in the flow processed by BVPMMJCL but which are NOT parameters.

List of JCLs

Table of installation JCLs

Member	Contents	Procedure
	System and Administration Database installation	
D00CSD	CICS update: components	
D01ALLOC	Allocation of parameters PDSs	
D02CPAR	Loading of common parameters	
D03DEFIN	VSAM common file definition	
D03GDG	Definition of GDG for parameter backup	
D03INI	Initialization of system files	
D04MBR	Renaming of user-exits batch load modules	

Member	Contents	Procedure
D05IPROC	Proclib allocation (optional)	
D05PROC	Loading of batch procedures in the Proclib	
D06SKEL	Loading of skeleton files	
D07AE0	Loading of error messages and documentation	INAE
D08INGU	Initialization of users code file	INGU
D08INIAD	GDG definition and initialization	
D08RSAD	Restoration of Administration Database	RSAD
D08TINQJ	Initialization of archived journal file for VA Pacbase interface	INQJ
D08XMET	Installation of administration Model	VING
D11ZXIT	Installation of Endevor user-exits	
D12SY	Loading of Endevor parameters	
D13PREP	Allocation of Endevor VSAM work file and tables	
D14EXIT	Link-edit in authorized library for Endevor	
D15MSGS	Loading of Endevor messages	
D162530	Retrieval of 2.5 files	
D99INSL	List of components' dates	INSL
	CICS complement for EXCI	
E00CSD	'Session/Connection' CSD definition	
	RACF complement	
E10RACF	BVPSECUR Link-Edit	
E11RACF	ZAP BVPSECUR	
	Installation of the Development Database	
I00CSD	CICS update: components	
I01SY	Allocation of parameter PDSs	
I02SY	Loading of parameters	
I03DEF	VSAM files definition	
I03INI	GDG definition and initialization	
I04REST	Backup of tests Database	REST
I05META	Installation of development Model and configuration management	VINS

Member	Contents	Procedure
I20GDGI	Initialization of Pac/Impact GDG	

Table of operation tests JCL

Member	Contents	Procedure
	ADMINISTRATION DATABASE PROCEDURES	
JCLARAD	Archiving of the Database journal	ARAD
JCLPAGX	Extraction of Administration Database	PAGX
JCLROAD	Reorganization of Administration Database	ROAD
JCLRSAD	Restoration of Administration Database	RSAD
JCLSVAD	Backup of Administration Database	PACG
JCLUPGP	Update of PAF batch format	UPGP
	DEVELOPMENT DATABASE PROCEDURES	
JCLACTI	Activity follow-up	ACTI
JCLARCH	Archiving of the Development Database journal	ARCH
JCLCPSN	Comparison between sub-networks	PACX
JCLCSES	Compression of session number	CSES
JCLESES	Matching session numbers	ESES
JCLEMLD	Loading of error messages related to generated applications	EMLD
JCLEMUP	Update of error messages related to generated applications	EMUP
JCLEXLI	Extraction of libraries	PACX
JCLEXPJ	Extraction of transactions from journal	PACX
JCLEXTA	Extraction of an Entity	PACX
JCLEXTR	Extraction of an Entity	PACX
JCLEXUE	Extraction of a User Entity	PACX
JCLEXPU	Extraction for purge	PACX
JCLRMEN	Extraction to move an entity to a higher library, replace, rename an entity	PACX
JCLGPMC	Generation-print (MOVE CORRESPONDING)	GPMC
JCLGPRC	Generation-print (COBOL API)	GPRC
JCLGPRP	Generation-print + PPAF	GPRP
JCLGPRT	Generation-print	GPRT

Member	Contents	Procedure
JCLGPRU	Generation-print source + loading in source library	GPRU
JCLMLIB	Library management	PACS
JCLPQCA	Quality control	PQCA
JCLPQCE	Quality control extraction	PQCE
JCLPRGS	Master outline file	PRGS
JCLREOR	Reorganization of Development Database	REOR
JCLREST	Backup of Development Database	REST
JCLRESY	Complement system backup	RESY
JCLSADM	SSADM method integrity control	SADM
JCLSASN	Backup of sub-networks	PACS
JCLSASY	Complement system backup	SASY
JCLSAVE	Backup of Development Database	PACS
JCLUPDP	Update of PAF batch format	UPDP
JCLUPDT	Batch update	UPDT
JCLUXSR	Extraction of libraries	PACS
JCLXPAF	Validation of extraction master path	XPAF
JCLXPDM	Validation of master outline	XPDM
JCLYSMC	Yourdon method integrity control	YSMC
	SCM Tools Interface module	
JCLUBPM	Generation of QJ records	UBPM
JCLARPM	Archiving of SCM journal (QJ)	ARPM
JCLCHPM	Integrity Control of Events/Elements	CHPM
JCLCPPM	Comparison with extracted files	CPPM
JCLEXPM	Extraction of Database Data	EXPM
JCLGPPM	Post-generation	GPPM
JCLHIPM	Database Automatic Freeze	HIPM
JCLSIPM	Generation simulation	SIPM
	Pactables module	
JCLGETA	Generation of tables descriptions	GETA
JCLGETD	Generation of tables descriptions	GETD
JCLGETI	Initialization of tables	GETI
	PacTransfer module	

Member	Contents	Procedure
JCLTRDU	Production of DSMS transactions	TRDU
JCLTRJC	Compression of journal file	TRJC
JCLTRPF	Generation of transfer transactions	TRPF
JCLTRRP	Extraction of journal	TRRP
JCLTRUP	Update of Pac/Transfer parameters	TRUP
JCLTRED	Printing of Pac/Transfer parameters	TRED
	PAC/IMPACT MODULE	
JCLIANA	Impact analysis	IANA
JCLIGRA	Splitting up into group areas	IGRA
JCLIMFH	Merging FH creation FR	IMFH
JCLINFP	Initialization of FP	INFP
JCLINFQ	Initialization of FQ	INFQ
JCLIPEP	Print search criteria	IPEP
JCLIPFQ	Print of FQ file	IPFQ
JCLIPIA	Print of results	IPIA
JCLISEP	Selection of input	ISEP
JCLISOS	Selection of strings, operators	ISOS
	Retrieval of former releases	
RGY250	Exchange of GY transactions from 2.n vers.	GY25
RMB250	Exchange of MB transactions from 2.n vers.	MB25
RGY300	Exchange of GY transactions to 2.n vers.	GY30
RMB300	Exchange of MB transactions to 2.n vers.	MB30
RMP250	Retrieval of passwords from 2.5 vers.	UTMP
RPC250	Retrieval of PC file from 2.n version	PC25
RPE250	Retrieval of PE file from 2.n version	PE25
RPG200	Retrieval of PG file from 2.0 version	PG20
RPG250	Retrieval of PG file from 2.5 version	PG25
RPJ250	Retrieval of PJ file from 2.n version	PJ25
RPP250	PEI retrieval from 2.n version onwards	PP25
RUV250	Retrieval of UV file from Pac/Transfer	UV25
	UTILITIES	
JCLPURGE	Purge of LB PA WS work files	
JCLSTAT	Generation statistics file on database	STAT

Member	Contents	Procedure
	'P' lines extraction with 'UNS' operator	UTU1
	'P' lines update with 'UNS' operator	UTU2
	Endevor	
	Intra-Endevor integrity validation	CEND
	Inter-environments integrity validation	CIND
	Recognition of Endevor parameters	GPND
	Retrieval of the 2.n archived journal	JJND
	Retrieval of archived journal transactions	JRND
	Generation of VA Pac transaction in QJ	MEND
	Infopac elements creation (retrieval)	RIND
	VA Pac elements creation (retrieval)	RPND
	Retrieval of 2.n Types file	RPTY
	Retrieval of user entities	RP25
	Existing data retrieval	RRND
	Loading of 'TY' types VSAM file	TYND
	VA Pacbase elements import into Endevor	UPND

Table of RPP migration JCLs

Member	Contents	Procedure
JCLMIAM	Migration help function	MIAM
JCLMIA1	Program generation without specific code	MIA1
JCLMIA2	Screen generation without specific code	MIA2
JCLMIA3	Client generation without specific code	MIA3
JCLMIA4	Server generation without specific code	MIA4
JCLMIBA	Batch migration	MIBA
JCLMIBJ	Migration from the journal	MIBJ
JCLMIBR	Batch network migration	MIBR
JCLMILA	Error messages migration	MILA
JCLMIMA	Macrostructures migration	MIMA
JCLMITH	Thesaurus migration	MITH
JCLMIUS	Users migration	MIUS
JCLMERT	Transformation of Model entities	MERT
JCLTRDQ	Conversion of DBD Blocks into SQL Blocks	TRDQ

JCL Parameters

<u>Syntax</u>

===PRM PPPP=pppp .Comments

- Parameter values which contain special characters must be entered with simple quotes.
- Comments on ===PRM lines must not exceed the column 72

  They must be preceded by a dot ('.').

Note: When the default or '<>' values are filled in, the parameter must be set.

<u>Table of parameters</u>

Parameter	Meaning	Default
	JOB lines:	
PRFJ	Jobname prefix (maximum: 5 characters)	BVPJ
CCPT	Job accounting code	<>
CLASSJ	Job execution class	1
MSGCL	JCL output class	A
INDSV	VA Pac VSAM system (maximum: 24 characters)	'EXP.BVP3V'
INDSVE	Endevor VSAM system (maximum: 24 characters)	'EXP.BVP3VE'
INDSN	VA Pac Non-VSAM system (SAM,PDS) (maximum: 24 characters)	'EXP.BVP3N'
INDSNE	Endevor Non-VSAM system (SAM,PDS) (maximum: 24 characters)	'EXP.BVP3NE'
INDUV	VSAM user (maximum: 24 characters)	'UTI.BVP3V'
INDUN	Non VSAM user (SAM) (Maximum: 24 characters)	'UTI.BVP3N'
BASE	Development Database code (it is automatically loaded in the development transaction code field)	BASE
OUT	SYSOUT print class	H
UWK	UNIT of work files used	SYSDA
UNITSN	UNIT of non-VSAM system files	SYSDA
UNITUN	UNIT of NON VSAM user files	SYSDA
VOLSN	VOL=SER of NON-VSAM files	

Parameter	Meaning	Default
VOLSV	VOL=SER of VSAM system files (6)	
VOLUN	VOL=SER of NON-VSAM user file	
VOLUV	VOL=SER of VSAM user files (6)	
VCAT	VSAM catalog of the Development Database (user files)	
SCAT	VSAM system catalog (System files)	
LSK	Skeleton language (1)	A
DSCB	DSNAME of DSCB model file used for files at generation	'BVP.DSCB'
BIBP	DSNAME of the procedure library	'SYS1.PROCLIB'
HLQ	Common prefix of elements delivered with SMP/E (maximum 30 characters)	'HLQ'
BIBT	DSNAME of sort library (SORTLIB)	'SYS1.SORTLIB'
BCOB	DSNAME of COBOL routine library	'SYS1.SCEERUN'
	Update of CICS CDS	
LDLIB	Endevor load-lib (authorized Lib.)	'NDVR.LOADLIB'
CONLIB	Endevor CONLIB	'NDVR.CONLIB'
MSGLIB	Endevor MSGLIB	'NDVR.MSGLIB'
MSGSX	Endevor messages Suffix	'50'
MSGSXH	Endevor messages Suffix, in hexa.	'F5F0'
CSDL	DFHCSDUP STEPLIB DSN	'CICS410.SDFHLOAD'
DFHCSD	CSD name for update	'BVP.DFHCSD'
DFHEXC	EXCI modules PDS (4) (5)	'BVP.DFHEXCI'
	CSD input group	
GROUE	EXCI (4)	BVPGR
GROUP	Programs	BVPGR
GROUF	Files	BVPGR
GROUT	Transactions	BVPGR
LIST	List containing CICS groups	<>
	Pactables	
TABTDF	Table description file DSN	TD300
	DSMS module (2)	
DSMS	Development Database-element file name (2)	NULLFILE
	EXCI (4)	

Parameter	Meaning	Default
EXCN	EXCI connection (4)	BVPC
EXSS	EXCI session (4)	BVPS
EXPF	Prefix of EXCI virtual terminal (4)	EX
	Transactions	
CSOC	SOCKET transaction code (3)	DBSS
CPIC	CPIC transaction code (3)	DBST

(1) A = English, F = French

(2) These files DSNs should be replaced with those installed on site only if the Tables or DSMS modules are installed or if you want to change the default name.

(3) These transaction codes are related to the use of Administrator and Developer workbench. One of them is used to access the communication monitor for a TCP-IP Sockets protocol, the other is used to access the communication monitor for a CPI-C protocol. This code must be indicated in the installation parameters of the client environment.

(4) These parameters must be replaced with those installed on site if the SCM module is used.

(5) If SCM is used, the asterisk (which indicates a comment) must be removed from the line which contains the DFHEXC parameter, in the STEPLIB of the PAC step, in the GPRC, GPRP, GPRT and GPRU procedures.

(6) Required parameter, even under SMS.

Separators of JCL Modules

Lines before and after JCL modules

```
===BEGMOD
....1     )
.....     ) Lines to be inserted before each JCL module
....n     )
===ENDMOD
....1     )
.....     ) Lines to be inserted after each JCL module
....n     )
```

Lines may be inserted as input to BVPMMJCL if the default option is not appropriate (see the installation default values presented above).

The purpose of these lines is to split the JCL file created by the BVPMMLCL utility into as many members as JCL modules.

This utility adds ....1 to ....n lines in front of each JCL module and ....1 to ....n lines to the end of each JCL module.

System Installation

CICS CSD Update

System components

D00CSD module: '$prfj.D0' job

BVP: SMP/E root, prefix of the Administration Database, batch and on-line load-modules and procedures files.

Files	Comments
BVPAE	Error messages - on-line documentation
BVPGU	User codes / keywords
BVPGN	Administration Database, index file
BVPGR	Administration Database, data file
BVPGJ	Administration Database, transaction file
BVPGY	Administration Database, bulk data
BVPGK	Work file
BVPLB	Job follow-up file
BVPPA	PAF work file
BVPQJ	SCM work file
BVPTR	A&D workbench work file
BVPWS	A&D workbench working file

Programs

BVPQnnn, BVPPnnn, BVPRnnn, BVPSnnn and a few specific programs prefixed with BVP.

Note: The 'Dynamic Backout' option (JNLSYNCWrite and RECOVery) is required for GN, GR, GJ, and GY files.

Addition of programs under CICS

It is required to add, in 'DFHRPL', the DD line of the VA Pac online programs library.

For more details on the declaration of programs, refer to the 'Efficiency enhancement' subchapter in the Appendix of this manual.

Uppercase and lowercase management

The VA Pacbase manages the input character as follows:
- All the codes entered in lowercase are automatically transformed into uppercase,
- All entity names, as well as texts, remain in lowercase. Implicit keywords drawn from entity names are changed into uppercase words.

In order to inhibit the lowercase to uppercase switch, the letter 'X' should be entered in the ACTION CODE field.

This case management is provided by the BVPUTCR program.

To work in uppercase letters only, you just have to replace the BVPUTCR program with the BVPUTCX program.

Execution JCL

```
//$PRFJ.D0 JOB ($CCPT),'SYSTEM DFHCSDUP',CLASS=$CLASSJ,
//      MSGCLASS=$MSGCL
//**********************************************************************
//* VISUALAGE PACBASE                                                 *
//*                                                                   *
//*                INSTALLATION - CICSCSD                             *
//*           CICS: CSD BATCH UPDATE SYSTEM                           *
//**********************************************************************
//DFHCSDUP EXEC PGM=DFHCSDUP
//STEPLIB  DD DSN=$CSDL,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//DFHCSD   DD DSN=$DFHCSD,DISP=SHR
//SYSIN    DD *
**********************************************************************
*                    COMMON FILES                                   *
**********************************************************************
DEFINE FILE(BVPAE) GROUP($GROUF)
DESCRIPTION(HELP FILE)
      DSNAME($INDSV..BVPAE)
      STRINGS(10)
      STATUS (ENABLED) OPENTIME(STARTUP)
      DATABUFFERS(11) INDEXBUFFERS(10)
      RECORDFORMAT(F)
      ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(NO)
      RECOVERY(BACKOUTONLY)
DEFINE FILE(BVPPA) GROUP($GROUF)
DESCRIPTION(PAF FILE)
```

```
            DSNAME($INDSV..BVPPA)
            STRINGS(10)
            STATUS (ENABLED) OPENTIME(STARTUP)
            DATABUFFERS(11) INDEXBUFFERS(10)
            RECORDFORMAT(V)
            ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
            RECOVERY(BACKOUTONLY)
DEFINE FILE(BVPGK) GROUP($GROUF)
DESCRIPTION(GENERATION RIGHTS FILE)
            DSNAME($INDSV..BVPGK)
            STRINGS(2)
            STATUS (ENABLED) OPENTIME(STARTUP)
            DATABUFFERS(3) INDEXBUFFERS(2)
            RECORDFORMAT(F)
            ADD(NO) BROWSE(YES) DELETE(NO) READ(YES) UPDATE(NO)
            RECOVERY(BACKOUTONLY)
DEFINE FILE(BVPGN) GROUP($GROUF)
DESCRIPTION(INDEX ADMINISTRATION DATABASE)
            DSNAME($INDSV..BVPGN)
            STRINGS(10)
            STATUS (ENABLED) OPENTIME(STARTUP)
            DATABUFFERS(11) INDEXBUFFERS(10)
            RECORDFORMAT(F)
            ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
            RECOVERY(BACKOUTONLY)
DEFINE FILE(BVPGR) GROUP($GROUF)
DESCRIPTION(DATA ADMINISTRATION DATABASE)
            DSNAME($INDSV..BVPGR)
            STRINGS(10)
            STATUS (ENABLED) OPENTIME(STARTUP)
            DATABUFFERS(11)
            RECORDFORMAT(V)
            ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
            RECOVERY(BACKOUTONLY)
DEFINE FILE(BVPGY) GROUP($GROUF)
DESCRIPTION(EXTEND ADMINISTRATION DATABASE)
            DSNAME($INDSV..BVPGY)
            STRINGS(10)
            STATUS (ENABLED) OPENTIME(STARTUP)
            DATABUFFERS(11)
            RECORDFORMAT(F)
            ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
            RECOVERY(BACKOUTONLY)
DEFINE FILE(BVPGJ) GROUP($GROUF)
DESCRIPTION(JOURNAL ADMINISTRATION DATABASE)
            DSNAME($INDSV..BVPGJ)
            STRINGS(10)
            STATUS (ENABLED) OPENTIME(STARTUP)
            DATABUFFERS(11)
            RECORDFORMAT(V)
            ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
            RECOVERY(BACKOUTONLY)
DEFINE FILE(BVPGU) GROUP($GROUF)
DESCRIPTION(USER ADMINISTRATION DATABASE)
            DSNAME($INDSV..BVPGU)
```

```
               STRINGS(10)
               STATUS (ENABLED) OPENTIME(STARTUP)
               DATABUFFERS(11) INDEXBUFFERS(10)
               RECORDFORMAT(V)
               ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
               RECOVERY(BACKOUTONLY)
       DEFINE FILE(BVPLB) GROUP($GROUF)
       DESCRIPTION(FILE LB)
               DSNAME($INDSV..BVPLB)
               STRINGS(10)
               STATUS (ENABLED) OPENTIME(STARTUP)
               DATABUFFERS(11) INDEXBUFFERS(10)
               RECORDFORMAT(F)
               ADD(NO) BROWSE(YES) DELETE(NO) READ(YES) UPDATE(NO)
               RECOVERY(BACKOUTONLY)
       DEFINE FILE(BVPQJ) GROUP($GROUF)
       DESCRIPTION(FILE QJ)
               DSNAME($INDSV..BVPQJ)
               STRINGS(10)
               STATUS (ENABLED) OPENTIME(STARTUP)
               DATABUFFERS(11)
               RECORDFORMAT(F)
               ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
               RECOVERY(BACKOUTONLY)
       DEFINE FILE(BVPTR) GROUP($GROUF)
       DESCRIPTION(FILE TR)
               DSNAME($INDSV..BVPTR)
               STRINGS(10)
               STATUS (ENABLED) OPENTIME(STARTUP)
               DATABUFFERS(11)
               RECORDFORMAT(F)
               ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
               RECOVERY(BACKOUTONLY)
       DEFINE FILE(BVPWS) GROUP($GROUF)
       DESCRIPTION(FILE WS)
               DSNAME($INDSV..BVPWS)
               STRINGS(10)
               STATUS (ENABLED) OPENTIME(STARTUP)
               DATABUFFERS(11) INDEXBUFFERS(10)
               RECORDFORMAT(F)
               ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
               RECOVERY(BACKOUTONLY)
       ****************************************************************
       DEFINE PROGRAM(BVPCICSE) GROUP($GROUP)
                                 EXECKEY(CICS)
       DEFINE PROGRAM(BVPCMPUF) GROUP($GROUP)
       DEFINE PROGRAM(BVPFAJO) GROUP($GROUP)
       DEFINE PROGRAM(BVPFANM) GROUP($GROUP)
       DEFINE PROGRAM(BVPFBAG) GROUP($GROUP)
       DEFINE PROGRAM(BVPFBIB) GROUP($GROUP)
       DEFINE PROGRAM(BVPFCHA) GROUP($GROUP)
       DEFINE PROGRAM(BVPFCHK) GROUP($GROUP)
       DEFINE PROGRAM(BVPFCTL) GROUP($GROUP)
       DEFINE PROGRAM(BVPFDBD) GROUP($GROUP)
       DEFINE PROGRAM(BVPFECR) GROUP($GROUP)
```

```
DEFINE PROGRAM(BVPFENU) GROUP($GROUP)
DEFINE PROGRAM(BVPFFOG) GROUP($GROUP)
DEFINE PROGRAM(BVPFIAP) GROUP($GROUP)
DEFINE PROGRAM(BVPFMCL) GROUP($GROUP)
DEFINE PROGRAM(BVPFPGM) GROUP($GROUP)
DEFINE PROGRAM(BVPFRUB) GROUP($GROUP)
DEFINE PROGRAM(BVPFRWS) GROUP($GROUP)
DEFINE PROGRAM(BVPFSDO) GROUP($GROUP)
DEFINE PROGRAM(BVPFTER) GROUP($GROUP)
DEFINE PROGRAM(BVPFTRA) GROUP($GROUP)
DEFINE PROGRAM(BVPFTXT) GROUP($GROUP)
DEFINE PROGRAM(BVPFVER) GROUP($GROUP)
DEFINE PROGRAM(BVPF000) GROUP($GROUP)
DEFINE PROGRAM(BVPQA00) GROUP($GROUP)
DEFINE PROGRAM(BVPQB00) GROUP($GROUP)
DEFINE PROGRAM(BVPQC00) GROUP($GROUP)
DEFINE PROGRAM(BVPQC01) GROUP($GROUP)
DEFINE PROGRAM(BVPQC50) GROUP($GROUP)
DEFINE PROGRAM(BVPQD00) GROUP($GROUP)
DEFINE PROGRAM(BVPQE00) GROUP($GROUP)
DEFINE PROGRAM(BVPQF00) GROUP($GROUP)
DEFINE PROGRAM(BVPQF10) GROUP($GROUP)
DEFINE PROGRAM(BVPQG00) GROUP($GROUP)
DEFINE PROGRAM(BVPQH00) GROUP($GROUP)
DEFINE PROGRAM(BVPQH01) GROUP($GROUP)
DEFINE PROGRAM(BVPQH20) GROUP($GROUP)
DEFINE PROGRAM(BVPQH30) GROUP($GROUP)
DEFINE PROGRAM(BVPQI00) GROUP($GROUP)
DEFINE PROGRAM(BVPQI01) GROUP($GROUP)
DEFINE PROGRAM(BVPQI02) GROUP($GROUP)
DEFINE PROGRAM(BVPQI03) GROUP($GROUP)
DEFINE PROGRAM(BVPQI04) GROUP($GROUP)
DEFINE PROGRAM(BVPQI05) GROUP($GROUP)
DEFINE PROGRAM(BVPQI20) GROUP($GROUP)
DEFINE PROGRAM(BVPQI21) GROUP($GROUP)
DEFINE PROGRAM(BVPQI50) GROUP($GROUP)
DEFINE PROGRAM(BVPQK10) GROUP($GROUP)
DEFINE PROGRAM(BVPQK20) GROUP($GROUP)
DEFINE PROGRAM(BVPQK30) GROUP($GROUP)
DEFINE PROGRAM(BVPQL10) GROUP($GROUP)
DEFINE PROGRAM(BVPQL20) GROUP($GROUP)
DEFINE PROGRAM(BVPQL21) GROUP($GROUP)
DEFINE PROGRAM(BVPQL30) GROUP($GROUP)
DEFINE PROGRAM(BVPQL40) GROUP($GROUP)
DEFINE PROGRAM(BVPQL41) GROUP($GROUP)
DEFINE PROGRAM(BVPQL45) GROUP($GROUP)
DEFINE PROGRAM(BVPQL46) GROUP($GROUP)
DEFINE PROGRAM(BVPQM00) GROUP($GROUP)
DEFINE PROGRAM(BVPQP00) GROUP($GROUP)
DEFINE PROGRAM(BVPQP01) GROUP($GROUP)
DEFINE PROGRAM(BVPQP02) GROUP($GROUP)
DEFINE PROGRAM(BVPQP03) GROUP($GROUP)
DEFINE PROGRAM(BVPQP04) GROUP($GROUP)
DEFINE PROGRAM(BVPQP05) GROUP($GROUP)
DEFINE PROGRAM(BVPQP06) GROUP($GROUP)
```

```
DEFINE PROGRAM(BVPQP07) GROUP($GROUP)
DEFINE PROGRAM(BVPQP08) GROUP($GROUP)
DEFINE PROGRAM(BVPQP50) GROUP($GROUP)
DEFINE PROGRAM(BVPQQR0) GROUP($GROUP)
DEFINE PROGRAM(BVPQR00) GROUP($GROUP)
DEFINE PROGRAM(BVPQS02) GROUP($GROUP)
DEFINE PROGRAM(BVPQS03) GROUP($GROUP)
DEFINE PROGRAM(BVPQS04) GROUP($GROUP)
DEFINE PROGRAM(BVPQS05) GROUP($GROUP)
DEFINE PROGRAM(BVPQS06) GROUP($GROUP)
DEFINE PROGRAM(BVPQS07) GROUP($GROUP)
DEFINE PROGRAM(BVPQT00) GROUP($GROUP)
DEFINE PROGRAM(BVPQT10) GROUP($GROUP)
DEFINE PROGRAM(BVPQT20) GROUP($GROUP)
DEFINE PROGRAM(BVPQT50) GROUP($GROUP)
DEFINE PROGRAM(BVPQU10) GROUP($GROUP)
DEFINE PROGRAM(BVPQU20) GROUP($GROUP)
DEFINE PROGRAM(BVPQV10) GROUP($GROUP)
DEFINE PROGRAM(BVPQV20) GROUP($GROUP)
DEFINE PROGRAM(BVPQV30) GROUP($GROUP)
DEFINE PROGRAM(BVPQX00) GROUP($GROUP)
DEFINE PROGRAM(BVPQX01) GROUP($GROUP)
DEFINE PROGRAM(BVPQY01) GROUP($GROUP)
DEFINE PROGRAM(BVPQY02) GROUP($GROUP)
DEFINE PROGRAM(BVPQY03) GROUP($GROUP)
DEFINE PROGRAM(BVPQY04) GROUP($GROUP)
DEFINE PROGRAM(BVPQY05) GROUP($GROUP)
DEFINE PROGRAM(BVPQY10) GROUP($GROUP)
DEFINE PROGRAM(BVPQY11) GROUP($GROUP)
DEFINE PROGRAM(BVPQY20) GROUP($GROUP)
DEFINE PROGRAM(BVPQY30) GROUP($GROUP)
DEFINE PROGRAM(BVPQY33) GROUP($GROUP)
DEFINE PROGRAM(BVPQZ00) GROUP($GROUP)
DEFINE PROGRAM(BVPQ000) GROUP($GROUP)
DEFINE PROGRAM(BVPQ100) GROUP($GROUP)
DEFINE PROGRAM(BVPQ200) GROUP($GROUP)
DEFINE PROGRAM(BVPQ210) GROUP($GROUP)
DEFINE PROGRAM(BVPQ300) GROUP($GROUP)
DEFINE PROGRAM(BVPQ400) GROUP($GROUP)
DEFINE PROGRAM(BVPQ500) GROUP($GROUP)
DEFINE PROGRAM(BVPQ600) GROUP($GROUP)
DEFINE PROGRAM(BVPQ700) GROUP($GROUP)
DEFINE PROGRAM(BVPQ800) GROUP($GROUP)
DEFINE PROGRAM(BVPQ900) GROUP($GROUP)
DEFINE PROGRAM(BVPRACF) GROUP($GROUP)
DEFINE PROGRAM(BVPRADM) GROUP($GROUP)
DEFINE PROGRAM(BVPRBAS) GROUP($GROUP)
DEFINE PROGRAM(BVPRCE00) GROUP($GROUP)
DEFINE PROGRAM(BVPRCS00) GROUP($GROUP)
DEFINE PROGRAM(BVPRC100) GROUP($GROUP)
DEFINE PROGRAM(BVPRDOC) GROUP($GROUP)
DEFINE PROGRAM(BVPRDO00) GROUP($GROUP)
DEFINE PROGRAM(BVPRENU) GROUP($GROUP)
DEFINE PROGRAM(BVPRIT00) GROUP($GROUP)
DEFINE PROGRAM(BVPRKEY) GROUP($GROUP)
```

```
DEFINE PROGRAM(BVPRLGF) GROUP($GROUP)
DEFINE PROGRAM(BVPRLGS) GROUP($GROUP)
DEFINE PROGRAM(BVPRLIC) GROUP($GROUP)
DEFINE PROGRAM(BVPRMC00) GROUP($GROUP)
DEFINE PROGRAM(BVPRMS00) GROUP($GROUP)
DEFINE PROGRAM(BVPROP00) GROUP($GROUP)
DEFINE PROGRAM(BVPRPAR) GROUP($GROUP)
DEFINE PROGRAM(BVPRPRC) GROUP($GROUP)
DEFINE PROGRAM(BVPRPVP) GROUP($GROUP)
DEFINE PROGRAM(BVPRSEC) GROUP($GROUP)
DEFINE PROGRAM(BVPRS12) GROUP($GROUP)
DEFINE PROGRAM(BVPRTRF) GROUP($GROUP)
DEFINE PROGRAM(BVPRUSE) GROUP($GROUP)
DEFINE PROGRAM(BVPRVL00) GROUP($GROUP)
DEFINE PROGRAM(BVPRXX00) GROUP($GROUP)
DEFINE PROGRAM(BVPRWB00) GROUP($GROUP)
DEFINE PROGRAM(BVPR000) GROUP($GROUP)
DEFINE PROGRAM(BVPR005) GROUP($GROUP)
DEFINE PROGRAM(BVPR100) GROUP($GROUP)
DEFINE PROGRAM(BVPR200) GROUP($GROUP)
DEFINE PROGRAM(BVPR400) GROUP($GROUP)
DEFINE PROGRAM(BVPR500) GROUP($GROUP)
DEFINE PROGRAM(BVPR600) GROUP($GROUP)
DEFINE PROGRAM(BVPR980) GROUP($GROUP)
                       RESIDENT(YES)
DEFINE PROGRAM(BVPR990) GROUP($GROUP)
                       RESIDENT(YES)
DEFINE PROGRAM(BVPSA00) GROUP($GROUP)
DEFINE PROGRAM(BVPSB00) GROUP($GROUP)
DEFINE PROGRAM(BVPSB02) GROUP($GROUP)
DEFINE PROGRAM(BVPSB10) GROUP($GROUP)
DEFINE PROGRAM(BVPSB30) GROUP($GROUP)
DEFINE PROGRAM(BVPSCPI) GROUP($GROUP)
DEFINE PROGRAM(BVPSC00) GROUP($GROUP)
DEFINE PROGRAM(BVPSC10) GROUP($GROUP)
DEFINE PROGRAM(BVPSD00) GROUP($GROUP)
DEFINE PROGRAM(BVPSD05) GROUP($GROUP)
DEFINE PROGRAM(BVPSD07) GROUP($GROUP)
DEFINE PROGRAM(BVPSD10) GROUP($GROUP)
DEFINE PROGRAM(BVPSD15) GROUP($GROUP)
DEFINE PROGRAM(BVPSD16) GROUP($GROUP)
DEFINE PROGRAM(BVPSD17) GROUP($GROUP)
DEFINE PROGRAM(BVPSD20) GROUP($GROUP)
DEFINE PROGRAM(BVPSD25) GROUP($GROUP)
DEFINE PROGRAM(BVPSECT) GROUP($GROUP)
DEFINE PROGRAM(BVPSERR) GROUP($GROUP)
DEFINE PROGRAM(BVPSE00) GROUP($GROUP)
DEFINE PROGRAM(BVPSE10) GROUP($GROUP)
DEFINE PROGRAM(BVPSE20) GROUP($GROUP)
DEFINE PROGRAM(BVPSE30) GROUP($GROUP)
DEFINE PROGRAM(BVPSFA0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFB0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFC0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFD0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFE0) GROUP($GROUP)
```

```
DEFINE PROGRAM(BVPSFF0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFH0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFIN) GROUP($GROUP)
DEFINE PROGRAM(BVPSFI0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFJ0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFK0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFL0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFO0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFP0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFQ0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFR0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFS0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFT0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFV0) GROUP($GROUP)
DEFINE PROGRAM(BVPSFX0) GROUP($GROUP)
DEFINE PROGRAM(BVPSF00) GROUP($GROUP)
DEFINE PROGRAM(BVPSF05) GROUP($GROUP)
DEFINE PROGRAM(BVPSF07) GROUP($GROUP)
DEFINE PROGRAM(BVPSF10) GROUP($GROUP)
DEFINE PROGRAM(BVPSF20) GROUP($GROUP)
DEFINE PROGRAM(BVPSH00) GROUP($GROUP)
DEFINE PROGRAM(BVPSH02) GROUP($GROUP)
DEFINE PROGRAM(BVPSH04) GROUP($GROUP)
DEFINE PROGRAM(BVPSH10) GROUP($GROUP)
DEFINE PROGRAM(BVPSH20) GROUP($GROUP)
DEFINE PROGRAM(BVPSH30) GROUP($GROUP)
DEFINE PROGRAM(BVPSH40) GROUP($GROUP)
DEFINE PROGRAM(BVPSH42) GROUP($GROUP)
DEFINE PROGRAM(BVPSH44) GROUP($GROUP)
DEFINE PROGRAM(BVPSI00) GROUP($GROUP)
DEFINE PROGRAM(BVPSI10) GROUP($GROUP)
DEFINE PROGRAM(BVPSI20) GROUP($GROUP)
DEFINE PROGRAM(BVPSI30) GROUP($GROUP)
DEFINE PROGRAM(BVPSJ00) GROUP($GROUP)
DEFINE PROGRAM(BVPSK00) GROUP($GROUP)
DEFINE PROGRAM(BVPSL00) GROUP($GROUP)
DEFINE PROGRAM(BVPSO00) GROUP($GROUP)
DEFINE PROGRAM(BVPSO02) GROUP($GROUP)
DEFINE PROGRAM(BVPSO03) GROUP($GROUP)
DEFINE PROGRAM(BVPSO04) GROUP($GROUP)
DEFINE PROGRAM(BVPSO05) GROUP($GROUP)
DEFINE PROGRAM(BVPSO10) GROUP($GROUP)
DEFINE PROGRAM(BVPSO12) GROUP($GROUP)
DEFINE PROGRAM(BVPSO37) GROUP($GROUP)
DEFINE PROGRAM(BVPSO38) GROUP($GROUP)
DEFINE PROGRAM(BVPSO80) GROUP($GROUP)
DEFINE PROGRAM(BVPSP00) GROUP($GROUP)
DEFINE PROGRAM(BVPSP10) GROUP($GROUP)
DEFINE PROGRAM(BVPSP20) GROUP($GROUP)
DEFINE PROGRAM(BVPSP30) GROUP($GROUP)
DEFINE PROGRAM(BVPSP40) GROUP($GROUP)
DEFINE PROGRAM(BVPSP50) GROUP($GROUP)
DEFINE PROGRAM(BVPSP60) GROUP($GROUP)
DEFINE PROGRAM(BVPSP70) GROUP($GROUP)
DEFINE PROGRAM(BVPSP80) GROUP($GROUP)
```

```
DEFINE PROGRAM(BVPSQ00) GROUP($GROUP)
DEFINE PROGRAM(BVPSQ05) GROUP($GROUP)
DEFINE PROGRAM(BVPSQ07) GROUP($GROUP)
DEFINE PROGRAM(BVPSR00) GROUP($GROUP)
DEFINE PROGRAM(BVPSR10) GROUP($GROUP)
DEFINE PROGRAM(BVPSR20) GROUP($GROUP)
DEFINE PROGRAM(BVPSR30) GROUP($GROUP)
DEFINE PROGRAM(BVPSR40) GROUP($GROUP)
DEFINE PROGRAM(BVPSR50) GROUP($GROUP)
DEFINE PROGRAM(BVPSSOC) GROUP($GROUP)
DEFINE PROGRAM(BVPSS00) GROUP($GROUP)
DEFINE PROGRAM(BVPSS1B) GROUP($GROUP)
DEFINE PROGRAM(BVPSS1C) GROUP($GROUP)
DEFINE PROGRAM(BVPSS10) GROUP($GROUP)
DEFINE PROGRAM(BVPSS20) GROUP($GROUP)
DEFINE PROGRAM(BVPSS30) GROUP($GROUP)
DEFINE PROGRAM(BVPSS40) GROUP($GROUP)
DEFINE PROGRAM(BVPSS50) GROUP($GROUP)
DEFINE PROGRAM(BVPST00) GROUP($GROUP)
DEFINE PROGRAM(BVPST10) GROUP($GROUP)
DEFINE PROGRAM(BVPST20) GROUP($GROUP)
DEFINE PROGRAM(BVPST30) GROUP($GROUP)
DEFINE PROGRAM(BVPSV00) GROUP($GROUP)
DEFINE PROGRAM(BVPSV10) GROUP($GROUP)
DEFINE PROGRAM(BVPSV20) GROUP($GROUP)
DEFINE PROGRAM(BVPSV30) GROUP($GROUP)
DEFINE PROGRAM(BVPSX00) GROUP($GROUP)
DEFINE PROGRAM(BVPSX10) GROUP($GROUP)
DEFINE PROGRAM(BVPSY00) GROUP($GROUP)
DEFINE PROGRAM(BVPSY05) GROUP($GROUP)
DEFINE PROGRAM(BVPSY07) GROUP($GROUP)
DEFINE PROGRAM(BVPSY10) GROUP($GROUP)
DEFINE PROGRAM(BVPSY20) GROUP($GROUP)
DEFINE PROGRAM(BVPSY30) GROUP($GROUP)
DEFINE PROGRAM(BVPSY40) GROUP($GROUP)
DEFINE PROGRAM(BVPSY50) GROUP($GROUP)
DEFINE PROGRAM(BVPTPST) GROUP($GROUP)
DEFINE PROGRAM(BVPTPWS) GROUP($GROUP)
DEFINE PROGRAM(BVPUCTR) GROUP($GROUP)
                    RESIDENT(YES)
DEFINE PROGRAM(BVPTUPUF) GROUP($GROUP)
DEFINE PROGRAM(BVPUCTX) GROUP($GROUP)
DEFINE PROGRAM(BVPUFAA) GROUP($GROUP)
DEFINE PROGRAM(BVPUFB1) GROUP($GROUP)
DEFINE PROGRAM(BVPUFB2) GROUP($GROUP)
DEFINE PROGRAM(BVPUFE2) GROUP($GROUP)
****************************************************************
DEFINE TRANSACTION($CSOC) GROUP($GROUT)
DESCRIPTION(SOCKET TRANSACTION CODE) PROGRAM(BVPSSOC)
DEFINE TRANSACTION($CPIC) GROUP($GROUT)
DESCRIPTION(CPIC TRANSACTION CODE) PROGRAM(BVPSCPI)
****************************************************************
```

```
       ADD GROUP($GROUF) LIST($LIST)
       ADD GROUP($GROUP) LIST($LIST)
       ADD GROUP($GROUT) LIST($LIST)
       //
```

Allocation and Loading of System Parameters

D01ALLOC module: '$prfj.D1' job

Allocation of file: $INDSN..BVPSY

Step	Program	Comments
STEP1	IDCAMS	DELETE of files
STEP2	IEFBR14	allocation of files

Execution JCL

```
//$PRFJ.D1   JOB ($CCPT),'PAC D01ALLOC',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//********************************************************************
//* VISUALAGE PACBASE                                               *
//*                                                                 *
//*              INSTALLATION - D01ALLOC                            *
//* INITIAL ALLOCATION OF THE PARAMETER PDS AND ADDITIONAL FILES    *
//*     .STEP1 : LISTCAT                                            *
//*     .STEP2 : ALLOCATION                                         *
//********************************************************************
//*
//STEP1    EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
  LISTC ENT($INDSN..BVPSY)
/*
//STEP2  EXEC PGM=IEFBR14,COND=(0,EQ,STEP1)
//SY       DD DSN=$INDSN..BVPSY,DISP=(,CATLG,DELETE),
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//         VOL=SER=$VOLSN,
//         UNIT=$UNITSN,
//         SPACE=(6080,(50,,5))
//
```

D02CPAR module: '$prfj.D2C' job

Loading of $INDSN..BVPSY file

Step	Program	Comments
STEP1	IEBUPDTE	Loading of PDS members

Caution

Replace all :/ with ./ before submitting the job.

Execution JCL

```
===FRM TYPE=DATA
//$PRFJ.D2C  JOB ($CCPT),'PAC D02CPAR',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//********************************************************************
//* VISUALAGE PACBASE                                               *
//*                                                                 *
//*              INSTALLATION - D02CPAR                             *
//*    LOADS PDS OF COMMON PARAMETERS                               *
//*      .STEP1 : LOADING COMMON PARAMETERS                         *
//*  ->NOTE:                                                        *
//*    REPLACE :/ BY ./ BEFORE SUBMITTING THE JOB                   *
//********************************************************************
//*
//STEP1  EXEC PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD SYSOUT=$OUT
//SYSUT2   DD DSN=$INDSN..BVPSY,DISP=SHR
//SYSIN    DD DATA,DLM='PP'
:/     ADD NAME=SRTRE01
 SORT FIELDS=(1,25,A,48,4,A,32,7,A,39,1,D,54,7,A,26,1,D),FORMAT=BI
:/     ADD NAME=SRTRE02
 SORT FIELDS=(1,60,A),FORMAT=BI
:/     ADD NAME=SRTPC25
 SORT FIELDS=(42,8,A),FORMAT=BI
:/     ADD NAME=DFBVPAE
 DELETE ($INDSV..BVPAE) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME ($INDSV..BVPAE)           -
                  SHR (2,3) RUS   KEYS (12,0)     -
                  VOL ($VOLSV)                    -
                  CYL (45)                        -
                  RECSZ (80 80) )                 -
        INDEX   ( NAME ($INDSV..BVPAE.I)          -
                  CISZ (4096) )                   -
        DATA    ( NAME ($INDSV..BVPAE.D)          -
                  FSPC (2,1)                      -
        CISZ (4096) )   /*: CATALOG ($SCAT) */
:/     ADD NAME=DFBVPGN
 DELETE ($INDSV..BVPGN) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME ($INDSV..BVPGN)           -
                  SHR (2) RUS   KEYS (49,0)       -
                  VOL ($VOLSV)                    -
                  CYL (4 1)                       -
                  RECSZ (59,59) )                 -
        INDEX   ( NAME ($INDSV..BVPGN.I)          -
                  CISZ (4096) )                   -
        DATA    ( NAME ($INDSV..BVPGN.D)          -
                  FSPC (10,5)                     -
```

```
                CISZ (4096) )          /*: CATALOG ($VCAT) */
:/     ADD NAME=DFBVPGR
 DELETE ($INDSV..BVPGR) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME ($INDSV..BVPGR)           -
                  SHR (2) RUS   NUMBERED          -
                  VOL ($VOLSV)                    -
                  CYL (4 1)                       -
                  RECSZ (144,144)  )              -
       DATA   ( NAME ($INDSV..BVPGR.D)            -
       CISZ (4096) )          /*: CATALOG ($VCAT) */
:/     ADD NAME=DFBVPGY
 DELETE ($INDSV..BVPGY) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME ($INDSV..BVPGY)           -
                  SHR (2) RUS   NUMBERED          -
                  VOL ($VOLSV)                    -
                  CYL (4 1)                       -
                  RECSZ (1018,1018)  )            -
       DATA   ( NAME ($INDSV..BVPGY.D)            -
       CISZ (4096) )          /*: CATALOG ($VCAT) */
:/     ADD NAME=DFBVPGJ
 DELETE ($INDSV..BVPGJ) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME ($INDSV..BVPGJ)           -
                  SHR (2) RUS   NUMBERED          -
                  VOL ($VOLSV)                    -
                  CYL (1 1)                       -
                  RECSZ (170,170)  )              -
       DATA   ( NAME ($INDSV..BVPGJ.D)            -
       CISZ (4096) )          /*: CATALOG ($VCAT) */
:/     ADD NAME=DFBVPGU
 DELETE ($INDSV..BVPGU) CLUSTER
   DEFINE CLUSTER ( NAME ($INDSV..BVPGU)         -
                  SHR (2,3) RUS   KEYS (8,0)      -
                  VOL ($VOLSV)                    -
                  CYL (4 1)                       -
                  RECSZ (80,80) )                 -
       INDEX  ( NAME ($INDSV..BVPGU.I)            -
                CISZ (4096) )                     -
       DATA   ( NAME ($INDSV..BVPGU.D)            -
                FSPC (2,1)                        -
       CISZ (4096) )          /*: CATALOG ($VCAT) */
:/     ADD NAME=DFBVPQJ
 DELETE ($INDSV..BVPQJ) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME ($INDSV..BVPQJ)           -
                  SHR (3 3)   RUS   NUMBERED      -
                  VOL ($VOLSV)                    -
                  CYL (4 1)                       -
                  RECSZ (1105,1105) )               -
```

```
                     DATA    ( NAME ($INDSV..BVPQJ.D)       -
                       CISZ (4096) )        /*: CATALOG ($VCAT) */
:/      ADD NAME=DFBVPSC
 DELETE ($INDSV..BVPSC) CLUSTER
   DEFINE CLUSTER ( NAME ($INDSV..BVPSC)       -
                       SHR (2,3) RUS    KEY (4 0)        -
                       VOL ($VOLSV)                      -
                       RECSZ (3204,3204) )              -
          INDEX   ( NAME ($INDSV..BVPSC.I)       -
                       CISZ (4096) )                     -
          DATA    ( NAME ($INDSV..BVPSC.D)       -
                       FSPC (10,5) SPEED  TRK (5)        -
          CISZ (3584) )   /*: CATALOG ($SCAT) */
:/      ADD NAME=DFBVPSA
 DELETE ($INDSV..BVPSA) CLUSTER
   DEFINE CLUSTER ( NAME ($INDSV..BVPSA)       -
                       SHR (2,3) RUS    KEY (5 0)        -
                       VOL ($VOLSV)                      -
                       RECSZ (4605,4605) )              -
          INDEX   ( NAME ($INDSV..BVPSA.I)       -
                       CISZ (4096) )                     -
          DATA    ( NAME ($INDSV..BVPSA.D)       -
                       FSPC (10,5) SPEED  CYL (4 1)      -
          CISZ (5120) )   /*: CATALOG ($SCAT) */
:/      ADD NAME=DFBVPSG
 DELETE ($INDSV..BVPSG) CLUSTER
   DEFINE CLUSTER ( NAME ($INDSV..BVPSG)       -
                       SHR (2,3) RUS    KEY (5 0)        -
                       VOL ($VOLSV)                      -
                       RECSZ (4605,4605) )              -
          INDEX   ( NAME ($INDSV..BVPSG.I)       -
                       CISZ (4096) )                     -
          DATA    ( NAME ($INDSV..BVPSG.D)       -
                       FSPC (10,5) SPEED  CYL (4 1)      -
          CISZ (5120) )   /*: CATALOG ($SCAT) */
:/      ADD NAME=DFBVPSN
 DELETE ($INDSV..BVPSN) CLUSTER
   DEFINE CLUSTER ( NAME ($INDSV..BVPSN)       -
                       SHR (2,3) RUS    KEY (5 0)        -
                       VOL ($VOLSV)                      -
                       RECSZ (4605,4605) )              -
          INDEX   ( NAME ($INDSV..BVPSN.I)       -
                       CISZ (4096) )                     -
          DATA    ( NAME ($INDSV..BVPSN.D)       -
                       FSPC (10,5) SPEED  CYL (5 1)      -
          CISZ (5120) )   /*: CATALOG ($SCAT) */
:/      ADD NAME=DFBVPSR
 DELETE ($INDSV..BVPSR) CLUSTER
   DEFINE CLUSTER ( NAME ($INDSV..BVPSR)       -
                       SHR (2,3) RUS    KEY (5 0)        -
                       VOL ($VOLSV)                      -
                       RECSZ (4605,4605) )              -
          INDEX   ( NAME ($INDSV..BVPSR.I)       -
                       CISZ (4096) )                     -
          DATA    ( NAME ($INDSV..BVPSR.D)       -
```

```
                                FSPC (10,5) SPEED  TRK (5)      -
                   CISZ (5120) )   /*: CATALOG ($SCAT) */
      :/     ADD NAME=DFBVPSP
       DELETE ($INDSV..BVPSP) CLUSTER
         DEFINE CLUSTER ( NAME ($INDSV..BVPSP)         -
                          SHR (2,3) RUS   KEY (5 0)    -
                          VOL ($VOLSV)                 -
                          RECSZ (4605,4605) )          -
               INDEX   ( NAME ($INDSV..BVPSP.I)        -
                          CISZ (4096) )                -
               DATA    ( NAME ($INDSV..BVPSP.D)        -
                          FSPC (10,5) SPEED  TRK (3 1) -
               CISZ (5120) )   /*: CATALOG ($SCAT) */
      :/     ADD NAME=DFBVPGS
       DELETE ($INDSV..BVPGS) CLUSTER
       DEFINE CLUSTER ( NAME ($INDSV..BVPGS)           -
                          SHR (2) RUS   KEYS (25,0)     -
                          VOL ($VOLSV)                 -
                          CYL (1 1)                    -
                          RECSZ (214,214) )            -
               INDEX   ( NAME ($INDSV..BVPGS.I)        -
                          CISZ (4096) )                -
               DATA    ( NAME ($INDSV..BVPGS.D)        -
                          FSPC (10,5)                  -
               CISZ (4096) )           /*: CATALOG ($VCAT) */
      :/     ADD NAME=DFBVPSS
       DELETE ($INDSV..BVPSS) CLUSTER
         DEFINE CLUSTER ( NAME ($INDSV..BVPSS)         -
                          SHR (2,3) RUS   KEY (5 0)    -
                          VOL ($VOLSV)                 -
                          RECSZ (4605,4605) )          -
               INDEX   ( NAME ($INDSV..BVPSS.I)        -
                          CISZ (4096) )                -
               DATA    ( NAME ($INDSV..BVPSS.D)        -
                          FSPC (10,5) SPEED  CYL (5 1) -
               CISZ (5120) )   /*: CATALOG ($SCAT) */
      :/     ADD NAME=DFBVPGK
       DELETE ($INDSV..BVPGK) CLUSTER
         DEFINE CLUSTER ( NAME ($INDSV..BVPGK)         -
                          SHR (4) RUS     KEY (29 0)   -
                          VOL ($VOLSV)                 -
                          CYL (4 1)                    -
                          RECSZ (80,80) )              -
               INDEX   ( NAME ($INDSV..BVPGK.I)        -
                          CISZ (4096) )                -
               DATA    ( NAME ($INDSV..BVPGK.D)        -
                          FSPC (10,5)                  -
               CISZ (4096) )   /*: CATALOG ($SCAT) */
      :/     ADD NAME=DFTABTDF
       DELETE ($TABTDF) CLUSTER
       DEFINE CLUSTER ( NAME ($TABTDF)                 -
                          SHR (2 3) RUS   KEYS (21,0)   -
                          VOL ($VOLUV)                 -
                          CYL (1 1)                    -
                          RECSZ (240,240) )            -
```

```
              INDEX   ( NAME ($TABTDF..I)            -
                        CISZ (4096) )               -
              DATA    ( NAME ($TABTDF..D)            -
                        FSPC (10,5)                 -
         CISZ (2048) )        /*: CATALOG ($VCAT) */
:/     ADD NAME=DFDSMSDC
 LISTCAT ENTRIES ($DSMS) CLUSTER
 IF LASTCC NE 0 THEN DO
 DELETE ($DSMS) CLUSTER
 DEFINE CLUSTER ( NAME ($DSMS)                       -
                  SHR (2,3) REUSE  KEYS (31,2)       -
                  VOL ($VOLUV)                       -
                  CYL (1 1)                          -
                  RECSZ (50,168) )                   -
         INDEX   ( NAME ($DSMS..I)                   -
                   CISZ (4096) )                     -
         DATA    ( NAME ($DSMS..D)                   -
                   FSPC (10,5)                       -
         CISZ (4096) )          /*: CATALOG ($VCAT) */
 END
:/     ADD NAME=DFBVPLB
 DELETE ($INDSV..BVPLB) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME ($INDSV..BVPLB)              -
                  SHR (4)    RUS   KEYS (23,0)       -
                  VOL ($VOLSV)                       -
                  CYL (2 1)                          -
                  RECSZ (117,117) )                  -
         INDEX   ( NAME ($INDSV..BVPLB.I)            -
                   CISZ (4096) )                     -
         DATA    ( NAME ($INDSV..BVPLB.D)            -
                   FSPC (20,10)                      -
         CISZ (4096) )          /*: CATALOG ($VCAT) */
:/     ADD NAME=DFBVPPA
 DELETE ($INDSV..BVPPA) CLUSTER
 DEFINE CLUSTER ( NAME ($INDSV..BVPPA)              -
                  SHR (2 3) RUS   KEYS (37 2)        -
                  VOL ($VOLSV)                       -
                  CYL (5 1)                          -
                  RECSZ (200 1161) )                 -
         INDEX   ( NAME ($INDSV..BVPPA.I)            -
                   CISZ (4096) )                     -
         DATA    ( NAME ($INDSV..BVPPA.D)            -
                   FSPC (10 5) SPEED                 -
         CISZ (16384) )         /*: CATALOG ($SCAT) */
:/     ADD NAME=DFBVPTR
 DELETE ($INDSV..BVPTR) CLUSTER
 DEFINE CLUSTER ( NAME ($INDSV..BVPTR)              -
                  SHR (2 3)  RUS   NUMBERED          -
                  VOL ($VOLSV)                       -
                  CYL (1 1)                          -
                  RECSZ (4000 4000) )                -
         DATA    ( NAME ($INDSV..BVPTR.D)            -
                   FSPC (10 5) SPEED                 -
```

```
               CISZ (4096) )       /*: CATALOG ($SCAT) */
:/      ADD NAME=DFBVPWS
 DELETE ($INDSV..BVPWS) CLUSTER
 DEFINE CLUSTER ( NAME ($INDSV..BVPWS)          -
                  SHR (2 3) RUS  KEYS (37 0)     -
                  VOL ($VOLSV)                   -
                  CYL (150 5)                    -
                  RECSZ (1537 1537) )            -
        INDEX   ( NAME ($INDSV..BVPWS.I)         -
                  CISZ (4096) )                  -
        DATA    ( NAME ($INDSV..BVPWS.D)         -
                  FSPC (10 5) SPEED              -
        CISZ (4096) )       /*: CATALOG ($SCAT) */
:/      ADD NAME=DFSYSPAF
 DELETE (&USES.SYSPAF.&USER) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME (&USES.SYSPAF.&USER)     -
                  SHR (2 3)  RUS  KEYS(12 0)     -
                  VOL ($VOLUV)                   -
                  CYL (5 1)                      -
                  RECSZ (170 1031) )             -
        INDEX   ( NAME (&USES.SYSPAF.&USER.I)    -
                  CISZ (4096) )                  -
        DATA    ( NAME (&USES.SYSPAF.&USER.D)    -
                  FSPC (10 5) SPEED              -
        CISZ (4096) )       /*: CATALOG ($VCAT) */
:/      ADD NAME=DFSYSEXT
 DELETE (&USES.SYSEXT.&USER) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME (&USES.SYSEXT.&USER)     -
                  SHR (2 3)  RUS  KEYS(43 0)     -
                  VOL ($VOLUV)                   -
                  CYL (5 1)                      -
                  RECSZ (254 254) )              -
        INDEX   ( NAME (&USES.SYSEXT.&USER.I)    -
                  CISZ (4096) )                  -
        DATA    ( NAME (&USES.SYSEXT.&USER.D)    -
                  FSPC (10 5) SPEED              -
        CISZ (4096) )       /*: CATALOG ($VCAT) */
:/      ADD NAME=DFSYSEX2
 DELETE (&USES.SYSEX2.&USER) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME (&USES.SYSEX2.&USER)     -
                  SHR (2 3)  RUS  KEYS(43 0)     -
                  VOL ($VOLSV)                   -
                  CYL (5 1)                      -
                  RECSZ (254 254) )              -
        INDEX   ( NAME (&USES.SYSEX2.&USER.I)    -
                  CISZ (4096) )                  -
        DATA    ( NAME (&USES.SYSEX2.&USER.D)    -
                  FSPC (10 5) SPEED              -
        CISZ (4096) )       /*: CATALOG ($VCAT) */
```

```
:/     ADD NAME=DLSYSEX2
DELETE (&USES.SYSEX2.&USER) CLUSTER
:/     ADD NAME=DFMIBXNO
DELETE (&USES.MIBXNO.&USER) CLUSTER
SET LASTCC = 0
SET MAXCC = 0
DEFINE CLUSTER ( NAME (&USES.MIBXNO.&USER)          -
                 SHR (2 3)  RUS  KEYS(36 0)          -
                 VOL ($VOLSV)                        -
                 CYL (5 1)                           -
                 RECSZ (80 80) )                     -
        INDEX   ( NAME (&USES.MIBXNO.&USER.I)        -
                 CISZ (4096) )                       -
        DATA    ( NAME (&USES.MIBXNO.&USER.D)        -
                 FSPC (10 5) SPEED                   -
        CISZ (4096) )          /*: CATALOG ($VCAT) */
:/     ADD NAME=DLMIBXNO
DELETE (&USES.MIBXNO.&USER) CLUSTER
:/     ADD NAME=DFMIAMNR
DELETE (&USES.MIAMNR.&USER) CLUSTER
SET LASTCC = 0
SET MAXCC = 0
DEFINE CLUSTER ( NAME (&USES.MIAMNR.&USER)          -
                 SHR (2 3)  RUS  KEYS(36 0)          -
                 VOL ($VOLSV)                        -
                 CYL (5 1)                           -
                 RECSZ (80 80) )                     -
        INDEX   ( NAME (&USES.MIAMNR.&USER.I)        -
                 CISZ (4096) )                       -
        DATA    ( NAME (&USES.MIAMNR.&USER.D)        -
                 FSPC (10 5) SPEED                   -
        CISZ (4096) )          /*: CATALOG ($VCAT) */
:/     ADD NAME=DLMIAMNR
DELETE (&USES.MIAMNR.&USER) CLUSTER
:/     ADD NAME=DLOUTFIL
DELETE (&USER)
:/     ADD NAME=LIOUTFIL
LISTCAT ENTRIES (&USER)
:/     ADD NAME=DFSYIANA
DELETE ($INDUV..SYIANA.&USER) CLUSTER
SET LASTCC = 0
SET MAXCC = 0
DEFINE CLUSTER ( NAME ($INDUV..SYIANA.&USER)        -
                 SHR (2 3)  RUS  KEYS(94 1)          -
                 VOL ($VOLUV)                        -
                 CYL (5 1)                           -
                 RECSZ (100 100) )                   -
        INDEX   ( NAME ($INDUV..SYIANA.&USER.I)      -
                 CISZ (4096) )                       -
        DATA    ( NAME ($INDUV..SYIANA.&USER.D)      -
                 FSPC (10 5) SPEED                   -
        CISZ (4096) )          /*: CATALOG ($VCAT) */
:/     ADD NAME=DFBVPWK
DELETE ($INDSV..BVPWK) CLUSTER
SET LASTCC = 0
```

```
                SET MAXCC = 0
                DEFINE CLUSTER ( NAME ($INDSV..BVPWK)              -
                                 SHR (2 3)  RUS  KEYS(8 0)         -
                                 VOL ($VOLSV)                     -
                                 CYL (1 1)                        -
                                 RECSZ (162,162) )                -
                      INDEX   ( NAME ($INDSV..BVPWK.I)            -
                                 CISZ (4096) )                    -
                      DATA    ( NAME ($INDSV..BVPWK.D)            -
                                 FSPC (10 5) SPEED                -
                      CISZ (16384) )          /*: CATALOG ($VCAT) */
                :/    ADD NAME=DFBVPWY
                DELETE ($INDSV..BVPWY) CLUSTER
                SET LASTCC = 0
                SET MAXCC = 0
                DEFINE CLUSTER ( NAME ($INDSV..BVPWY)              -
                                 SHR (2 3)  RUS  KEYS(8 0)         -
                                 VOL ($VOLSV)                     -
                                 CYL (2 1)                        -
                                 RECSZ (1028,1028) )              -
                      INDEX   ( NAME ($INDSV..BVPWY.I)            -
                                 CISZ (4096) )                    -
                      DATA    ( NAME ($INDSV..BVPWY.D)            -
                                 FSPC (10 5) SPEED                -
                      CISZ (16384) )          /*: CATALOG ($VCAT) */
                :/    ADD NAME=DFSYTRPF
                DELETE ($INDUV..SYTRPF.&USER) CLUSTER
                SET LASTCC = 0
                SET MAXCC = 0
                DEFINE CLUSTER ( NAME ($INDUV..SYTRPF.&USER)       -
                                 SHR (2 3)  RUS  KEYS(28 0)        -
                                 VOL ($VOLUV)                     -
                                 CYL (5 1)                        -
                                 RECSZ (180 180) )                -
                      INDEX   ( NAME ($INDUV..SYTRPF.&USER.I)     -
                                 CISZ (4096) )                    -
                      DATA    ( NAME ($INDUV..SYTRPF.&USER.D)     -
                                 FSPC (10 5) SPEED                -
                      CISZ (4096) )           /*: CATALOG ($VCAT) */
                :/    ADD NAME=DFSYTRDU
                DELETE ($INDUV..SYTRDU.&USER) CLUSTER
                SET LASTCC = 0
                SET MAXCC = 0
                DEFINE CLUSTER ( NAME ($INDUV..SYTRDU.&USER)       -
                                 SHR (2 3)  RUS  KEYS(28 0)        -
                                 VOL ($VOLUV)                     -
                                 CYL (5 1)                        -
                                 RECSZ (180 180) )                -
                      INDEX   ( NAME ($INDUV..SYTRDU.&USER.I)     -
                                 CISZ (4096) )                    -
                      DATA    ( NAME ($INDUV..SYTRDU.&USER.D)     -
                                 FSPC (10 5) SPEED                -
                      CISZ (4096) )           /*: CATALOG ($VCAT) */
                :/    ADD NAME=DLSYSPAF
                DELETE (&USES.SYSPAF.&USER) CLUSTER
```

```
:/      ADD NAME=DLSYSEXT
 DELETE (&USES.SYSEXT.&USER) CLUSTER
:/      ADD NAME=DLSYIANA
 DELETE ($INDUV..SYIANA.&USER) CLUSTER
:/      ADD NAME=DLSYTRDU
 DELETE ($INDUV..SYTRDU.&USER) CLUSTER
:/      ADD NAME=DLBVPWK
 DELETE ($INDSV..BVPWK) CLUSTER
:/      ADD NAME=DLBVPWY
 DELETE ($INDSV..BVPWY) CLUSTER
:/      ADD NAME=DLPQCE
 DELETE ($INDUN..PQCE.&USER)
:/      ADD NAME=MAXKEY
9999999999999999999999999999999999999999999999999999999999999999999
:/      ADD NAME=KEY01
00000001
:/      ADD NAME=REPRO999
 REPRO INFILE (MAXKEY)    OUTFILE (SYSPAF)
:/      ADD NAME=REPRO
 REPRO INFILE (IN1)      OUTFILE (OU1)
:/      ADD NAME=VERIFGN
 VERIFY FILE (PACGGN)
:/      ADD NAME=VERIFGR
 VERIFY FILE (PACGGR)
:/      ADD NAME=VERIFGY
 VERIFY FILE (PACGGY)
:/      ADD NAME=VERIFGJ
 VERIFY FILE (PACGGJ)
:/      ADD NAME=VERIFGU
 VERIFY FILE (PACGGU)
:/      ADD NAME=VERIFAN
 VERIFY FILE (PAC7AN)
:/      ADD NAME=VERIFAR
 VERIFY FILE (PAC7AR)
:/      ADD NAME=VERIFAY
 VERIFY FILE (PAC7AY)
:/      ADD NAME=VERIFAJ
 VERIFY FILE (PAC7AJ)
:/      ADD NAME=VERIFAE
 VERIFY FILE (PAC7AE)
:/      ADD NAME=VERIFLB
 VERIFY FILE (PAC7LB)
:/      ADD NAME=VERIFQJ
 VERIFY FILE (PAC7QJ)
:/      ADD NAME=VERIFSA
 VERIFY FILE (PAC7SA)
:/      ADD NAME=VERIFSG
 VERIFY FILE (PAC7SG)
:/      ADD NAME=VERIFSN
 VERIFY FILE (PAC7SN)
:/      ADD NAME=VERIFSC
 VERIFY FILE (PAC7SC)
:/      ADD NAME=VERIFSR
 VERIFY FILE (PAC7SR)
:/      ADD NAME=VERIFSP
```

```
 VERIFY FILE (PAC7SP)
:/    ADD NAME=VERIFSS
 VERIFY FILE (PAC7SS)
:/    ADD NAME=VERIFTD
 VERIFY FILE (PAC7TD)
:/    ADD NAME=VERIFEM
 VERIFY FILE (PAC7EM)
:/    ADD NAME=LIBVPGJ
 LISTCAT ENTRIES ($INDSV..BVPGJ) CLUSTER
PP
//
```

Initializations

D03DEFIN module: '$prfj.D3' job

Allocation of system and Administration Database files

Step	Program	Comments
STEP1	IDCAMS	Delete/Define

Execution JCL

```
//$PRFJ.D3  JOB ($CCPT),'PAC D03DEFIN',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VISUALAGE PACBASE                                                 *
//*                                                                   *
//*              INSTALLATION - D03DEFIN                              *
//*    DEFINITION OF COMMON VSAM FILES                                *
//*    STEP1 : DELETE/DEFINE                                          *
//*********************************************************************
//*
//STEP1  EXEC PGM=IDCAMS
//*:STEPCAT  DD  DSN=$SCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//SYSIN DD DSN=$INDSN..BVPSY(DFBVPSA),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPSC),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPSG),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPSN),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPSR),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPSP),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPSS),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPPA),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPGS),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPGN),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPGR),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPGY),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPGJ),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPGK),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPLB),DISP=SHR
```

```
//       DD DSN=$INDSN..BVPSY(DFBVPTR),DISP=SHR
//       DD DSN=$INDSN..BVPSY(DFBVPWS),DISP=SHR
//*
//
```

D03GDG module: '$prfj.D3G' job

Allocation of model DSCB - GDG definition

Step	Program	Comments
STEP1	IDCAMS	DELETE of model DSCB files
STEP2	IEFBR14	Allocation of model DSCB

Execution JCL

```
//$PRFJ.D3G JOB ($CCPT),'PAC D03GDG',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*******************************************************************
//* VISUALAGE PACBASE                                              *
//*                                                                *
//*               INSTALLATION - D03GDG                            *
//*   JOB TO RUN ONLY THE FIRST TIME THE PRODUCT IS INSTALLED      *
//*     . BUILDING OF DSCB MODEL                                   *
//*******************************************************************
//STEP1  EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
 DELETE ($DSCB)
//*
//STEP2  EXEC PGM=IEFBR14
//DSCB     DD DISP=(,CATLG),SPACE=(TRK,0),
//         UNIT=$UNITSN,
//         VOL=SER=$VOLSN,
//         DSN=$DSCB
//*
//
```

D03INI module: '$prfj.D3I' job

Initialization of system and Administration Database files

Step	Program	Comments
STEP1	IDCAMS	Initialization of PA work file max. key (PAF user on-line request)
STEP2	IDCAMS	Initialization of GS extraction schema file max. key (PAF extension)
STEP3	IDCAMS	Initialization of WS work file max. key (Workstation)

Step	Program	Comments
STEP4	IDCAMS	Initialization of LB file max. key (jobs follow-up)
STEP5	IDCAMS	Initialization of GK generator work file max. key
PINTR	IDCAMS	Initialization of TR work file max. key (Workstation)

Execution JCL

```
//$PRFJ.D3I JOB ($CCPT),'PAC D03INI',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//**********************************************************************
//* VISUALAGE PACBASE                                                 *
//*                                                                    *
//*               INSTALLATION - D03INI                               *
//*   INITIALIZATION: JOB TO RUN ONLY                                 *
//*   THE FIRST TIME THE PRODUCT IS INSTALLED                         *
//*     . INITIALIZATION OF P.A.F. WORK FILES PA                      *
//*     . INITIALIZATION OF PDM EXTENSION-USER FILE "GS"              *
//*     . INITIALIZATION OF WORK FILE STATION WS                      *
//*     . INITIALIZATION OF JOB REPORT FILE LB                        *
//*     . INITIALIZATION OF GENERATION RIGHTS FILE GK                 *
//*     . INITIALIZATION OF AD WORKBENCH FILE TR                      *
//**********************************************************************
//STEP1  EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=$SCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//PAO    DD DSN=$INDSV..BVPPA,DISP=SHR
//PAI    DD DSN=$INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN  DD *
  REPRO INFILE (PAI)   OUTFILE (PAO)
//*
//STEP2  EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=$SCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//GSO    DD DSN=$INDSV..BVPGS,DISP=SHR
//GSI    DD DSN=$INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN  DD *
  REPRO INFILE (GSI)   OUTFILE (GSO)
//*
//STEP3  EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=$SCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//WSO    DD DSN=$INDSV..BVPWS,DISP=SHR
//WSI    DD DSN=$INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN  DD *
  REPRO INFILE (WSI)   OUTFILE (WSO)
//*
//STEP4  EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=$SCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//LBO    DD DSN=$INDSV..BVPLB,DISP=SHR
//LBI    DD DSN=$INDSN..BVPSY(MAXKEY),DISP=SHR
```

```
//SYSIN    DD *
  REPRO INFILE (LBI)   OUTFILE (LBO)
//*
//STEP5  EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=$SCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT

//GKO      DD DSN=$INDSV..BVPGK,DISP=SHR
//GKI      DD DSN=$INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD *
  REPRO INFILE (GKI)   OUTFILE (GKO)
//*
//PTINTR EXEC PGM=BVPTINTR
//*-----------------------
//*:STEPCAT DD DSN=$VCAT,DISP=SHR
//*:       DD DSN=$SCAT,DISP=SHR
//STEPLIB  DD DSN=$HLQ..SBVPMBR8,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//PAC7TR   DD DSN=$INDSV..BVPTR,DISP=SHR
//SYSOUT   DD SYSOUT=$OUT
//SYSUDUMP DD SYSOUT=$OUT
//
```

Renaming the User Exit Batch Programs

<u>D04MBR module: '$prfj.D4B' job</u>

Rename user exits batch programs

Step	Program	Comments
STEP1	IEBCOPY	RENAME user exits load modules
STEP2	IEBCOPY	COPY user exits load modules

<u>Execution JCL</u>

```
//$PRFJ.D4B JOB ($CCPT),'PAC D04MBR',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*******************************************************************
//* VISUALAGE PACBASE                                               *
//*                                                                 *
//*            INSTALLATION - D04MBR                                *
//*      - RENAME EXIT USERS BATCH LOAD MODULES -                   *
//*******************************************************************
//STEP1    EXEC PGM=IEBCOPY,REGION=0M
//SYSPRINT DD SYSOUT=$OUT
//I1       DD DSN=$HLQ..SBVPMBR8,DISP=SHR
//O1       DD DSN=&&TEMP,DISP=(NEW,PASS),
//         UNIT=SYSDA,SPACE=(CYL,(20,10,100)),
//         DCB=(TRTCH=NOCOMP,RECFM=U,BLKSIZE=6144)
//SYSIN    DD *
  C INDD=I1,OUTDD=O1
    S M=((BVPRBASB,BVPRBAS))
    S M=((BVPRC10B,BVPRC100))
```

```
              S M=((BVPRCE0B,BVPRCE00))
              S M=((BVPRCS0B,BVPRCS00))
              S M=((BVPRDOCB,BVPRDOC))
              S M=((BVPRDO0B,BVPRDO00))
              S M=((BVPRIT0B,BVPRIT00))
              S M=((BVPRKEYB,BVPRKEY))
              S M=((BVPRLGFB,BVPRLGF))
              S M=((BVPRLGSB,BVPRLGS))
              S M=((BVPRLICB,BVPRLIC))
              S M=((BVPRMC0B,BVPRMC00))
              S M=((BVPRMS0B,BVPRMS00))
              S M=((BVPROP0B,BVPROP00))
              S M=((BVPRPARB,BVPRPAR))
              S M=((BVPRPRCB,BVPRPRC))
              S M=((BVPRPVPB,BVPRPVP))
              S M=((BVPRSECB,BVPRSEC))
              S M=((BVPRTRFB,BVPRTRF))
              S M=((BVPRXX0B,BVPRXX00))
              S M=((BVPRUSEB,BVPRUSE))
              S M=((BVPRVL0B,BVPRVL00))
              S M=((BVPRWB0B,BVPRWB00))
          /*
          //*
          //STEP2    EXEC PGM=IEBCOPY
          //SYSPRINT DD SYSOUT=$OUT
          //I1       DD DSN=&&TEMP,DISP=(OLD,DELETE)
          //O1       DD DSN=$HLQ..SBVPMBR8,DISP=SHR
          //SYSIN    DD *
             C   I=((I1,R)),O=O1
          /*
```

Loading of Procedures

It is recommended that all operation procedures be cataloged in one procedures library:

- Either in a reserved PROCLIB: in this case, execute the allocation job first, and then the loading job.
- Or in an existing PROCLIB: in this case, execute the loading job straight away.

D05IPROC module: '$prfj.D5I' job

Allocation of a reserved library (optional)

Step	Program	Comments
STEP1	IEFBR14	Allocation of procedures library

Execution JCL

```
//$PRFJ.D5I  JOB ($CCPT),'PAC D05IPROC',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//********************************************************************
```

```
//* VISUALAGE PACBASE                                                *
//*                                                                  *
//*              INSTALLATION - D05IPROC                             *
//*                                                                  *
//*                WARNING! OPTIONAL JOB                             *
//*                =====================                            *
//*                                                                  *
//*    INITIAL ALLOCATION OF A SPECIAL "PROCLIB" FOR THE PRODUCT     *
//*      .STEP1 : LISTCAT                                            *
//*      .STEP2 : ALLOCATION                                         *
//*                                                                  *
//********************************************************************
//*
//STEP1    EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
  LISTC ENT($BIBP)
/*
//STEP2  EXEC PGM=IEFBR14,COND=(0,EQ,STEP1)
//LIB      DD DSN=$BIBP,DISP=(,CATLG,DELETE),
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//         VOL=SER=$VOLSN,
//         UNIT=$UNITSN,
//         SPACE=(6080,(200,20,10))
```

D05PROC module: '$prfj.D5P' job

Loading of procedures

This job includes an IEBUPDTE step, which creates one member for each procedure.

Caution:

Replace all :/ with ./ before submitting the job.

Each member is coded 'BVPNNNN', where NNNN is the standard name of the procedure.

Procedures are detailed in the 'Administrator's Procedures' manual or in the 'Developer's Procedures' manual, except for the Database retrieval procedures, which are described in this manual.

Execution JCL
```
//$PRFJ.D5P JOB ($CCPT),'PAC D05PROC',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//********************************************************************
//* VISUALAGE PACBASE                                                *
//*                                                                  *
//*              INSTALLATION - D05PROC                              *
//*                                                                  *
```

```
//*      CATALOGING OF BATCH PROCEDURES                                *
//*                                                                    *
//*   ->NOTE:                                                          *
//*      REPLACE :/ BY ./ BEFORE SUBMITTING THE JOB                    *
//*                                                                    *
//*********************************************************************
//UPD     EXEC PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD SYSOUT=$OUT
//SYSUT2   DD DSN=$BIBP,DISP=SHR
//SYSIN    DD DATA,DLM='F+'
:/ ADD NAME=BVPACTI
:/ ADD NAME=BVPARAD
:/ ADD NAME=BVPARCH
:/ ADD NAME=BVPARPM
:/ ADD NAME=BVPCEND
:/ ADD NAME=BVPCHPM
:/ ADD NAME=BVPCIND
:/ ADD NAME=BVPCINN
:/ ADD NAME=BVPCPPM
:/ ADD NAME=BVPCSES
:/ ADD NAME=BVPEMLD
:/ ADD NAME=BVPEMUP
:/ ADD NAME=BVPESES
:/ ADD NAME=BVPEXPM
:/ ADD NAME=BVPGETA
:/ ADD NAME=BVPGETD
:/ ADD NAME=BVPGETI
:/ ADD NAME=BVPGPND
:/ ADD NAME=BVPGPMC
:/ ADD NAME=BVPGPPM
:/ ADD NAME=BVPGPRN
:/ ADD NAME=BVPGPRP
:/ ADD NAME=BVPGPRC
:/ ADD NAME=BVPGPRT
:/ ADD NAME=BVPGPRU
:/ ADD NAME=BVPGPRX
:/ ADD NAME=BVPGPRY
:/ ADD NAME=BVPGY25
:/ ADD NAME=BVPGY30
:/ ADD NAME=BVPHIPM
:/ ADD NAME=BVPIANA
:/ ADD NAME=BVPIGRA
:/ ADD NAME=BVPIMFH
:/ ADD NAME=BVPINAE
:/ ADD NAME=BVPINFP
:/ ADD NAME=BVPINFQ
:/ ADD NAME=BVPINGU
:/ ADD NAME=BVPINQJ
:/ ADD NAME=BVPINSL
:/ ADD NAME=BVPIPEP
:/ ADD NAME=BVPIPFQ
:/ ADD NAME=BVPIPIA
:/ ADD NAME=BVPISEP
:/ ADD NAME=BVPISOS
:/ ADD NAME=BVPJJND
```

```
:/ ADD NAME=BVPJRND
:/ ADD NAME=BVPLSND
:/ ADD NAME=BVPMB25
:/ ADD NAME=BVPMB30
:/ ADD NAME=BVPMEND
:/ ADD NAME=BVPMNDO
:/ ADD NAME=BVPMLIB
:/ ADD NAME=BVPPACG
:/ ADD NAME=BVPPACS
:/ ADD NAME=BVPPACX
:/ ADD NAME=BVPPAGX
:/ ADD NAME=BVPPC25
:/ ADD NAME=BVPPE25
:/ ADD NAME=BVPPG20
:/ ADD NAME=BVPPG25
:/ ADD NAME=BVPPJ25
:/ ADD NAME=BVPPPAF
:/ ADD NAME=BVPPP25
:/ ADD NAME=BVPPQCA
:/ ADD NAME=BVPPQCE
:/ ADD NAME=BVPPRGS
:/ ADD NAME=BVPREOR
:/ ADD NAME=BVPREST
:/ ADD NAME=BVPRESY
:/ ADD NAME=BVPRIND
:/ ADD NAME=BVPRMTD
:/ ADD NAME=BVPROAD
:/ ADD NAME=BVPRPND
:/ ADD NAME=BVPRPTY
:/ ADD NAME=BVPRPP2
:/ ADD NAME=BVPRP25
:/ ADD NAME=BVPRRND
:/ ADD NAME=BVPRSAD
:/ ADD NAME=BVPSADM
:/ ADD NAME=BVPSASY
:/ ADD NAME=BVPSAVE
:/ ADD NAME=BVPSIPM
:/ ADD NAME=BVPSMTD
:/ ADD NAME=BVPSTAT
:/ ADD NAME=BVPTRDU
:/ ADD NAME=BVPTRED
:/ ADD NAME=BVPTRJC
:/ ADD NAME=BVPTRPF
:/ ADD NAME=BVPTRRP
:/ ADD NAME=BVPTRUP
:/ ADD NAME=BVPTYND
:/ ADD NAME=BVPUBPM
:/ ADD NAME=BVPUPDP
:/ ADD NAME=BVPUPDT
:/ ADD NAME=BVPUPGP
:/ ADD NAME=BVPUPND
:/ ADD NAME=BVPUTMP
:/ ADD NAME=BVPUTM1
:/ ADD NAME=BVPUTM2
:/ ADD NAME=BVPUTU1
```

```
:/ ADD NAME=BVPUTU2
:/ ADD NAME=BVPUV25
:/ ADD NAME=BVPVING
:/ ADD NAME=BVPVINS
:/ ADD NAME=BVPXPAF
:/ ADD NAME=BVPXPDM
:/ ADD NAME=BVPYSMC
F+
//
```

Loading of Generation Skeleton Files

D06SKEL module: '$prfj.D6' job

Creation and loading of skeleton files.

Step	Program	Comments
STEP1	IDCAMS	DELETE/DEFINE SA SC SG SN SR SS SP
STEP2	IDCAMS	Loading (REPRO) of SA SC SG SN SR SS SP
STEP3	IDCAMS	DELETE of SF file
STEP4	IEBGENER	Loading of SF file

Execution JCL

```
//$PRFJ.D6  JOB ($CCPT),'PAC D06SKEL',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VISUALAGE PACBASE                                                 *
//*                                                                   *
//*              INSTALLATION - D06SKEL                               *
//*   LOADING OF PRODUCT SKELETON FILES FOR GENERATION                *
//*     .STEP1 : DELETE DEFINE SKELETON FILES SA SC SG SN SR SS SP    *
//*     .STEP2 : LOADING VSAM SKELETON FILES SA SC SG SN SR SS SP     *
//*     .STEP3 : DELETE "SF"                                          *
//*     .STEP4 : ALLOCATING AND LOADING "SF"                          *
//*********************************************************************
//*
//STEP1  EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=$SCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD DSN=$INDSN..BVPSY(DFBVPSA),DISP=SHR
//         DD DSN=$INDSN..BVPSY(DFBVPSC),DISP=SHR
//         DD DSN=$INDSN..BVPSY(DFBVPSG),DISP=SHR
//         DD DSN=$INDSN..BVPSY(DFBVPSN),DISP=SHR
//         DD DSN=$INDSN..BVPSY(DFBVPSR),DISP=SHR
//         DD DSN=$INDSN..BVPSY(DFBVPSS),DISP=SHR
//         DD DSN=$INDSN..BVPSY(DFBVPSP),DISP=SHR
//*
//STEP2  EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=$SCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//SA0      DD DSN=$INDSV..BVPSA,DISP=SHR
```

```
//SCO       DD DSN=$INDSV..BVPSC,DISP=SHR
//SGO       DD DSN=$INDSV..BVPSG,DISP=SHR
//SNO       DD DSN=$INDSV..BVPSN,DISP=SHR
//SRO       DD DSN=$INDSV..BVPSR,DISP=SHR
//SSO       DD DSN=$INDSV..BVPSS,DISP=SHR
//SPO       DD DSN=$INDSV..BVPSP,DISP=SHR
//SAI       DD DSN=$HLQ..SBVPPF5(BVPSA$LSK),DISP=SHR
//SCI       DD DSN=$HLQ..SBVPPF6(BVPSC$LSK),DISP=SHR
//SGI       DD DSN=$HLQ..SBVPPF5(BVPSG$LSK),DISP=SHR
//SNI       DD DSN=$HLQ..SBVPPF5(BVPSN$LSK),DISP=SHR
//SRI       DD DSN=$HLQ..SBVPPF5(BVPSR$LSK),DISP=SHR
//SSI       DD DSN=$HLQ..SBVPPF5(BVPSS$LSK),DISP=SHR
//SPI       DD DSN=$HLQ..SBVPPF5(BVPSP),DISP=SHR
//SYSIN     DD *
  REPRO INFILE (SAI)   OUTFILE (SAO)
  REPRO INFILE (SCI)   OUTFILE (SCO)
  REPRO INFILE (SGI)   OUTFILE (SGO)
  REPRO INFILE (SNI)   OUTFILE (SNO)
  REPRO INFILE (SRI)   OUTFILE (SRO)
  REPRO INFILE (SSI)   OUTFILE (SSO)
  REPRO INFILE (SPI)   OUTFILE (SPO)
//*
//STEP3   EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=$OUT
//SYSIN     DD *
 DELETE ($INDSN..BVPSF)
//*
//STEP4   EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=$OUT
//SYSIN     DD DUMMY
//SYSUT1    DD DSN=$HLQ..SBVPPF7(BVPSF),DISP=SHR
//SYSUT2    DD DSN=$INDSN..BVPSF,DISP=(,CATLG,DELETE),
//          UNIT=$UNITSN,
//          VOL=SER=$VOLSN,
//          SPACE=(TRK,(10,1)),
//          DCB=(RECFM=FB,LRECL=119,BLKSIZE=11900)
//*
//
```

Loading of Error messages and online help

D07AE0 module: '$prfj.D7' job

This JCL defines, and then loads the AE error messages file.

It must be executed every time a version is re-installed.

To take one or more languages into account, you must add as many parameter lines which contain the two-characters language code in position 3.

To take all the available languages into account, you must enter a parameter line which contains '**' in position 3.

The AE file must be closed in on-line mode.

Step	Program	Comments
INPUT	BVPTU001	Recognition of the language parameter
DELDEF	IDCAMS	DELETE DEFINE of AE
PTUCAE	BVPTUCAE	Loading of AE

Execution JCL

```
//$PRFJ.D7  JOB ($CCPT),'PAC D07AE0',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//**********************************************************************
//* VISUALAGE PACBASE                                                  *
//*                                                                    *
//*              INSTALLATION - D07AE                                  *
//**********************************************************************
//INAE   EXEC BVPINAE
  **
/*
```

Installation of the Administration Database

Users File Initialization

D08INGU module: '$prfj.D8' job

This JCL should be submitted upon the first installation only.

It defines and then loads the GU file with the 'TEST' and 'ADMIN' user codes. These user codes will be used to activate the keys and to execute the test JCLs.

Note:

For a re-installation on a version higher than or equal to 3.0, if you want to restore the Administration Database of the previous version, you will first have to retrieve the GU file which corresponds to the PE backup.

Step	Program	Comments
STEP1	IDCAMS	DELETE DEFINE of GU
STEP2	PTUIGU	creation of data

Execution JCL

```
//$PRFJ.D8  JOB ($CCPT),'PAC D08INGU',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//*********************************************************************
//* VISUALAGE PACBASE                                                 *
//*                                                                   *
//*                INSTALLATION - D08INGU                             *
//*            - INITIALIZATION OF USER FILE GU -                     *
//*                                                                   *
//*        EXECUTE THIS JOB ONLY FOR FIRST INSTALLATION               *
//*                                                                   *
//*********************************************************************
//*
//INGU    EXEC BVPINGU
```

Initialization of Generation Data Groups

D08INIAD module: '$prfj.D8A' job

This JCL must be submitted upon the first installation only.

It creates GDG files and initializes the journal and Administration Database backups.

Caution

If the files are managed under SMS, delete the lines DD //GDGMOD from the JCL of the IDCAMS steps before submitting the job.

Step	Program	Comments
STEP1	IDCAMS	GDG of administration journal file
STEP2	IEBGENER	Initialization of this file (PK)
STEP3	IDCAMS	GDG of admin. backup file
STEP4	IEBGENER	Initialization of this file (PE)
STEP5	IDCAMS	GDG of backup file of SCM journal
STEP6	IEBGENER	Initialization of this file (JQ)

Execution JCL

```
//$PRFJ.D8A JOB ($CCPT),'PAC D08INIAD',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VISUALAGE PACBASE                                                 *
//*                                                                   *
//*                INSTALLATION - D08INIAD                            *
//* JOB TO RUN ONLY FOR THE 1ST INSTALL OF DATABASE ADMINISTRATOR     *
//*    . BUILDING OF INDEX DATA-GROUP FOR                             *
//*       "PE" SAVE FILE, "PK" ARCHIVAL FILE, "JQ" ARCHIVAL FILE      *
//*    . "PK" FILE INITIALIZATION                                     *
```

```
//*     . "JQ" FILE INITIALIZATION                                    *
//*     . LOADING OF TEST DATABASE ON "PE" FILE                       *
//*  ->NOTE                                                           *
//*     ----                                                          *
//*     IF "SMS" IS INSTALLED DELETE //GDGMOD DD STATEMENTS           *
//*********************************************************************
//STEP1  EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=$VCAT,DISP=SHR
//GDGMOD   DD DSN=$INDSN..BVPPK,
//         DISP=(,KEEP,DELETE),
//         UNIT=$UNITSN,
//         VOL=SER=$VOLSN,
//         SPACE=(TRK,0),
//         DCB=($DSCB,RECFM=FB,LRECL=170,BLKSIZE=6800)
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
  DEFINE GENERATIONDATAGROUP -
         (NAME ($INDSN..BVPPK) LIMIT (3) SCR)
//*
//STEP2  EXEC PGM=IEBGENER
//SYSIN    DD DUMMY
//SYSPRINT DD DUMMY
//SYSUT1   DD DUMMY,DCB=(RECFM=FB,LRECL=170,BLKSIZE=170)
//SYSUT2   DD DSN=$INDSN..BVPPK(+1),
//         DISP=(,CATLG,DELETE),
//         UNIT=$UNITSN,
//         VOL=SER=$VOLSN,
//         SPACE=(TRK,1),
//         DCB=($DSCB,RECFM=FB,LRECL=170,BLKSIZE=6800)
//*
//STEP3  EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=$VCAT,DISP=SHR
//GDGMOD   DD DSN=$INDSN..BVPPE,
//         DISP=(,KEEP,DELETE),
//         UNIT=$UNITSN,
//         VOL=SER=$VOLSN,
//         SPACE=(TRK,0),
//         DCB=($DSCB,RECFM=VB,LRECL=1023,BLKSIZE=27998)
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
  DEFINE GENERATIONDATAGROUP -
         (NAME ($INDSN..BVPPE) LIMIT (3) SCR)
//*
//STEP4  EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD DUMMY
//SYSUT1   DD DSN=$HLQ..SBVPPF2(BVPPE),DISP=SHR
//SYSUT2   DD DSN=$INDSN..BVPPE(+1),
//         DISP=(,CATLG,DELETE),
//         UNIT=$UNITSN,
//         VOL=SER=$VOLSN,
//         SPACE=(TRK,(220,10),RLSE),
//         DCB=($DSCB,RECFM=VB,LRECL=1023,BLKSIZE=27998)
//*
//STEP5  EXEC PGM=IDCAMS
```

```
//*:STEPCAT DD DSN=$VCAT,DISP=SHR
//GDGMOD   DD DSN=$INDSN..BVPJQ,
//         DISP=(,KEEP,DELETE),
//         UNIT=$UNITSN,
//         VOL=SER=$VOLSN,
//         SPACE=(TRK,0),
//         DCB=($DSCB,RECFM=FB,LRECL=1119,BLKSIZE=11190)
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
  DEFINE GENERATIONDATAGROUP -
         (NAME ($INDSN..BVPJQ) LIMIT (3) SCR)
//*
//STEP6  EXEC PGM=IEBGENER
//SYSIN    DD DUMMY
//SYSPRINT DD DUMMY
//SYSUT1   DD DUMMY,DCB=(RECFM=FB,LRECL=1119,BLKSIZE=1119)
//SYSUT2   DD DSN=$INDSN..BVPJQ(+1),
//         DISP=(,CATLG,DELETE),
//         UNIT=$UNITSN,
//         VOL=SER=$VOLSN,
//         SPACE=(TRK,1),
//         DCB=($DSCB,RECFM=FB,LRECL=1119,BLKSIZE=1119)
//
```

Loading of the Administration Database

D08RSAD module: '$prfj.D8B' job

This JCL must be submitted upon the first installation only.

It runs the RSAD procedure in order to restore the Administration Database
with the backup file created in the previous '$prfj.D8A' job.

Note

If you have a Database of a previous version, consult the chapter dedicated to
the retrieval of user parameters.

Caution

To use VisualAge Pacbase, you need an access key. At the end of this step, an
evaluation key is installed, but this key only allows the execution of some
procedures, in particular the installation procedures.

This access key must be updated via Administrator workbench, to allow an
unrestricted access to VA Pacbase.

Execution JCL

```
//$PRFJ.D8B JOB ($CCPT),'PAC D08RSAD',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
```

```
//********************************************************************
//* VISUALAGE PACBASE                                                *
//*                                                                  *
//*                 INSTALLATION - D08RSAD                           *
//* CREATION OF THE TEST DATABASE ADMINISTRATOR                      *
//* INDICATE THE LANGUAGE CODE OF THE SITE ON Y LINE COL 10-11       *
//********************************************************************
//TESTRSAD  EXEC BVPRSAD
 *ADMIN   ADMIN
 Y    20EN
//
```

Initialization of the QJ archive file

D08TINQJ module: '$prfj.D8T' job

This JCL should be executed only upon the first installation.

It defines and then loads the QJ 'Archive journal of the SCM Tools Interface module'.

Step	Program	Comments
STEP1	IDCAMS	DELETE DEFINE QJ
PCMINI	PCMINI	Initialization of QJ

Execution JCL

```
//$PRFJ.D8T JOB ($CCPT),'PAC D08TINQJ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//********************************************************************
//* VISUALAGE PACBASE                                                *
//*                                                                  *
//*                 INSTALLATION - D08TINQJ                          *
//*          - INITIALIZATION OF SYSTEM FILE QJ -                    *
//*                                                                  *
//*      EXECUTE THIS JOB ONLY FOR FIRST INSTALLATION >= V300        *
//*                                                                  *
//********************************************************************
//INQJ      EXEC BVPINQJ
```

Loading of the Administration Model

D08XMET module: '$prfj.8X' job

This JCL must be submitted upon the first installation and upon each re-installation.

It is used to run the VING procedure and to install the administration model.

Execution JCL

```
//$PRFJ.8X  JOB ($CCPT),'PAC D08XMET',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//*********************************************************************
//* VISUALAGE PACBASE                                                 *
//*                                                                   *
//*    - ADMINISTRATION DATABASE -                                    *
//*       MODEL INSTALLATION                                          *
//*        INDICATE THE FILE NECESSARY FOR ROAD PROCEDURE             *
//*********************************************************************
//VING   EXEC BVPVING,FDIC='$HLQ..SBVPPF8(BVPMETAD)',
//       USER=ADMIN
 *ADMIN  ADMIN   ***       VINSI
/*
//*VINS.PAC7MR  DD DSN=ROADFILE
```

Access Key Input

This step is performed with Administrator workbench and consists in executing the following operations:

- Entering the access key,
- Defining generation targets,
- Activating the key.

These operations are presented in the 'AD workbench User's Guide', 'Prior administration actions' chapter. They are detailed in the Online Help of Administrator workbench.

Backup of the Administration Database

Performing this step is recommended since it prevents you from having to enter the key again in case of a problem.

List of components with their dates of creation

D99INSL module: '$prfj.D99' job

This job prints the following lists:

- A list of batch and on-line programs, with their generation characteristics,
- A list of permanent system files AE ,SA, SC, SG, SR, SS, SN, SP and SF with the date of their creation.

In case of system operation problem, these lists should be printed in order to communicate to the VisualAge Pacbase Support all the installation references.

This job also executes the INSL procedure.

Meaning of return code:

Return code	label
6	Load-module not found in the library
A	Not standard

Execution JCL

```
//$PRFJ.D99  JOB ($CCPT),'PAC D99INSL',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//**********************************************************************
//* VISUALAGE PACBASE                                                  *
//*                                                                    *
//*               INSTALLATION - D99INSL                               *
//*     THE FOLLOWING JOB PROVIDES THE LIST OF PROGRAMS                *
//*     AND SYSTEM FILES INSTALLED ON THE SITE.                        *
//**********************************************************************
//INSL   EXEC BVPINSL
/*
```

Additional Installations

CICS Complements for Sockets

To use sockets (specific to CICS), you must install a CICS listener which does not standardly include an authentication system. The security system performs the control via the BVPCICSE security user-exit provided by SMP/E in the hlq.SBVPMTR8 PDS.

The BVPCICSE user-exit must be declared in the CSD with the 'EXECKEY(CICS)' clause (see the D00CSD installation JCL) in the following way:

In CICS, enter the 'EZAC AL' command:

```
EZAC,ALter
ENTER ONE OF THE FOLLOWING
CICS        ===>                      Enter Yes!No
LISTENER    ===>  Y                   Enter Yes!No
```

Select the listener and enter:

```
EZAC,ALter,LISTENER
ENTER ALL FIELDS
APPLID      ===> A6ECCSXP    APPLID of CICS System
NAME        ===> CSKL        TRANSACTION NAME OF LISTENER
```

The following screen is then displayed. You must indicate the code of the user-exit:

```
EZAC,ALter,LISTENER
OVERTYPE TO ENTER
APPLID      ===> A6ECCSXP     APPLID of CICS System
TRANID      ===> CSKL         Transaction Name of Listener
PORT        ===> 09957        Port Number of Listener
IMMEDIATE   ===> YES          Immediate Startup Yes!No
BACKLOG     ===> 040          Backlog Value for Listener
NUMSOCK     ===> 100          Number of Sockets in Listener
MINMSGL     ===> 004          Minimum Message Length
ACCTIME     ===> 030          Timeout Value for ACCEPT
GIVTIME     ===> 010          Timeout Value for GIVESOCKE
REATIME     ===> 300          Timeout Value for READ
FASTRD      ===> YES          Read Immediately   Yes!No
TRANTRN     ===> YES          Translate TRNID    Yes!No
TRANUSR     ===> YES          Translate User Data Yes!No
SECEXIT     ===> BVPCICSE     Name of Security Exit
WLM groups  ===> CICSSEXP     ===>               ===>
```

Utility to purge work files

The JCLPURGE JCL is provided in standard.

Its purpose is to purge the WS workstation work file (its size is 150 cylinders, to allow voluminous requests), the PA PAF work file, and the LB job execution report file.

It is recommended to execute this JCL daily or to insert it in the CICS startup to prevent a possible problem in online mode.

SQL sources for access to DB2 catalog

With the B......GN... choice, the system generates the SQL and calls the SQL update module: BVPRS12.

The BVPRS12 SQL update load-module is automatically provided by SMP/E in the hlq.SBVPSRC PDS. It just allows the online use but does not perform updates.

To benefit from the update functions, you must download the BVPRS12 source from the VisualAge Pacbase Support: http://www.ibm.com/software/awdtools/vapacbase/support.htm. You must adapt it and install it as any standard DB2 program:

- Pre-processor preparation, resulting in a COBOL source and a DBRM (same name as the COBOL source).

- Compilation and link-edit of the COBOL source, resulting in an executable program (BVPRS12).

The plan is built with the DBRM, using the TSO DB2I application (this being the BIND operation).

The CICS RCT table is updated with the development Database transaction code and the code of the plan previously built.

Special authorizations

The TSO userid used for the BIND must allow for the consultation of the following catalog tables:
- SYSIBM.SYSDATABASE
- SYSIBM.SYSTABLESPACE
- SYSIBM.SYSTABLES
- SYSIBM.SYSCOLUMNS

Notes:
- Updates are performed via SQL dynamic statements.
- DB2 tables or views which are accessed or updated are not qualified, i.E. the user's CICS Userid will implicitly qualify the DB2 object's name.

CICS Complements for EXCI

This step is to be executed only on the sites which use SCM.

You will have to check that the EXCI interface for the communication with the CICS system is operational.

If this is not the case, you will have to make sure that the CICS is started with the ISC=YES option and you will have to define a "SESSION/CONNECTION" set by executing the EC00CSD JCL as follows:

Execution JCL

```
//$PRFJ.E0 JOB ($CCPT),'SYSTEM DFHCEXCI',CLASS=$CLASSJ,
//      MSGCLASS=$MSGCL
//********************************************************************
//* VISUALAGE PACBASE                                               *
//*                                                                 *
//*               INSTALLATION - CICSCSD                            *
//*            EXCI: CSD BATCH UPDATE SYSTEM                         *
//********************************************************************
//DFHCSDUP EXEC PGM=DFHCSDUP
//STEPLIB  DD DSN=$CSDL,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//DFHCSD   DD DSN=$DFHCSD,DISP=SHR
//SYSIN    DD *
```

```
******************************************************************
DEFINE CONNECTION($EXCN) GROUP($GROUE)
       ACCESSMETHOD(IRC) PROTOCOL(EXCI) CONNTYPE(GENERIC)
       SINGLESESS(NO) DATASTREAM(USER) RECORDFORMAT(U)
       QUEUELIMIT(NO) MAXQTIME(NO) AUTOCONNECT(NO)
       INSERVICE(YES) ATTACHSEC(LOCAL)
       BINDSECURITY(NO) USEDFLTUSER(NO) XLNACTION(KEEP)
DEFINE SESSIONS($EXSS) GROUP($GROUE)
       CONNECTION($EXCN) PROTOCOL(EXCI) MAXIMUM(0,0)
       RECEIVEPFX($EXPF) RECEIVECOUNT(5) SENDSIZE(4096)
       RECEIVESIZE(4096) SESSPRIORITY(0) AUTOCONNECT(NO)
       BUILDCHAIN(YES) USERAREALEN(0) IOAREALEN(4096,4096)
       RELREQ(NO) DISCREQ(NO) NEPCLASS(0)
       RECOVOPTION(SYSDEFAULT)
******************************************************************
ADD GROUP($GROUE) LIST($LIST)
```

Security Systems Interface

Introduction

Security systems provide a mechanism for data access control. They perform
user identification and verification, and they control resource access
authorizations.

The Security System Interface is designed to ensure the communication of
these controls between the security system installed on site and VA Pac.

In order to ensure a standardized control for all security systems, VA Pac is
not directly interfaced with the security system, but with SAF (System
Authorization Facility), via the RACROUTE macro-instructions for RACF or
the TSS macro-instructions for TOPSECRET.

To enable the communication between the security system and VA Pac, two
types of operations are required: the first ones must be performed in the
Administrator workbench module, and the others in the security system.

- From the Administrator workbench module

  You must change the access key, define the type of security system used
  (RACF or TOPSECRET) and the class in which VA Pac logical resources are
  defined.

  For more information, consult the Administrator & Developer workbench
  User's Guide , Chapter "Prior Administration Actions ", and the online help
  of Administrator workbench, on the "Access Key" and "Security" browsers.

- From the security system

  You must perform the following operations:

  – create a RACF or TOPSECRET resource class in accordance with the
    security system chosen.

To allow the security system to work properly, all the VA Pac logical resources are associated with a RACF or TOPSECRET class.

The VA Pac logical resources correspond to all the possible access authorizations for each library.

– create resources in RACF or TOPSECRET.

This operation consists in defining, in the RACF or TOPSECRET tables, the access authorizations to the VA Pac libraries if you want a complete control of resources from RACF or TOPSECRET.

– specify the user access authorizations to the resources either by using commands, or by installing sub-programs.

Implementation for RACF

- Operating mode of the RACF interface in online mode:

  - In 'dumb' terminal mode, the following processing is performed:

  Retrieval of the CICS login user code via an 'EXEC CICS ASSIGN' and display of this user code on the VisualAge Pacbase login screen.

  If the user can connect with a user code other than that used for the CICS login, the User and Password fields become input fields. The existence of the 'User/Password' is checked in RACF tables as soon as the user code entered differs from that of the CICS login.

  For a login via the workbench, the existence of the 'User/password' is checked in RACF tables.

  Possible error messages:

  9127 Unknown user (unknown to RACF)

  9128 Wrong password

  9129 Revoked user

  9126 Security system: connection problem (any other error on the 'User/password' check)

- Operating mode of the RACF interface in batch mode:

  The following processing is performed:

  1) Retrieval of the TSO system login user code, and checking, in the Administration Database, that this code is authorized to submit the procedure.

  Possible error if the user is not authorized:

  8296 User not authorized for this procedure

  2) For each '*' line:

  - If the user code is entered (different from blank), the BVPSECUR batch RACF sub-program (declared in the system via a SVC service) checks the validity of the 'User/password' in this '*' line.

  Possible errors:

9127 Unknown user (unknown to RACF)

9128 Wrong password

9129 Revoked user

9126 Security system: connection problem (any other error on the 'User/password' check)

- If the user code on the '*' line is set to 'blank', the user code of the TSO login is retrieved, and there is no RACF check on the 'User/password'.

3) For the procedures where a library code is specified on the '*' line (GPRT, EXTR, UPDT ...), the user/resource VA Pac authorizations on the library are checked.

Possible error if the user is not authorized:

2546 Unauthorized access to this library

There are always two control levels:

- the VA Pac user is the user of the system (RACF)
- the resources (Library-Authorization level) are managed in RACF.

Creation of resources

Resources are created with the 'RDEFINE' procedure.

Definition of resources

- Definition of the resource class

  The resource class is defined via the ICHERCDE and ICHRFRTB macros:

  cccc ICHERCDE CLASS=cccc, ID=128, MAXLNTH=4, FIRST=ALPHANUM, OTHER=ANY, POSIT=25, OPER=NO

  cccc ICHRFRTB CLASS=cccc,ACTION=RACF

  with cccc as the code of the RACF resource class dedicated to VA Pac.

- Definition of the access authorizations to the resources

  These authorizations must be assigned using PERMIT as follows:

  PERMIT 4$P CLASS(cccc) ID(user) ACCESS(ALTER) for VA Pac Administrators

  PERMIT nLLL CLASS(cccc) ID(user) ACCESS(ALTER), n varies from 0 to 3 and corresponds to the VA Pac authorization level on the LLL library.

  Online mode requests

  In online mode, a command allows to execute a RACF request to determine the user access authorizations to the resources ('EXEC QUERY SECURITY' in the BVPRACF control sub-program).

  Batch requests

Contrary to the online mode, there is no command you could use to execute a RACF request: therefore, you must execute the RACF request via an assembler sub-program.

This BVPSECUR sub-program is provided by SMP/E in the hlq.SBVPMBR8 PDS.

Moreover, you must install an SVC in the LPA library.

To do so, you must:

1. Declare the SVC with the appropriate routine number.

Example for number 232: in SYS1.PARMLIB(IEASVC00), add the line SVCPARM 232,REPLACE,TYPE(3),EPNAME(IGC0023B) where IGC0023B is the name of the SVC load module.

2. Link the BVPSECUR object module to create the name of the load module.

3. Add this load module name in the SVC load system library.

4. ZAP the BVPSECB VA Pac module with the chosen SVC routine number.

5. After the LPA library update, you must execute an IPL CLPA to take the modifications into account.

The E10RACF sample JCL, that is supplied with the installation JCLs, performs steps 2 and 3, and the E11RACF JCL executes step 4.

Then, you must check whether the user is authorized to run the procedure. In case of a multi-user procedure (UPDT for instance), each identification line triggers the control of the user's authorization on the library.

Implementation for TOPSECRET

The sources of the sub-programs (assembler) which allow the access to the TOPSECRET tables are supplied by SMP/E in the hlq.SBVPSRC PDS and must be compiled.

COMPILATION OF THE ACCESS SUB-PROGRAMS

For the compilation of BVPTSS and BVPTSSC, the "OPMAT" TSS library must be specified in the SYSLIB line of the Assembler compilation program.

BVPTSSC is a CICS program. It must be translated before being compiled and link-edited.

BVPTSSC and the TSSCAI program (Computer Associates) must be declared in the CICS CDS. They must be loaded in one of the DFHRPL's load-module library .

CREATION OF RESOURCES

TSS ADD(dept-name) cccc(nlib) cccc(nlib) ...

dept-name = department name

n = authorization level

lib = Library code

cccc = Resource class

EXAMPLE

Let a Database, with two Libraries BI1 and BI2. The resource class will be, for access authorizations to Libraries:
```
4BI1 3BI1 2BI1 1BI1 0BI1 4BI2 3BI2 2BI2 1BI2 0BI2
```

Note: there is no difference between the global authorization and the database authorization, for this latter does not exist in the Security System Interface.

The resources corresponding to the general access authorization must be defined with a special Library code $$$:

```
4$$$ 3$$$ 2$$$ 1$$$ 0$$$
```

Since '*' is the generic character for the security system, the Inter-Library '***' mode must be coded as '£££' (or '###' depending on the keyboard used).

There is another special library code $P, which is used to declare an administrator.

DEFINITION OF RESOURCES
- Definition of the resource class
  SS ADD (RDT) RESCLASS(cccc) RESCODE(xx)
  cccc = code of the resource class which corresponds to VA Pac
  xx = hexadecimal code indicating the type of resource
- Definition of access authorizations
  TSS PERMIT(user-code) cccc(nlib)
  TSS PERMIT(user-code) cccc(nlib)

VA Pacbase/Endevor TSO interface
Warning

The system preparation, installation and operation use some standard functions of the operating system and of VSAM. The user is entirely responsible for any adaptation which modifies the parameters entered upon installation (described in chapter 3).

In particular, all modifications on JCLs and executable modules' names etc., must be performed with caution. This kind of modifications often causes abnormal conditions which are sometimes difficult to detect.

In case of an incident during the execution of an installation phase, the phase must be started again from the beginning without any JCL modification of the specific JOBs.

Allocation of processors to the PROCESSOR GROUP

Reminder: The VA Pacbase Endevor system is constituted of two types of elements:
- 'VA Pac' type: All VA Pac entities (compilable or not) are stored in Endevor Types called 'VA Pac' types. Several 'VA Pac' types can be created.
- 'INFOPAC' type: Each VA Pac type element is associated with an 'INFOPAC' type, which is in its turn associated with this 'VA Pac' type. The 'INFOPAC' type is transparent to the user. It cannot be modified, except on some specified processors.

Three PROCESSOR GROUPs must be defined for the VA Pacbase Endevor system.

Two of these PROCESSOR GROUPs are allocated to each 'VA Pac' type and one is allocated to each 'INFOPAC' type.

These PROCESSOR GROUPs must be defined in the following way:
- Non-compilable VA Pac entities ('VA Pac' type)
  - PROCESSOR GROUP: (user-defined name)
  - GENERATE PROCESSOR: (5)
  - DELETE PROCESSOR: (2)
  - MOVE PROCESSOR: (3)
- Compilable VA Pac entities ('VA Pac' type)
  - PROCESSOR GROUP: (user-defined name)
  - GENERATE PROCESSOR: (1)
  - DELETE PROCESSOR: (2)
  - MOVE PROCESSOR: (3)
- Compilable or non-compilable VA Pac entities ('INFOPAC' type)
  - PROCESSOR GROUP: (user-defined name)

- GENERATE PROCESSOR: (4)
- DELETE PROCESSOR: *NOPROC*
- MOVE PROCESSOR: *NOPROC*

Where:

(1): 'PRCSGENP' member of the 'BVPSY' parameters PDS.

This processor compiles and link-edits the generated VA Pac entity, and creates its FOOTPRINT.

Note: This JCL must be adapted to the site standards before it is installed in the Endevor system; in particular the LOADTEST parameter must correspond to the user load-modules library.

(2): 'PRCSDELP' member of the 'BVPSY' parameters PDS.

This processor executes the DELETE action on the INFOPAC type associated with the VA Pac type (See the 'TYND' batch procedure). It also communicates to EXIT3 the VA Pac data of the element to be deleted. This data is contained in its homonym, but whose type is INFOPAC. EXIT3 then relates this data to the data of the Endevor context and prepares the VA Pac Database update transactions.

(3): 'PRCSMOVP' member of the 'BVPSY' parameters PDS.

This processor executes the MOVE action on the INFOPAC type associated with the VA Pac type: it transfers it from STAGE 1 to STAGE 2 (See 'TYND' batch procedure). It also communicates to EXIT3 the VA Pac data of the element to be transferred. This data is contained in its homonym, but whose type is INFOPAC. EXIT3 then relates this data to the data of the Endevor context and prepares VA Pac Database update transactions.

(4): 'PRCSGENI' member of the 'BVPSY' parameters PDS.

This processor executes the ADD action on the INFOPAC type associated with the VA Pac type. IT also modifies the compiled load module FOOTPRINT (when the entity is compilable) in order to allocate the FOOTPRINT of the current INFOPAC to it. It finally communicates to EXIT3 the VA Pac data of the element to be transferred. This data is contained in its homonym, but whose type is INFOPAC. EXIT3 then relates this data to the data of the Endevor context and prepares VA Pac Database update transactions.

Note: The LOADTEST parameter must correspond to the user load-modules library.

(5): 'PRCSGEPP' member of the 'BVPSY' parameters PDS.

This 'GENERATE' type processor is only used for the 'TRANSFER' action of a non-compilable VA Pac element. It generates and executes the 'TRANSFER' action of the 'INFOPAC' element.

Important: All these processors can be used without modification. They can also be customized to meet site's requirements. Proceed with caution and carefully follow the recommendations given in this manual (see Chapter 'Description of the Interface Elements', Subchapter 'Interface Processors' of the 'Endevor Reference Manual').

Installation of the system

Execute the six following JCLs:
- Zap on EXIT2 'C1UEXT02'.
- Loading of the system parameters' PDS.
- Initial preparation of files.
- Loading of EXITs in an authorized library
- Loading of TSO / VA Pacbase Endevor messages into the site ENDEVOR library.
- Retrieval from the 2.5 version (before executing this JOB, read carefully the "Retrieval" chapter in the "VA Pacbase Endevor TSO Reference Manual").

EXIT2 ZAP 'C1UEXT02'

D11ZXIT module: '$prfj.ZXIT' job

This job contains the following steps:

Step	Program	Comments
STEP01	IMASPZAP	EXIT2 ZAP. It concerns the member name of the VA Pacbase Endevor messages 'ISPMLIB' library. It must be executed only if the value chosen for the $MSGSXH parameter is other than 50.

Execution JCL
```
//$PRFJ.XIT JOB ($CCPT),'ZAP EXIT USER',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//**************************************************
//*        --- ZAP 'C1UEXT02' EXIT USER ---        *
//**************************************************
//*
//*------------------------------------------------*
```

```
//*              I M P O R T A N T              *
//*              -----------                    *
//*  IT IS NOT NECESSARY TO EXECUTE THIS JOB     *
//*     IF THE SUFFIX OF THE PACBASE USER MESSAGES  *
//*     MEMBER OF ENDEVOR 'ISPMLIB' LIBRARY CONTAINS *
//*     THE VALUE '50' (CHECK 'MSGSX' PARAMETER).    *
//*  IF THE SUFFIX IS MODIFIED, THIS STEP MUST BE    *
//*     EXECUTED. IN ORDER TO DO SO, THE 'MSGSHX'    *
//*     MUST BE CODED WITH THE CORRESPONDING HEXA-   *
//*     DECIMAL VALUE OF THE NEW SUFFIX.             *
//*     FOR INST: IF THE NEW SUFFIX IS: MSGSX='89',  *
//*              THE 'MSGSXH' PARAMETER MUST BE      *
//*              CODED: MSGSXH='F8F9'.               *
//*-----------------------------------------------*
//*
//STEP01  EXEC PGM=IMASPZAP
//SYSLIB   DD DSN=$HLQ..SBVPMBR8,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
 NAME C1UEXT02 C1UEXT02
 VER 0303 F5F0
 REP 0303 $MSGSXH
//*
//
```

Loading of the system parameters' PDS

D12SY module: '$prfj.SY' job

This job contains an IEBUPDTE of the following members:
- Input dedicated to SORT utilities
- Definitions (DELETE/DEFINE), verifications (VERIFY) and REPRO of VSAM files
- BLBVPQU member which contains the building command of the 'QU' backup index of the 'UQ' VA Pac update file.
- 'ISPLOGON' member which contains the 3 VSAM files used by the VA Pacbase Endevor system. They must be defined in the TSO procedure of the user LOGON.
- 'ISPF' member which contains the allocation of the Exits trace file. Since its contents are specific to each user, it must be copied in the ISPF connection procedure.
- 'CIUU$msgsx' member (see the meaning of '$MSGSX' parameter in the table of parameters). It contains the TSO messages of the VA Pacbase Endevor system and is copied in the Endevor 'ISPMLIB' library.
- 'PRCSGENI' member: JCL of the 'GENERATE' type processor for 'INFOPAC'-type ELEMENTS (1)
- 'PRCSGENP' member: JCL of the 'GENERATE' type processor for 'VA Pac'-type ELEMENTS with compilation (1)

- 'PRCSGEPP' member: JCL of the 'GENERATE' type processor for 'VA Pac'-type ELEMENTS without compilation, related to the 'TRANSFER' action (1).
- 'PRCSDELP' member: JCL of the 'DELETE' type processor for 'VA Pac'-type ELEMENTS (see PHASE 1)
- 'PRCSMOVP' member: JCL of the 'MOVE' type processor for 'VA Pac'-type ELEMENTS (1)

(1) 'see Allocation of processors to the PROCESSOR GROUP'

Execution JCL

```
//$PRFJ.SY JOB ($CCPT),'LOAD PARAM.',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*
//***************************************************************
//*        LOADING PACBASE-ENDEVOR PARAMETERS IN 'SY' PDS      *
//***************************************************************
//*
//*    *-------------------------------------------------*
//*    *               I M P O R T A N T                 *
//*    *               -----------                       *
//*    *        BEFORE EXECUTING THIS JOB, REPLACE ALL   *
//*    *              ':/' BY './' VIA THE EDITOR.        *
//*    *-------------------------------------------------*
//*
//*
//ET010   EXEC PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD SYSOUT=$OUT
//SYSUT1   DD DSN=$INDSN..BVPSY,DISP=SHR
//SYSUT2   DD DSN=$INDSN..BVPSY,DISP=SHR
//SYSIN    DD DATA,DLM='F+'
:/ ADD NAME=DFBVPNJ
 DELETE ($INDSVE..BVPNJ) CLUSTER
 DEFINE CLUSTER ( NAME ($INDSVE..BVPNJ)       -
                  SHR (2)        NUMBERED      -
                  VOL ($VOLSV)   REC (310)     -
                  RECSZ (310,310) RUS )        -
        DATA    ( NAME ($INDSVE..BVPNJ.D)      -
                  CISZ (4096) ) /*: CATALOG ($CATU) */
:/ ADD NAME=DFBVPTS
 DELETE ($INDSVE..BVPTS) CLUSTER
 DEFINE CLUSTER ( NAME ($INDSVE..BVPTS)       -
                  SHR (2 3)       KEYS (14 1)  -
                  VOL ($VOLSV)   REC (100)     -
                  RECSZ (080,080) RUS )        -
        INDEX   ( NAME ($INDSVE..BVPTS.I)      -
                  CISZ (4096) )                -
        DATA    ( NAME ($INDSVE..BVPTS.D)      -
                  FSPC (10,5)                  -
                  CISZ (4096) ) /*: CATALOG ($CATU) */
:/ ADD NAME=DFBVPTY
 DELETE ($INDSVE..BVPTY) CLUSTER
```

```
        DEFINE CLUSTER ( NAME ($INDSVE..BVPTY)          -
                         SHR (2,3)       KEYS (8,1)     -
                         REC  (150)                     -
                         VOL ($VOLSV)                   -
                         RECSZ (080,080) RUS )          -
             INDEX   ( NAME ($INDSVE..BVPTY.I)          -
                         CISZ (4096) )                  -
             DATA    ( NAME ($INDSVE..BVPTY.D)          -
                         FSPC (10,5)                    -
                         CISZ (4096) )  /*: CATALOG ($CATU) */
:/ ADD NAME=DFBVPUP
 DELETE ($INDSVE..BVPUP) CLUSTER
 DEFINE CLUSTER ( NAME ($INDSVE..BVPUP)          -
                         SHR (2,3)       KEYS (43,0)    -
                         REC  (10000)                   -
                         VOL ($VOLSV)                   -
                         RECSZ (112,112) RUS )          -
             INDEX   ( NAME ($INDSVE..BVPUP.I)          -
                         CISZ (4096) )                  -
             DATA    ( NAME ($INDSVE..BVPUP.D)          -
                         FSPC (10,5)                    -
                         CISZ (4096) )  /*: CATALOG ($CATU) */
:/ ADD NAME=DFBVPUQ
 DELETE ($INDSVE..BVPUQ) CLUSTER
 DEFINE CLUSTER ( NAME ($INDSVE..BVPUQ)          -
                         SHR (2,3)       NUMBERED      -
                         REC  (10000)                   -
                         VOL ($VOLSV)                   -
                         RECSZ (170,170) RUS )          -
             DATA    ( NAME ($INDSVE..BVPUQ.D)          -
                         CISZ (4096) )  /*: CATALOG ($CATU) */
:/ ADD NAME=DFBVPUU
 DELETE ($INDSVE..BVPUU) CLUSTER
 DEFINE CLUSTER ( NAME ($INDSVE..BVPUU)          -
                         SHR (2,3)       NUMBERED      -
                         REC  (10000)                   -
                         VOL ($VOLSV)                   -
                         RECSZ (170,170) RUS )          -
             DATA    ( NAME ($INDSVE..BVPUU.D)          -
                         CISZ (4096) )  /*: CATALOG ($CATU) */
:/ ADD NAME=DLBVPUU
 DELETE ($INDSVE..BVPUU) CLUSTER
:/ ADD NAME=DLBVPNJ
 DELETE ($INDSVE..BVPNJ) CLUSTER
:/ ADD NAME=VERIFTY
 VERIFY FILE (PAC7TY)
:/ ADD NAME=BLBVPQU
   DEFINE GENERATIONDATAGROUP -
         (NAME ($INDUNE..BVPQU) LIMIT (3) SCR)
:/ ADD NAME=ISPLOGON
//*
//* THE FOLLOWING THREE FILES MUST BE DECLARED
//* INTO THE USER TSO LOGON PROCEDURE.
//*
//IKJ     EXEC PGM=IKJEFT01, ...
```

```
    .
    .
//PAC7TY   DD DSN=$INDSVE..BVPTY,DISP=SHR
//PAC7UP   DD DSN=$INDSVE..BVPUP,DISP=SHR
//PAC7UQ   DD DSN=$INDSVE..BVPUQ,DISP=SHR
    .
    .
//
:/ ADD NAME=ISPF
//*
//* EXITS TRACE FILE ALLOCATION MUST BE DECLARED
//* INTO THE USER ISPF CONNECTION PROCEDURE.
//*
CONTROL MAIN NOMSG
SET &PTRACE = &STR('$INDUNE..&SYSUID..PTRACE')
FREE  FI(PTRACE)
ALLOC FI(PTRACE) SHR REU DA(&PTRACE)
IF &LASTCC > 0 THEN DO
   FREE ATTRLIST(DCBTRACE)
   ATTR DCBTRACE  RECFM(F B) LRECL(120) BLKSIZE(12000) DSORG(PS)
   ALLOC FI(PTRACE) DA(&PTRACE) SPACE(20,10) TRACKS USING(DCBTRACE)
   FREE  FI(PTRACE)
   ALLOC FI(PTRACE) SHR REU DA(&PTRACE)
END
:/ ADD NAME=CIUU$MSGSX
CIUU$MSGSX.1E     'INVALID TYPE (INFOPAC) ' .ALARM = YES .HELP = *
'''INFOPAC'' TYPE ELEMENTS ARE NOT ALLOWED FOR UPDATING
CIUU$MSGSX.2E     'INVALID ACTION (PACBASE)' .ALARM = YES .HELP = *
'ACTIONS ''ADD & UPDATE'' ARE NOT ALLOWED FOR PACBASE OUT OF PROCESSOR
CIUU$MSGSX.3E     'INVALID ACTION (PACBASE)' .ALARM = YES .HELP = *
'ONLY ACTIONS ''ADD & UPDATE'' ARE ALLOWED FOR PACBASE THROUGH PROCESSO
:/ ADD NAME=PRCSGENI
//*
//*----------------------------------------------------------------*
//* G E N E R A T E    P R O C E S S O R        (INFOPAC TYPE)  *
//*----------------------------------------------------------------*
//*
//GENI    PROC ROOTPGM='BV',
//            STEPLIB='$HLQ..SBVPMBR8',
//            OUT='$OUT',
//            TY='$INDSVE..BVPTY',
//            UP='$INDSVE..BVPUP',
//            LOADTEST='???'
//*
//GEN00   EXEC PGM=BC1PDSIN,MAXRC=0,
//        EXECIF=(&C1COMMENT(36,5),NE,'*RND*')
//GEN02A   DD DSN=&&SYSOUT1,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//GEN02B   DD DSN=&&SYSDMP1,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//GEN03A   DD DSN=&&SYSOUT2,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
```

```
//GEN04A    DD DSN=&&SYSOUT3,DISP=(,PASS,DELETE),UNIT=SYSDA,
//             DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//             SPACE=(TRK,(5,5),RLSE)
//GEN04B    DD DSN=&&SYSDMP3,DISP=(,PASS,DELETE),UNIT=SYSDA,
//             DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//             SPACE=(TRK,(5,5),RLSE)
//*
//GEN0A    EXEC PGM=IEBCOPY,MAXRC=4,
//         EXECIF=(&C1COMMENT(36,5),NE,'*RND*')
//SYSPRINT DD SYSOUT=&OUT
//SYSUT3   DD UNIT=SYSDA,SPACE=(TRK,30)
//SYSUT4   DD UNIT=SYSDA,SPACE=(TRK,30)
//IN       DD DSN=&LOADTEST,DISP=SHR
//OUT      DD DSN=&&TEMP,DISP=(,PASS),UNIT=SYSDA,
//             DCB=(RECFM=U,BLKSIZE=6144),
//             SPACE=(TRK,(10,10,10),RLSE)
//SYSIN    DD *
 C O=OUT,I=IN
 S M=((&C1ELEMENT,,R))
//*
//GEN0B    EXEC PGM=BSTCOPY,MAXRC=0,COND=(00,NE,GEN0A),
//         EXECIF=(&C1COMMENT(36,5),NE,'*RND*')
//SYSPRINT DD SYSOUT=&OUT
//IN       DD DSN=&&TEMP,DISP=(OLD,DELETE)
//OUT      DD DSN=&LOADTEST,DISP=SHR,FOOTPRNT=CREATE
//SYSIN    DD *
 C O=OUT,I=IN
 S M=((&C1ELEMENT,,R))
//*
//GEN01    EXEC PGM=&ROOTPGM.PNTRAN,
//         EXECIF=(&C1COMMENT(36,5),NE,'*RND*'),
//             PARM=(&C1ACTION(1,8,_)&C1ENVMNT(1,8,_),
//             &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//             &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_)I)
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7PU   DD DSN=&UP,DISP=SHR
//PAC7TR   DD DSN=&&PAC7TR,DISP=(,PASS),UNIT=SYSDA,
//             DCB=(RECFM=FB,LRECL=58,BLKSIZE=58),
//             SPACE=(TRK,(01,01),RLSE)
//*
//GEN02    EXEC PGM=&ROOTPGM.PNPR10,MAXRC=0,
//         EXECIF=(&C1COMMENT(36,5),NE,'*RND*'),
//             PARM=(&C1ACTION(1,8,_)&C1ENVMNT(1,8,_),
//             &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//             &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_))
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SYSIN    DD DSN=&&PAC7TR,DISP=(OLD,DELETE)
//PAC7TZ   DD DSN=&TY,DISP=SHR
//PAC7BS   DD DUMMY,DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080)
//PAC7CW   DD DSN=&&CONWIN,DISP=(,PASS),UNIT=SYSDA,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//             SPACE=(TRK,(01,01),RLSE)
//PAC7EV   DD DSN=&&PAC7EV,DISP=(,PASS),UNIT=SYSDA,
//             DCB=(RECFM=FB,LRECL=126,BLKSIZE=12600),
//             SPACE=(TRK,(01,01),RLSE)
```

```
//SYSOUT   DD DSN=&&SYSOUT1,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP1,DISP=(MOD,PASS)
//*
//*----------------------------------------------------*
//*  PRINT 'INFOPAC' MEMBER OF THE ORIGINAL STAGE      *
//*   INTO SEQUENTIAL FILE 'PAC7IP'                    *
//*----------------------------------------------------*
//*
//GEN03    EXEC PGM=CONWRITE,MAXRC=0,
//         EXECIF=(&C1COMMENT(36,5),NE,'*RND*')
//CONWIN   DD DSN=&&CONWIN,DISP=(OLD,DELETE)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(,PASS),UNIT=SYSDA,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(02,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT2,DISP=(MOD,PASS)
//*
//*----------------------------------------------------*
//*  COPY SEQUENTIAL 'PAC7IP' IN THE VSAM 'PAC7UP'     *
//*   DEFINED IN TSO WITH A NEW DDNAME FOR EXIT3       *
//*----------------------------------------------------*
//*
//GEN04    EXEC PGM=&ROOTPGM.PNPR11,COND=(00,NE,GEN02),
//         EXECIF=(&C1COMMENT(36,5),NE,'*RND*')
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7EV   DD DSN=&&PAC7EV,DISP=(OLD,PASS)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(OLD,PASS)
//PAC7PU   DD DSN=&UP,DISP=SHR
//SYSOUT   DD DSN=&&SYSOUT3,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP3,DISP=(MOD,PASS)
//*
//*----------------------------------------------------*
//*           PRINT SYSOUTS, SYSUDUMP, ...             *
//*----------------------------------------------------*
//*
//GEN05    EXEC PGM=CONLIST,PARM=PRINT,COND=EVEN,MAXRC=0,
//         EXECIF=((&C1COMMENT(36,5),NE,'*IBM*'),
//                 (&C1COMMENT(36,5),NE,'*RND*'))
//C1BANNER DD DSN=&&BANNER,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            SPACE=(TRK,(1,1),RLSE)
//C1PRINT  DD SYSOUT=&OUT,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171,DSORG=PS)
//LIST01   DD DSN=&&SYSOUT1,DISP=(OLD,DELETE)
//LIST02   DD DSN=&&SYSDMP1,DISP=(OLD,DELETE)
//LIST03   DD DSN=&&SYSOUT2,DISP=(OLD,DELETE)
//LIST04   DD DSN=&&SYSOUT3,DISP=(OLD,DELETE)
//LIST05   DD DSN=&&SYSDMP3,DISP=(OLD,DELETE)
//*
:/ ADD NAME=PRCSGEPP
//*
//*------------------------------------------------------------------*
//*  G E N E R A T E   P R O C E S S O R          (PACBASE TYPE) *
//*------------------------------------------------------------------*
//*
//GEPP     PROC ROOTPGM='BV',
//              STEPLIB='$HLQ..SBVPMBR8',
```

```
//              OUT='$OUT',
//              TY='$INDSVE..BVPTY',
//              UP='$INDSVE..BVPUP'
//*
//TRS01   EXEC PGM=BC1PDSIN,MAXRC=0,
//        EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//              (&C1ACTION(1,4),NE,'MOVE'),
//              (&C1ACTION(1,6),NE,'UPDATE'))
//TRS03A   DD DSN=&&SYSOUT1,DISP=(,PASS,DELETE),UNIT=SYSDA,
//           DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//           SPACE=(TRK,(5,5),RLSE)
//TRS03B   DD DSN=&&SYSDMP1,DISP=(,PASS,DELETE),UNIT=SYSDA,
//           DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//           SPACE=(TRK,(5,5),RLSE)
//TRS04A   DD DSN=&&SYSOUT2,DISP=(,PASS,DELETE),UNIT=SYSDA,
//           DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//           SPACE=(TRK,(5,5),RLSE)
//TRS05A   DD DSN=&&SYSOUT3,DISP=(,PASS,DELETE),UNIT=SYSDA,
//           DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//           SPACE=(TRK,(5,5),RLSE)
//TRS05B   DD DSN=&&SYSDMP3,DISP=(,PASS,DELETE),UNIT=SYSDA,
//           DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//           SPACE=(TRK,(5,5),RLSE)
//*
//TRS02   EXEC PGM=&ROOTPGM.PNTRAN,
//        EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//              (&C1ACTION(1,4),NE,'MOVE'),
//              (&C1ACTION(1,6),NE,'UPDATE')),
//           PARM=(&C1ACTION(1,8,_),&C1ENVMNT(1,8,_),
//           &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//           &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_)G)
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7PU   DD DSN=&UP,DISP=SHR
//PAC7TR   DD DSN=&&PAC7TR,DISP=(,PASS),UNIT=SYSDA,
//           DCB=(RECFM=FB,LRECL=58,BLKSIZE=58),
//           SPACE=(TRK,(01,01),RLSE)
//*
//TRS03   EXEC PGM=&ROOTPGM.PNPR10,
//        EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//              (&C1ACTION(1,4),NE,'MOVE'),
//              (&C1ACTION(1,6),NE,'UPDATE')),
//           PARM=(&C1ACTION(1,8,_),&C1ENVMNT(1,8,_),
//           &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//           &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_))
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SYSIN    DD DSN=&&PAC7TR,DISP=(OLD,DELETE)
//PAC7TZ   DD DSN=&TY,DISP=SHR
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(,PASS),UNIT=SYSDA,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//           SPACE=(TRK,(01,01),RLSE)
//PAC7CW   DD DSN=&&CONWIN,DISP=(,PASS),UNIT=SYSDA,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//           SPACE=(TRK,(01,01),RLSE)
//PAC7EV   DD DSN=&&PAC7EV,DISP=(,PASS),UNIT=SYSDA,
//           DCB=(RECFM=FB,LRECL=126,BLKSIZE=12600),
```

```
//              SPACE=(TRK,(01,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT1,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP1,DISP=(MOD,PASS)
//*
//*---------------------------------------------------*
//*  PRINT 'INFOPAC' MEMBER OF THE ORIGINAL STAGE     *
//*  INTO SEQUENTIAL FILE 'PAC7IP'                    *
//*---------------------------------------------------*
//*
//TRS04    EXEC PGM=CONWRITE,MAXRC=0,
//         EXECIF=(&C1ACTION(1,8),EQ,'GENERATE')
//CONWIN   DD DSN=&&CONWIN,DISP=(OLD,DELETE)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(,PASS),UNIT=SYSDA,
//              DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//              SPACE=(TRK,(02,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT2,DISP=(MOD,PASS)
//*
//*---------------------------------------------------*
//*  COPY SEQUENTIAL 'PAC7IP' IN THE VSAM 'PAC7UP'    *
//*  DEFINED IN TSO WITH A NEW DDNAME FOR  EXIT3      *
//*---------------------------------------------------*
//*
//TRS05    EXEC PGM=&ROOTPGM.PNPR11,COND=(00,NE,TRS03),
//         EXECIF=(&C1ACTION(1,8),EQ,'GENERATE')
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7EV   DD DSN=&&PAC7EV,DISP=(OLD,PASS)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(OLD,PASS)
//PAC7PU   DD DSN=&UP,DISP=SHR
//SYSOUT   DD DSN=&&SYSOUT3,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP3,DISP=(MOD,PASS)
//*
//*---------------------------------------------------*
//*          TRANSFER 'INFOPAC' ELEMENT               *
//*---------------------------------------------------*
//*
//TRS06    EXEC PGM=C1BM3000,PARM=(PAC7BS,CXMSGSX),
//         EXECIF=(&C1ACTION(1,8),EQ,'TRANSFER')
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(OLD,PASS)
//CXMSGSX  DD SYSOUT=&OUT
//*
//*---------------------------------------------------*
//*          PRINT SYSOUTS, SYSUDUMP, ...             *
//*---------------------------------------------------*
//*
//TRS07    EXEC PGM=CONLIST,PARM=PRINT,COND=EVEN,MAXRC=0,
//         EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//              (&C1ACTION(1,4),NE,'MOVE'),
//              (&C1ACTION(1,6),NE,'UPDATE'))
//C1BANNER DD DSN=&&BANNER,DISP=(,PASS,DELETE),UNIT=SYSDA,
//              SPACE=(TRK,(1,1),RLSE)
//C1PRINT  DD SYSOUT=&OUT,
//              DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171,DSORG=PS)
//LIST01   DD DSN=&&SYSOUT1,DISP=(OLD,DELETE)
//LIST02   DD DSN=&&SYSDMP1,DISP=(OLD,DELETE)
//LIST03   DD DSN=&&SYSOUT2,DISP=(OLD,DELETE)
```

```
//LIST04   DD DSN=&&SYSOUT3,DISP=(OLD,DELETE)
//LIST05   DD DSN=&&SYSDMP3,DISP=(OLD,DELETE)
//*
:/ ADD NAME=PRCSGENP
//*
//*------------------------------------------------------------------*
//* G E N E R A T E (LOAD) P R O C E S S O R    (PACBASE TYPE) *
//*------------------------------------------------------------------*
//*
//GENP    PROC ROOTPGM='BV',
//             STEPLIB='$HLQ..SBVPMBR8',
//             OUT='$OUT',
//             TY='$INDSVE..BVPTY',
//             UP='$INDSVE..BVPUP',
//             LOADTEST='???'
//*
//CNWRITE EXEC PGM=CONWRITE
//ELMSRC   DD DSN=&&ELMSRC,UNIT=SYSDA,DISP=(,PASS),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=400),
//            SPACE=(TRK,(15,15),RLSE)
//CONWIN   DD *
  WRITE ELEMENT          &C1ELEMENT
       FROM ENVIRONMENT &C1ENVMNT
            SYSTEM       &C1SYSTEM
            SUBSYSTEM    &C1SUBSYS
            TYPE         &C1ELTYPE
            STAGE        &C1STGID
       TO   DDN          ELMSRC.
//*
//COB    EXEC PGM=IGYCRCTL,MAXRC=04,
//            PARM='NOTERM,NOLIST,NOVBREF,NOOPT,NOTEST,NOXREF,APOST'
//*TEPLIB  DD DSNAME=CEE.SCEERUN,DISP=SHR
//SYSUT1   DD UNIT=SYSDA,SPACE=(CYL,(1,1)),DISP=(,DELETE)
//SYSUT2   DD UNIT=SYSDA,SPACE=(CYL,(1,1)),DISP=(,DELETE)
//SYSUT3   DD UNIT=SYSDA,SPACE=(CYL,(1,1)),DISP=(,DELETE)
//SYSUT4   DD UNIT=SYSDA,SPACE=(CYL,(1,1)),DISP=(,DELETE)
//SYSUT5   DD UNIT=SYSDA,SPACE=(CYL,(1,1)),DISP=(,DELETE)
//SYSUT6   DD UNIT=SYSDA,SPACE=(CYL,(1,1)),DISP=(,DELETE)
//SYSUT7   DD UNIT=SYSDA,SPACE=(CYL,(1,1)),DISP=(,DELETE)
//SYSIN    DD DSN=&&ELMSRC,DISP=(OLD,DELETE)
//SYSLIN   DD DSN=&&LOADSET,UNIT=SYSDA,DISP=(MOD,PASS),
//            SPACE=(400,(500,200)),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//SYSPRINT DD SYSOUT=&OUT
//*
//LKED    EXEC PGM=HEWL,PARM=(LIST,LET,XREF),MAXRC=04
//**       COND=(4,LT,COB)
//SYSLIB   DD DSNAME=CEE.SCEELKED,DISP=SHR
//         DD DSN=&LOADTEST,DISP=SHR
//SYSLIN   DD DSNAME=&&LOADSET,DISP=(OLD,DELETE)
//         DD *,DCB=BLKSIZE=80
 NAME &C1ELEMENT(R)
//SYSLMOD  DD DSN=&LOADTEST,DISP=SHR,FOOTPRNT=CREATE
//SYSUT1   DD UNIT=SYSDA,SPACE=(1024,(50,20))
//SYSPRINT DD SYSOUT=&OUT
```

```
//*
//TRS00    EXEC PGM=BC1PDSIN,MAXRC=0,
//         EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//                 (&C1ACTION(1,4),NE,'MOVE'),
//                 (&C1ACTION(1,6),NE,'UPDATE'))
//TRS02A   DD DSN=&&SYSOUT1,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//TRS02B   DD DSN=&&SYSDMP1,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//TRS03A   DD DSN=&&SYSOUT2,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//TRS04A   DD DSN=&&SYSOUT3,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//TRS04B   DD DSN=&&SYSDMP3,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//*
//TRS01    EXEC PGM=&ROOTPGM.PNTRAN,
//         EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//                 (&C1ACTION(1,4),NE,'MOVE'),
//                 (&C1ACTION(1,6),NE,'UPDATE')),
//         PARM=(&C1ACTION(1,8,_),&C1ENVMNT(1,8,_),
//               &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//               &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_)G)
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7PU   DD DSN=&UP,DISP=SHR
//PAC7TR   DD DSN=&&PAC7TR,DISP=(,PASS),UNIT=SYSDA,
//            DCB=(RECFM=FB,LRECL=58,BLKSIZE=58),
//            SPACE=(TRK,(01,01),RLSE)
//*
//TRS02    EXEC PGM=&ROOTPGM.PNPR10,
//         EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//                 (&C1ACTION(1,4),NE,'MOVE'),
//                 (&C1ACTION(1,6),NE,'UPDATE')),
//          PARM=(&C1ACTION(1,8,_),&C1ENVMNT(1,8,_),
//               &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//               &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_))
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SYSIN    DD DSN=&&PAC7TR,DISP=(OLD,DELETE)
//PAC7TZ   DD DSN=&TY,DISP=SHR
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(,PASS),UNIT=SYSDA,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(01,01),RLSE)
//PAC7CW   DD DSN=&&CONWIN,DISP=(,PASS),UNIT=SYSDA,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(01,01),RLSE)
//PAC7EV   DD DSN=&&PAC7EV,DISP=(,PASS),UNIT=SYSDA,
//            DCB=(RECFM=FB,LRECL=126,BLKSIZE=12600),
//            SPACE=(TRK,(01,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT1,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP1,DISP=(MOD,PASS)
```

```
//*
//*-------------------------------------------------*
//*  PRINT 'INFOPAC' MEMBER OF THE ORIGINAL STAGE   *
//*  INTO SEQUENTIAL FILE 'PAC7IP'                  *
//*-------------------------------------------------*
//*
//TRS03   EXEC PGM=CONWRITE,MAXRC=0,
//        EXECIF=(&C1ACTION(1,8),EQ,'GENERATE')
//CONWIN  DD DSN=&&CONWIN,DISP=(OLD,DELETE)
//PAC7IP  DD DSN=&&PAC7IP,DISP=(,PASS),UNIT=SYSDA,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//           SPACE=(TRK,(02,01),RLSE)
//SYSOUT  DD DSN=&&SYSOUT2,DISP=(MOD,PASS)
//*
//*-------------------------------------------------*
//*  COPY SEQUENTIAL 'PAC7IP' IN THE VSAM 'PAC7UP'  *
//*  DEFINED IN TSO WITH A NEW DDNAME FOR  EXIT3    *
//*-------------------------------------------------*
//*
//TRS04   EXEC PGM=&ROOTPGM.PNPR11,COND=(00,NE,TRS02),
//        EXECIF=(&C1ACTION(1,8),EQ,'GENERATE')
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7EV   DD DSN=&&PAC7EV,DISP=(OLD,PASS)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(OLD,PASS)
//PAC7PU   DD DSN=&UP,DISP=SHR
//SYSOUT   DD DSN=&&SYSOUT3,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP3,DISP=(MOD,PASS)
//*
//*-------------------------------------------------*
//*          TRANSFER 'INFOPAC' ELEMENT             *
//*-------------------------------------------------*
//*
//TRS05   EXEC PGM=C1BM3000,PARM=(PAC7BS,CXMSGSX),
//        EXECIF=(&C1ACTION(1,8),EQ,'TRANSFER')
//PAC7BS  DD DSN=&&BSTIPT01,DISP=(OLD,PASS)
//CXMSGSX DD SYSOUT=&OUT
//*
//*-------------------------------------------------*
//*          PRINT SYSOUTS, SYSUDUMP, ...           *
//*-------------------------------------------------*
//*
//TRS06   EXEC PGM=CONLIST,PARM=PRINT,COND=EVEN,MAXRC=0,
//        EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//              (&C1ACTION(1,4),NE,'MOVE'),
//              (&C1ACTION(1,6),NE,'UPDATE'))
//C1BANNER DD DSN=&&BANNER,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            SPACE=(TRK,(1,1),RLSE)
//C1PRINT  DD SYSOUT=&OUT,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171,DSORG=PS)
//LIST01   DD DSN=&&SYSOUT1,DISP=(OLD,DELETE)
//LIST02   DD DSN=&&SYSDMP1,DISP=(OLD,DELETE)
//LIST03   DD DSN=&&SYSOUT2,DISP=(OLD,DELETE)
//LIST04   DD DSN=&&SYSOUT3,DISP=(OLD,DELETE)
//LIST05   DD DSN=&&SYSDMP3,DISP=(OLD,DELETE)
//*
```

```
:/ ADD NAME=PRCSDELP
//*
//*------------------------------------------------------------------*
//* D E L E T E     P R O C E S S O R            (PACBASE TYPE)  *
//*------------------------------------------------------------------*
//*
//DELP    PROC ROOTPGM='BV',
//              STEPLIB='$HLQ..SBVPMBR8',
//              OUT='$OUT',
//              TY='$INDSVE..BVPTY',
//              UP='$INDSVE..BVPUP'
//*
//DEL00   EXEC PGM=BC1PDSIN,MAXRC=0
//DEL01A   DD DSN=&&SYSOUT1,DISP=(,PASS,DELETE),UNIT=SYSDA,
//              DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//              SPACE=(TRK,(5,5),RLSE)
//DEL01B   DD DSN=&&SYSDMP1,DISP=(,PASS,DELETE),UNIT=SYSDA,
//              DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//              SPACE=(TRK,(5,5),RLSE)
//DEL03A   DD DSN=&&SYSOUT2,DISP=(,PASS,DELETE),UNIT=SYSDA,
//              DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//              SPACE=(TRK,(5,5),RLSE)
//DEL03B   DD DSN=&&SYSDMP2,DISP=(,PASS,DELETE),UNIT=SYSDA,
//              DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//              SPACE=(TRK,(5,5),RLSE)
//*
//DEL01   EXEC PGM=&ROOTPGM.PNPR10,
//        EXECIF=(&C1COMMENT(36,5),NE,'*IBM*'),
//           PARM=(DELETE__,&C1ENVMNT(1,8,_),
//            &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//            &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_))
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SYSIN    DD DUMMY
//PAC7TZ   DD DSN=&TY,DISP=SHR
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(,PASS),UNIT=SYSDA,
//              DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//              SPACE=(TRK,(01,01),RLSE)
//PAC7CW   DD DSN=&&CONWIN,DISP=(,PASS),UNIT=SYSDA,
//              DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//              SPACE=(TRK,(01,01),RLSE)
//PAC7EV   DD DSN=&&PAC7EV,DISP=(,PASS),UNIT=SYSDA,
//              DCB=(RECFM=FB,LRECL=126,BLKSIZE=12600),
//              SPACE=(TRK,(01,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT1,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP1,DISP=(MOD,PASS)
//*
//*--------------------------------------------------*
//*  PRINT 'INFOPAC' MEMBER INTO SEQUENTIAL 'PAC7IP'  *
//*--------------------------------------------------*
//*
//DEL02   EXEC PGM=CONWRITE,MAXRC=12,
//        EXECIF=(&C1COMMENT(36,5),NE,'*IBM*')
//CONWIN   DD DSN=&&CONWIN,DISP=(OLD,DELETE)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(,PASS),UNIT=SYSDA,
//              DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
```

```
//             SPACE=(TRK,(02,01),RLSE)
//*
//*-------------------------------------------------*
//*  COPY SEQUENTIAL 'PAC7IP' IN VSAM 'PAC7UP'       *
//*  DEFINED UNDER TSO WITH ANOTHER DDNAME FOR EXIT3 *
//*-------------------------------------------------*
//*
//DEL03   EXEC PGM=&ROOTPGM.PNPR11,COND=(00,NE,DEL02),
//       EXECIF=(&C1COMMENT(36,5),NE,'*IBM*')
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7EV   DD DSN=&&PAC7EV,DISP=(OLD,PASS)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(OLD,PASS)
//PAC7PU   DD DSN=&UP,DISP=SHR
//SYSOUT   DD DSN=&&SYSOUT2,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP2,DISP=(MOD,PASS)
//*
//*-------------------------------------------------*
//*           DELETE 'INFOPAC' ELEMENT              *
//*-------------------------------------------------*
//*
//DEL04   EXEC PGM=C1BM3000,PARM=(PAC7BS,CXMSGSX),COND=(00,NE,DEL02),
//       EXECIF=((&C1ACTION,NE,GENERATE),
//               (&C1COMMENT(36,5),NE,'*IBM*'))
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(OLD,PASS)
//CXMSGSX  DD SYSOUT=&OUT
//*
//*-------------------------------------------------*
//*           PRINT SYSOUTS, SYSUDUMP, ...          *
//*-------------------------------------------------*
//*
//DEL05   EXEC PGM=CONLIST,PARM=PRINT,COND=EVEN,MAXRC=0,
//       EXECIF=(&C1COMMENT(36,5),NE,'*IBM*')
//C1BANNER DD DSN=&&BANNER,DISP=(,PASS,DELETE),UNIT=SYSDA,
//           SPACE=(TRK,(01,01),RLSE)
//C1PRINT  DD SYSOUT=&OUT,
//           DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171,DSORG=PS)
//LIST01   DD DSN=&&SYSOUT1,DISP=(OLD,DELETE)
//LIST02   DD DSN=&&SYSDMP1,DISP=(OLD,DELETE)
//LIST03   DD DSN=&&SYSOUT2,DISP=(OLD,DELETE)
//LIST04   DD DSN=&&SYSDMP2,DISP=(OLD,DELETE)
//*
:/ ADD NAME=PRCSMOVP
//*
//*-------------------------------------------------------------*
//*  M O V E    P R O C E S S O R              (PACBASE TYPE) *
//*-------------------------------------------------------------*
//*
//MOVP    PROC ROOTPGM='BV',
//             STEPLIB='$HLQ..SBVPMBR8',
//             OUT='$OUT',
//             TY='$INDSVE..BVPTY',
//             UP='$INDSVE..BVPUP'
//*
//MOV00   EXEC PGM=BC1PDSIN,MAXRC=0
//MOV02A   DD DSN=&&SYSOUT1,DISP=(,PASS,DELETE),UNIT=SYSDA,
```

```
//              DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//              SPACE=(TRK,(5,5),RLSE)
//MOV03A   DD DSN=&&SYSOUT2,DISP=(,PASS,DELETE),UNIT=SYSDA,
//              DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//              SPACE=(TRK,(5,5),RLSE)
//MOV03B   DD DSN=&&SYSDMP2,DISP=(,PASS,DELETE),UNIT=SYSDA,
//              DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//              SPACE=(TRK,(5,5),RLSE)
//MOV05A   DD DSN=&&SYSOUT3,DISP=(,PASS,DELETE),UNIT=SYSDA,
//              DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//              SPACE=(TRK,(5,5),RLSE)
//MOV05B   DD DSN=&&SYSDMP3,DISP=(,PASS,DELETE),UNIT=SYSDA,
//              DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//              SPACE=(TRK,(5,5),RLSE)
//*
//MOV01    EXEC PGM=&ROOTPGM.PNTRAN,
//         EXECIF=(&C1ACTION,EQ,TRANSFER),
//              PARM=(&C1ACTION(1,8,_)&C1ENVMNT(1,8,_),
//              &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//              &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_)M)
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7PU   DD DSN=&UP,DISP=SHR
//PAC7TR   DD DSN=&&&&C1ACTION,DISP=(,PASS),UNIT=SYSDA,
//              DCB=(RECFM=FB,LRECL=58,BLKSIZE=58),
//              SPACE=(TRK,(01,01),RLSE)
//*
//MOV02    EXEC PGM=IEBGENER,EXECIF=(&C1ACTION,EQ,MOVE)
//SYSIN    DD *
  GENERATE MAXFLDS=1
  RECORD FIELD=(058,1,,1)
//SYSUT1   DD *
,&C1SENVMNT(1,8,_),&C1SSYSTEM(1,8,_)&C1SSUBSYS(1,8,_)
&C1SELTYPE(1,8,_),&C1SELEMENT(1,10,_)&C1SSTGNUM)
/*
//SYSUT2   DD DSN=&&&&C1ACTION,DISP=(,PASS),UNIT=SYSDA,
//              DCB=(RECFM=FB,LRECL=58,BLKSIZE=58),
//              SPACE=(TRK,(01,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT1,DISP=(MOD,PASS)
//SYSPRINT DD SYSOUT=&OUT
//*
//MOV03    EXEC PGM=&ROOTPGM.PNPR10,MAXRC=0,
//              PARM=(&C1ACTION(1,8,_)&C1ENVMNT(1,8,_),
//              &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//              &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_))
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SYSIN    DD DSN=&&&&C1ACTION,DISP=(OLD,DELETE)
//PAC7TZ   DD DSN=&TY,DISP=SHR
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(,PASS),UNIT=SYSDA,
//              DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//              SPACE=(TRK,(01,01),RLSE)
//PAC7CW   DD DSN=&&CONWIN,DISP=(,PASS),UNIT=SYSDA,
//              DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//              SPACE=(TRK,(01,01),RLSE)
//PAC7EV   DD DSN=&&PAC7EV,DISP=(,PASS),UNIT=SYSDA,
//              DCB=(RECFM=FB,LRECL=126,BLKSIZE=12600),
```

```
//             SPACE=(TRK,(01,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT2,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP2,DISP=(MOD,PASS)
//*
//*-------------------------------------------------*
//*  PRINT 'INFOPAC' MEMBER FROM ORIGIN STAGE INTO   *
//*  SEQUENTIAL 'PAC7IP'                             *
//*-------------------------------------------------*
//*
//MOV04    EXEC PGM=CONWRITE,MAXRC=0
//CONWIN   DD DSN=&&CONWIN,DISP=(OLD,DELETE)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(,PASS),UNIT=SYSDA,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//           SPACE=(TRK,(02,01),RLSE)
//*
//*-------------------------------------------------*
//*  COPY SEQUENTIAL 'PAC7IP' IN VSAM 'PAC7UP'       *
//*  DEFINED UNDER TSO WITH ANOTHER DDNAME FOR EXIT3 *
//*-------------------------------------------------*
//*
//MOV05    EXEC PGM=&ROOTPGM.PNPR11,MAXRC=0,COND=(00,NE,MOV04)
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7EV   DD DSN=&&PAC7EV,DISP=(OLD,PASS)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(OLD,PASS)
//PAC7PU   DD DSN=&UP,DISP=SHR
//SYSOUT   DD DSN=&&SYSOUT3,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP3,DISP=(MOD,PASS)
//*
//*-------------------------------------------------*
//*             MOVE 'INFOPAC' ELEMENT              *
//*-------------------------------------------------*
//*
//MOV06    EXEC PGM=C1BM3000,PARM=(PAC7BS,CXMSGSX),MAXRC=8,
//           COND=(00,NE,MOV04)
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(OLD,PASS)
//CXMSGSX  DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//*
//*-------------------------------------------------*
//*           PRINT SYSOUTS, SYSUDUMP, ...           *
//*-------------------------------------------------*
//*
//MOV07    EXEC PGM=CONLIST,PARM=PRINT,COND=EVEN
//C1BANNER DD DSN=&&BANNER,DISP=(,PASS,DELETE),UNIT=SYSDA,
//           SPACE=(TRK,(01,01),RLSE)
//C1PRINT  DD SYSOUT=&OUT,
//           DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171,DSORG=PS)
//LIST01   DD DSN=&&SYSOUT1,DISP=(OLD,DELETE)
//LIST02   DD DSN=&&SYSOUT2,DISP=(OLD,DELETE)
//LIST03   DD DSN=&&SYSDMP2,DISP=(OLD,DELETE)
//LIST04   DD DSN=&&SYSOUT3,DISP=(OLD,DELETE)
//LIST05   DD DSN=&&SYSDMP3,DISP=(OLD,DELETE)
```

```
//*
F+
//*
//
```

Initial preparation of files

D13PREP module: '$prfj.PRE' job

This preparation, which must be executed upon the first installation only, is constituted of a '$PRFJ.PRE' job which includes the following steps:

Step	Program	Comments
ET010	IDCAMS	Allocation of the VSAM file of the Endevor types of VA Pac and 'INFOPAC' elements : 'TY' Allocation of the work file of the VA Pacbase context for the elements in Endevor (update preparation) : 'UP' Allocation of the work file of the VA Pacbase + Endevor context for the elements in Endevor (update preparation) : 'UQ'
ET020	BVPNINUQ	Loading of 'UQ' RRDS file
ET030	IDCAMS	DELETE of model DSCB of 'QU' file
ET040	IDCAMS	Data-group index BLDG and initialization of 'QU' file (backup of VA Pacbase update 'UQ' file)
ET050	IEBGENER	Loading of 'QU' file
ET060	IDCAMS	Initialization of 'UP' file
ET070	IDCAMS	Initialization of 'TY' types file

Execution JCL

```
//$PRFJ.PRE JOB ($CCPT),'PREPARATION',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*
//*----------------------------------------------------------------*
//*          JOB TO RUN ONLY FIRST TIME PACBASE IS INSTALLED        *
//*----------------------------------------------------------------*
//*
//****************************************************
//*        ALLOCATION TABLES AND WORK VSAM FILES      *
//*                                                    *
//* IF "SMS" IS INSTALLED DELETE //GDGMOD DD STATEMENTS *
//****************************************************
//*
//ET010   EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=$VCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD DSN=$INDSN..BVPSY(DFBVPTY),DISP=SHR
```

```
//          DD DSN=$INDSN..BVPSY(DFBVPUP),DISP=SHR
//          DD DSN=$INDSN..BVPSY(DFBVPUQ),DISP=SHR
//          DD DSN=$INDSN..BVPSY(DFBVPTS),DISP=SHR
//*
//***************************************************
//*              LOADING 'UQ'                       *
//***************************************************
//*
//ET020   EXEC PGM=BVPNINUQ
//STEPLIB  DD DSN=$HLQ..SBVPMBR8,DISP=SHR
//PAC7UQ   DD DSN=$INDSVE..BVPUQ,DISP=SHR
//SYSOUT   DD SYSOUT=$OUT
//SYSUDUMP DD SYSOUT=$OUT
//*
//***************************************************
//*        DELETE DSCB                              *
//***************************************************
//ET030   EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
  DELETE ($INDUNE..DSCB.BVPQU)
//*
//***************************************************
//*        DEFINE DSCB                              *
//***************************************************
//ET035   EXEC PGM=IEFBR14
//DSCBQU   DD DSN=$INDUNE..DSCB.BVPQU,DISP=(,CATLG,DELETE),
//           SPACE=(TRK,(0)),VOL=SER=$VOLUN,UNIT=$UNITUN,
//           DCB=(RECFM=FB,LRECL=187,BLKSIZE=18700)
//*
//***************************************************
//*          BUILDING GENERATION FILE INDEX         *
//***************************************************
//*
//ET040   EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=$VCAT,DISP=SHR
//GDGMOD   DD DSN=$INDUNE..DSCB.BVPQU,DISP=(,CATLG,DELETE),
//           SPACE=(TRK,0),UNIT=$UNITUN,
//           VOL=SER=$VOLUN,
//           DCB=(RECFM=FB,LRECL=187,BLKSIZE=18700)
//SYSIN    DD DSN=$INDSN..BVPSY(BLBVPQU),DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//*
//***************************************************
//*              LOADING 'QU'                       *
//***************************************************
//*
//ET050   EXEC PGM=IEBGENER
//SYSIN    DD DUMMY
//SYSPRINT DD SYSOUT=$OUT
//SYSUT1   DD DUMMY,DCB=(RECFM=FB,LRECL=187,BLKSIZE=18700)
//SYSUT2   DD DSN=$INDUNE..BVPQU(+1),DISP=(,CATLG,DELETE),        ,
//           VOL=SER=$VOLUN,
//           SPACE=(TRK,(1,1),RLSE),UNIT=$UNITUN,
//           DCB=$INDUNE..DSCB.BVPQU
```

```
//*
//****************************************************
//*          INITIALIZATION OF 'UP'                 *
//****************************************************
//*
//ET060   EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=$VCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//SYSPAF   DD DSN=$INDSVE..BVPUP,DISP=SHR
//MAXKEY   DD DSN=$INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=$INDSN..BVPSY(REPRO999),DISP=SHR
//*
//****************************************************
//*          INITIALIZATION OF 'TY'                 *
//****************************************************
//*
//ET070   EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=$VCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//SYSPAF   DD DSN=$INDSVE..BVPTY,DISP=SHR
//MAXKEY   DD DSN=$INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=$INDSN..BVPSY(REPRO999),DISP=SHR
//*
//****************************************************
//*          INITIALIZATION OF 'TS'                 *
//****************************************************
//*
//ET080   EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=$VCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//SYSPAF   DD DSN=$INDSVE..BVPTS,DISP=SHR
//MAXKEY   DD DSN=$INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=$INDSN..BVPSY(REPRO999),DISP=SHR
//*
//
```

LINK-EDIT of EXITS in an authorized library

D14EXIT module: '$prfj.EXT job

The VA Pacbase Endevor system is constituted of 2 EXITS (EXIT2 and EXIT3) which must be linked with 'EPC1UEXT' Endevor DRIVER.

The '$PRFJ.EXT' JOB includes the 2 following steps (which must be adapted to the sites) :

Step	Program	Comments
ET010	IEWL	EXIT2 link
ET020	IEWL	EXIT3 link

Note: After this job, the user must define EXITs in Endevor by adding them via the C1UEXIT macro structure lines of the 'BC1JXITS' Endevor JCL.

Execution JCL

```
//$PRFJ.EXT JOB ($CCPT),'EXIT2-EXIT3',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//********************************************************************
//*                                                                  *
//*        LINK-EDIT EXITS IN AN AUTHORIZED LINKLIST LIBRARY         *
//*                                                                  *
//*                       ----------------                           *
//*                                                                  *
//* IMPORTANT: YOU MUST DEFINED EXIT PROGRAMS TO ENDEVOR BY ADDING   *
//*            THEM TO THE àC1UEXIT MACRO IN THE ENDEVOR JCL         *
//*            'BC1JXITS'.                                           *
//*                                                                  *
//********************************************************************
//ET010   EXEC PGM=IEWL,PARM='LIST,XREF,LET'
//SYSUT1   DD  UNIT=SYSDA,SPACE=(1024,(300,100))
//SYSLIB   DD  DSN='$HLQ..SBVPMBR8',DISP=SHR
//         DD  DSN=$LDLIB,DISP=SHR
//         DD  DSN=$CONLIB,DISP=SHR
//SYSLMOD  DD  DSN=$LDLIB,DISP=SHR
//SYSPRINT DD  SYSOUT=*
//SYSLIN   DD  *
 INCLUDE SYSLIB(EPC1UEXT)
 INCLUDE SYSLIB(C1UEXT02)
 ENTRY EPC1UEXT
 NAME C1UEXT02(R)
/*
//*
//ET020   EXEC PGM=IEWL,PARM='LIST,XREF,LET'
//SYSUT1   DD  UNIT=SYSDA,SPACE=(1024,(300,100))
//SYSLIB   DD  DSN='$HLQ..SBVPMBR8',DISP=SHR
//         DD  DSN=$LDLIB,DISP=SHR
//         DD  DSN=$CONLIB,DISP=SHR
//SYSLMOD  DD  DSN=$LDLIB,DISP=SHR
//SYSPRINT DD  SYSOUT=*
//SYSLIN   DD  *
 INCLUDE SYSLIB(EPC1UEXT)
 INCLUDE SYSLIB(C1UEXT03)
 ENTRY EPC1UEXT
 NAME C1UEXT03(R)
/*
//*
//
```

Loading of TSO / VA Pac-ENDEVOR messages

D15MSGS module: '$prfj.MSG' job

This job loads the TSO user messages of the Endevor VA Pacbase system into Endevor 'ISPMLIB' message library from the 'CIUU$MSGSX' member present

in the PDS of 'SY' parameters. (See the meaning and the possible values of the '$MSGSX' parameter in the table of parameters).

This job includes the following step:

Step	Program	Comments
ET010	IEBCOPY	Loading of the 'CIUU$MSGSX' member in the Endevor 'ISPMLIB' library

Note: The member name follows the standards set by the Computer Associates company.

Execution JCL

```
//$PRFJ.MSG JOB ($CCPT),'LOAD USER MESSAGES',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*
//********************************************************************
//*         LOADING OF PACBASE MESSAGES IN THE ENDEVOR 'ISPMLIB'    *
//********************************************************************
//*
//ET010   EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=$OUT
//SYSUT3   DD UNIT=$UWK,SPACE=(TRK,20)
//SYSUT4   DD UNIT=$UWK,SPACE=(TRK,20)
//IN       DD DSN=$INDSN..BVPSY,DISP=SHR
//OUT      DD DSN=$MSGLIB,DISP=SHR
//SYSIN    DD *
 C I=IN,O=OUT
 S M=CIUU$MSGSX
/*
//*
//
```

Retrievals from the 2.5 version (JJND RPTY RP25)

D162530 module: '$prfj.2530' job

This job is to be executed only for the sites which upgrade from the 2.5 version of the VA Pacbase / Endevor interface. See before "Retrieval of VisualAge Pacbase 2.5" chapter in this manual.

The job includes the following steps:

Step	Procedure	Comments
ET010	BVPJND	Retrieval of archived journal
ET020	BVPRPTY	Retrieval of 2.5 Types VSAM file into the Administration Database

Step	Procedure	Comments
ET030	BVPTYND	Loading of Types VSAM file of the installed version from data contained in the Administration Database supplied in the previous step
ET040	BVPRP25	Retrieval of the Elements managed by Endevor and contained in VA Pacbase as User Entities of the .NDENV and .NDVLM Meta Entities, into User Entities of the new model.

Execution JCL

```
//$PRFJ.253 JOB ($CCPT),'RETRIEVAL FROM 2.5 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*
//*******************************************************************
//*                      !!!! ATTENTION !!!!                       *
//*    THIS JOB MUST BE ONLY EXECUTED FOR A RETRIEVAL FROM 2.5     *
//*    BEFORE EXECUTING THIS JOB, IT IS ADVISABLE TO CONSULT       *
//*    THE CHAPTER "RETRIEVAL" OF THE INSTALLATION MANUAL          *
//*******************************************************************
//*
//ET010   EXEC BVPJJND,
//        JNARCH='????'              <-- ARCHIVED JOURNAL 2.5
//*
//*********************************************
//*    BEFORE EXECUTING THE FOLLOWING STEPS,   *
//* THE ADMINISTRATION DATABASE MUST BE CLOSED *
//*********************************************
//*
//ET020   EXEC BVPRPTY,
//        PAC7TY='????'              <-- TYPE FILE 'TY' 2.5
//*
//INPUT.CARTE DD *
 *ADMIN   ADMIN
//*
//ET030   EXEC BVPTYND
 *ADMIN   ADMIN
//*
//ET040   EXEC BVPRP25,
 *ADMIN   ADMIN
//        PAC7TY='????'              <-- TYPE FILE 'TY' 2.5
//*
//INPUT.CARTE DD *
        ENVIRON SYSTEM  SUBSYSTM
//*
//
```

Installation of the Development Database

Before being installed, a Development Database must be declared in the Administration Database.

If the code entered does not correspond to the provided database (BVAP) or to a database predefined in the Administration Database, then this reference is updated by UPGP in the Administration Database.

The complete declaration of a new database is done via Administrator workbench. For more information, refer to the 'Installation of Client Components' chapter and also to the 'AD workbench User's Guide'.

NOTE: The BVAP test Database, provided at installation, is already declared in the Administration Database.

The following operations must be executed every time a new Development Database is created.

CICS CSD Update

Development Database components

I00CSD module: '$prfj.I0' job

bbbb=BASE, code of the Development Database, transaction code and prefixes of the Development Database file codes selected by the user.

Files:
- bbbbAN: index file,
- bbbbAR: data file,
- bbbbAJ: transaction journal,
- bbbbAY: bulk data

Transaction: bbbb executes the current operations in the Database (read-only, update).

Notes

The option allowing the "Dynamic Backout" (JNLSYNCWrite and RECOVery) is required for AN, AR, AJ, AY files.

The number of Strings, Indexbuffers and Databuffers allows the product to run correctly in most installations.

However, for sites containing large volumes of data and a large number of users, these parameters must be adapted.

For more details, refer to the 'Efficiency enhancement' subchapter in the Appendix of this manual.

Execution JCL

```
//$PRFJ.I0 JOB ($CCPT),'DEVPT DFHCSDUP',CLASS=$CLASSJ,
//       MSGCLASS=$MSGCL
//**********************************************************************
//* VISUALAGE PACBASE                                                  *
//*                                                                    *
//*              INSTALLATION - CICSCSD                                *
//*    CICS: CSD BATCH UPDATE FOR ONE DEVELOPMENT DATABASE             *
//**********************************************************************
//DFHCSDUP EXEC PGM=DFHCSDUP
//STEPLIB  DD DSN=$CSDL,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//DFHCSD   DD DSN=$DFHCSD,DISP=SHR
//SYSIN    DD *
**********************************************************************
*              DEVELOPMENT DATABASE FILES                          *
**********************************************************************
DEFINE FILE($BASE.AN) GROUP($GROUF)
DESCRIPTION(DEVELOPMENT DATABASE INDEX)
       DSNAME($INDUV..$BASE.AN)
       STRINGS(10)
       STATUS (ENABLED) OPENTIME(STARTUP)
       DATABUFFERS(11) INDEXBUFFERS(10)
       RECORDFORMAT(F)
       ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
       RECOVERY(BACKOUTONLY)
DEFINE FILE($BASE.AR) GROUP($GROUF)
DESCRIPTION(DEVELOPMENT DATABASE DATA)
       DSNAME($INDUV..$BASE.AR)
       STRINGS(10)
       STATUS (ENABLED) OPENTIME(STARTUP)
       DATABUFFERS(11)
       RECORDFORMAT(F)
       ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
       RECOVERY(BACKOUTONLY)
DEFINE FILE($BASE.AJ) GROUP($GROUF)
DESCRIPTION(DEVELOPMENT DATABASE JOURNAL)
       DSNAME($INDUV..$BASE.AJ)
       STRINGS(10)
       STATUS (ENABLED) OPENTIME(STARTUP)
       DATABUFFERS(11)
       RECORDFORMAT(F)
       ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
       RECOVERY(BACKOUTONLY)
DEFINE FILE($BASE.AY) GROUP($GROUF)
DESCRIPTION(DEVELOPMENT DATABASE EXTEND)
       DSNAME($INDUV..$BASE.AY)
       STRINGS(10)
       STATUS (ENABLED) OPENTIME(STARTUP)
       DATABUFFERS(11)
       RECORDFORMAT(F)
```

```
              ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
              RECOVERY(BACKOUTONLY)
      *********************************************************************
      *                 DEVELOPMENT DATABASE TRANSACTION                  *
      *********************************************************************
      DEFINE TRANSACTION($BASE) GROUP($GROUT)
      DESCRIPTION(DEVELOPMENT $BASE TRANSACTION) PROGRAM(BVPR000)
      //
```

Allocation and Loading of Database Parameters

I01SY module: '$prfj.I1' job

NOTE: This PDS contains the definitions of the Development Database files. A default size is specified for the test Database supplied at installation. As the Development Database is intended to grow in size, you are advised to modify the default value.

Step	Program	Comments
STEP1	IDCAMS	DELETE of PDS
STEP2	IEFBR14	allocation

Execution JCL

```
//$PRFJ.I1   JOB ($CCPT),'PAC I01SY',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VISUALAGE PACBASE                                                 *
//*                                                                   *
//*               INSTALLATION - I01SY                                *
//*    INITIAL ALLOCATION OF THE PARAMETERS PDS OF ONE                *
//*    DEVELOPMENT DATABASE                                           *
//*        .STEP1 : DELETE                                            *
//*        .STEP2 : ALLOCATION                                        *
//*********************************************************************
//*
//STEP1  EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
 DELETE ($INDUN..$BASE.SY)
//*
//STEP2  EXEC PGM=IEFBR14
//SY       DD DSN=$INDUN..$BASE.SY,DISP=(,CATLG,DELETE),
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//         UNIT=$UNITUN,
//         VOL=SER=$VOLUN,
//         SPACE=(6080,(100,,10))
//
```

I02SY module: '$prfj.I2' job

Caution

Replace :/ with ./ before submitting the job.

Step	Program	Comments
STEP1	IEBUPDTE	Loading

Execution JCL

```
===FRM TYPE=DATA
//$PRFJ.I2   JOB ($CCPT),'PAC I02SY',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//********************************************************************
//* VISUALAGE PACBASE                                               *
//*                                                                 *
//*                INSTALLATION - I02SY                             *
//*     LOADING OF THE PARAMETER PDS                                *
//*      .STEP1 : LOADING PARAMETERS FOR ONE DEVELOPMENT DATABASE   *
//*      ->NOTE 1                                                   *
//*      ------                                                     *
//*       REPLACE :/ BY ./ BEFORE SUBMITTING THE JOB                *
//*      ->NOTE 2                                                   *
//*      ------                                                     *
//*       THIS JOB CONTAINS THE SYSIN'S FOR ALLOCATING THE FILES    *
//*       THAT MAKING UP THE DEVELOPMENT DATA BASE :                *
//*       ADAPT THE SIZES SPECIFIED IN THE 'DEFINE' STATEMENTS      *
//*       TO YOUR REQUIREMENTS.                                     *
//********************************************************************
//*
//STEP1  EXEC PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD SYSOUT=$OUT
//SYSUT2   DD DSN=$INDUN..$BASE.SY,DISP=SHR
//SYSIN    DD DATA,DLM='PP'
:/     ADD NAME=DF$BASE.AN
 DELETE ($INDUV..$BASE.AN) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME ($INDUV..$BASE.AN)        -
                  SHR (2)    RUS   KEYS (49,0)   -
                  VOL ($VOLUV)                   -
                  CYL (20 1)                     -
                  RECSZ (59,59) )                -
        INDEX   ( NAME ($INDUV..$BASE.AN.I)      -
                  CISZ (4096) )                  -
        DATA    ( NAME ($INDUV..$BASE.AN.D)      -
                  FSPC (10,5)                    -
        CISZ (4096) )             /*: CATALOG ($VCAT) */
:/     ADD NAME=DF$BASE.AR
 DELETE ($INDUV..$BASE.AR) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME ($INDUV..$BASE.AR)        -
                  SHR (2)    RUS    NUMBERED     -
                  VOL ($VOLUV)                   -
                  CYL (20 1)                     -
```

```
                              RECSZ (144,144)  )              -
           DATA   ( NAME ($INDUV..$BASE.AR.D)      -
           CISZ (4096) )           /*: CATALOG ($VCAT) */
:/     ADD NAME=DF$BASE.AY
 DELETE ($INDUV..$BASE.AY) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME ($INDUV..$BASE.AY)         -
                  SHR (2)    RUS   NUMBERED        -
                  VOL ($VOLUV)                     -
                  CYL (5 1)                        -
                  RECSZ (1018,1018)  )             -
           DATA   ( NAME ($INDUV..$BASE.AY.D)      -
           CISZ (4096) )           /*: CATALOG ($VCAT) */
:/     ADD NAME=DF$BASE.AJ
 DELETE ($INDUV..$BASE.AJ) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME ($INDUV..$BASE.AJ)         -
                  SHR (2)    RUS   NUMBERED        -
                  VOL ($VOLUV)                     -
                  CYL (1 1)                        -
                  RECSZ (170,170)  )               -
          DATA    ( NAME ($INDUV..$BASE.AJ.D)      -
          CISZ (4096) )            /*: CATALOG ($VCAT) */
:/     ADD NAME=DL$BASE.JT
 DELETE ($INDUN..$BASE.JT)
:/     ADD NAME=DL$BASE.TJ
 DELETE ($INDUN..$BASE.TJ)
:/     ADD NAME=DF$BASE.FP
 DELETE ($INDUV..&USER.$BASE.FP) CLUSTER
 DEFINE CLUSTER ( NAME ($INDUV..&USER.$BASE.FP)   -
                  SHR (2)    RUS   KEYS (33,0)     -
                  VOL ($VOLUV)                     -
                  CYL (1 1)                        -
                  RECSZ (33,33) )                  -
          INDEX  ( NAME ($INDUV..&USER.$BASE.FP.I) -
                  CISZ (4096) )                    -
          DATA   ( NAME ($INDUV..&USER.$BASE.FP.D) -
                  FSPC (10,5)                      -
          CISZ (4096) )            /*: CATALOG ($VCAT) */
:/     ADD NAME=DF$BASE.EM
 DELETE ($INDUV..$BASE.EM) CLUSTER
 DEFINE CLUSTER ( NAME ($INDUV..$BASE.EM)         -
                  SHR (2 3)  RUS   KEYS (17,0)     -
                  VOL ($VOLUV)                     -
                  CYL (1 1)                        -
                  RECSZ (90,90) )                  -
          INDEX  ( NAME ($INDUV..$BASE.EM.I)       -
                  CISZ (4096) )                    -
          DATA   ( NAME ($INDUV..$BASE.EM.D)       -
                  FSPC (10,5)                      -
          CISZ (4096) )            /*: CATALOG ($VCAT) */
:/     ADD NAME=DL$BASE.MY
 DELETE ($INDUV..$BASE.MY) NONVSAM
```

```
:/     ADD NAME=DF$BASE.WK
 DELETE ($INDUV..&USERWK) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME ($INDUV..&USERWK)          -
                  SHR (2 3)  RUS  KEYS(8 0)        -
                  VOL ($VOLUV)                     -
                  CYL (1 1)                        -
                  RECSZ (162,162) )                -
        INDEX   ( NAME ($INDUV..&USERWKI)          -
                  CISZ (4096) )                    -
        DATA    ( NAME ($INDUV..&USERWKD)          -
                  FSPC (10 5) SPEED                -
        CISZ (16384) )         /*: CATALOG ($VCAT) */
:/     ADD NAME=DF$BASE.WY
 DELETE ($INDUV..&USERWY) CLUSTER
 SET LASTCC = 0
 SET MAXCC = 0
 DEFINE CLUSTER ( NAME ($INDUV..&USERWY)          -
                  SHR (2 3)  RUS  KEYS(8 0)        -
                  VOL ($VOLUV)                     -
                  CYL (2 1)                        -
                  RECSZ (1028,1028) )              -
        INDEX   ( NAME ($INDUV..&USERWYI)          -
                  CISZ (4096) )                    -
        DATA    ( NAME ($INDUV..&USERWYD)          -
                  FSPC (10 5) SPEED                -
        CISZ (16384) )         /*: CATALOG ($VCAT) */
:/     ADD NAME=DL$BASE.WK
 DELETE ($INDUV..&USERWK) CLUSTER
:/     ADD NAME=DL$BASE.WY
 DELETE ($INDUV..&USERWY) CLUSTER
:/     ADD NAME=LI$BASE.AJ
 LISTCAT ENTRIES ($INDUV..$BASE.AJ) CLUSTER
PP
//
```

Initialization of Generation Data Groups

I03DEF module: '$prfj.I3' job

Definition of the Development Database files.

Step	Program	Comments
STEP1	IDCAMS	Delete/Define

Execution JCL

```
//$PRFJ.I3  JOB ($CCPT),'PAC I03DEF',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VISUALAGE PACBASE                                                 *
//*                                                                   *
//*            INSTALLATION - I03DEF                                  *
```

```
//*      DEFINITION OF THE VSAM FILES FOR ONE DEVELOPMENT DATABASE        *
//*        STEP1 : DELETE/DEFINE OF THE FILES                             *
//********************************************************************
//*
//STEP1  EXEC PGM=IDCAMS
//*:STEPCAT  DD  DSN=$VCAT,DISP=SHR
//SYSPRINT DD  SYSOUT=$OUT
//SYSIN DD DSN=$INDUN..$BASE.SY(DF$BASE.AN),DISP=SHR
//        DD DSN=$INDUN..$BASE.SY(DF$BASE.AR),DISP=SHR
//        DD DSN=$INDUN..$BASE.SY(DF$BASE.AY),DISP=SHR
//        DD DSN=$INDUN..$BASE.SY(DF$BASE.AJ),DISP=SHR
//*
//
```

I03INI module: '$prfj.I3I' job

Allocation of the generation files (GDG) of the Development Database.

Caution

If the files are managed with SMS, delete the DD //GDGMOD lines from the
IDCAMS steps before submitting the Job.

Step	Program	Comments
STEP1	IDCAMS	GDG of the PJ file
STEP2	IEBGENER	Initialization of the PJ file
STEP3	IDCAMS	GDG of the PC PD PY file
STEP4	IEBGENER	Initialization of the PC file
STEP5	IEBGENER	Initialization of the PD file
STEP6	IEBGENER	Initialization of the PY file

Execution JCL
```
//$PRFJ.I3I JOB ($CCPT),'PAC I03INI',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//********************************************************************
//* VISUALAGE PACBASE                                               *
//*                                                                 *
//*                 INSTALLATION - I03INI                           *
//*   JOB TO RUN ONLY FOR THE INITIALIZATION OF A NEW DATABASE      *
//*     . BUILDING OF INDEX DATA-GROUP FOR                          *
//*       "PC", "PJ" SAVE FILES                                     *
//*     . "PJ" FILE INITIALIZATION                                  *
//*     . LOADING OF TEST DATABASE ON "PC" FILE                     *
//*   ->NOTE                                                        *
//*     ----                                                        *
//*     IF "SMS" IS INSTALLED DELETE //GDGMOD DD STATEMENTS         *
//********************************************************************
//STEP1  EXEC PGM=IDCAMS
```

```
//*:STEPCAT DD DSN=$VCAT,DISP=SHR
//GDGMOD   DD DSN=$INDUN..$BASE.PJ,
//         DISP=(,KEEP,DELETE),
//         UNIT=$UNITUN,
//         VOL=SER=$VOLUN,
//         SPACE=(TRK,0),
//         DCB=($DSCB,RECFM=FB,LRECL=170,BLKSIZE=27880)
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
  DEFINE GENERATIONDATAGROUP -
        (NAME ($INDUN..$BASE.PJ) LIMIT (3) SCR)
//*
//STEP2  EXEC PGM=IEBGENER
//SYSIN    DD DUMMY
//SYSPRINT DD DUMMY
//SYSUT1   DD DUMMY,DCB=(RECFM=FB,LRECL=170,BLKSIZE=170)
//SYSUT2   DD DSN=$INDUN..$BASE.PJ(+1),
//         DISP=(,CATLG,DELETE),
//         UNIT=$UNITUN,
//         VOL=SER=$VOLUN,
//         SPACE=(TRK,1),
//         DCB=($DSCB,RECFM=FB,LRECL=170,BLKSIZE=27880)
//*
//STEP3  EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=$VCAT,DISP=SHR
//GDGMOD1  DD DSN=$INDUN..$BASE.PC,
//         DISP=(,KEEP,DELETE),
//         UNIT=$UNITUN,
//         VOL=SER=$VOLUN,
//         SPACE=(TRK,0),
//         DCB=($DSCB,RECFM=VB,LRECL=1023,BLKSIZE=27998)
//GDGMOD2  DD DSN=$INDUN..$BASE.PD,
//         DISP=(,KEEP,DELETE),
//         UNIT=$UNITUN,
//         VOL=SER=$VOLUN,
//         SPACE=(TRK,0),
//         DCB=($DSCB,RECFM=VB,LRECL=1023,BLKSIZE=27998)
//GDGMOD3  DD DSN=$INDUN..$BASE.PY,
//         DISP=(,KEEP,DELETE),
//         UNIT=$UNITUN,
//         VOL=SER=$VOLUN,
//         SPACE=(TRK,0),
//         DCB=($DSCB,RECFM=VB,LRECL=1023,BLKSIZE=27998)
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
  DEFINE GENERATIONDATAGROUP -
        (NAME ($INDUN..$BASE.PC) LIMIT (3) SCR)
  DEFINE GENERATIONDATAGROUP -
        (NAME ($INDUN..$BASE.PD) LIMIT (3) SCR)
  DEFINE GENERATIONDATAGROUP -
        (NAME ($INDUN..$BASE.PY) LIMIT (3) SCR)
//*
//STEP4  EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD DUMMY
```

```
//SYSUT1   DD DSN=$HLQ..SBVPPF2(BVPPC),DISP=SHR
//SYSUT2   DD DSN=$INDUN..$BASE.PC(+1),
//         DISP=(,CATLG,DELETE),
//         UNIT=$UNITUN,
//         VOL=SER=$VOLUN,
//         SPACE=(TRK,(350,10),RLSE),
//         DCB=($DSCB,RECFM=VB,LRECL=1023,BLKSIZE=27998)
//*
//STEP5  EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD DUMMY
//SYSUT1   DD DUMMY,DCB=(RECFM=VB,LRECL=1023,BLKSIZE=27998)
//SYSUT2   DD DSN=$INDUN..$BASE.PD(+1),
//         DISP=(,CATLG,DELETE),
//         UNIT=$UNITUN,
//         VOL=SER=$VOLUN,
//         SPACE=(TRK,(220,10),RLSE),
//         DCB=($DSCB,RECFM=VB,LRECL=1023,BLKSIZE=27998)
//*
//STEP6  EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD DUMMY
//SYSUT1   DD DUMMY,DCB=(RECFM=VB,LRECL=1023,BLKSIZE=27998)
//SYSUT2   DD DSN=$INDUN..$BASE.PY(+1),
//         DISP=(,CATLG,DELETE),
//         UNIT=$UNITUN,
//         VOL=SER=$VOLUN,
//         SPACE=(TRK,(220,10),RLSE),
//         DCB=($DSCB,RECFM=VB,LRECL=1023,BLKSIZE=27998)
//
```

Loading of the Test Database

I04REST module: '$prfj.I4' job

This job executes the REST procedure, using as input the backup file
previously loaded on the disk in STEP4 of the '$prfj.I3I' job.

To install the test Database provided on the CD-ROM, run the JCL as is,
without any modification.

To install a Database different from the one you are provided with, see the
'Administrator's Procedures' manual. You will find details on the REST
procedure.

In this case, the Database to be restored must have been declared in the
Administration Database.

If the version of your Database is previous to 3.5, see in the 'Database
Retrieval' chapter, the sub-chapter dedicated to the retrieval of user
parameters.

Execution JCL

```
//$PRFJ.I4  JOB ($CCPT),'PAC I04REST',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//**********************************************************************
//* VISUALAGE PACBASE                                                  *
//*                                                                    *
//*               INSTALLATION - I04REST                               *
//*     CREATION OF THE DEVELOPMENT TEST DATABASE                      *
//*     INDICATE THE LANGUAGE CODE OF DATABASE ON Y LINE COL 10-11     *
//**********************************************************************
//TESTREST  EXEC BVPREST
 *ADMIN   ADMIN
 Y    20EN
 //
```

Loading of the Development Model

I05META module: '$prfj.I5' job

This JCL must be submitted when the Development Database is installed for the first time and then each time it is reinstalled.

It runs the VINS procedure and installs the Development Model.

Execution JCL

```
//$PRFJ.I5  JOB ($CCPT),'PAC I05META',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//**********************************************************************
//* VISUALAGE PACBASE                                                  *
//*                                                                    *
//*     - DEVELOPMENT DATABASE -                                       *
//*       MODEL INSTALLATION                                           *
//*       INDICATE THE FILE NECESSARY FOR REOR PROCEDURE               *
//**********************************************************************
//VINS    EXEC BVPVINS,FDIC='$HLQ..SBVPPF8(BVPMETBA)',
//        USER=ADMIN,BASE=$BASE
 *ADMIN   ADMIN   ***       VINS
 /*
//*VINS.PAC7MR  DD DSN=REORFILE
```

Complement - Pac/Impact

I20GDG module: '$prfj.I20' job

This job creates the files which are necessary to the impact analysis module.

Caution

If SMS is installed on the site, delete the DD //GDGMOD lines from the steps GDGBJ and GDGBB before submitting the job.

Step	Program	Comments
INIFO1	BVPRMSYS	
INIFO2	IDCAMS	allocation of GDG for FO file
INIFO3	IEBGENER	initialization of FO file from scratch
INIFR1	BVPRMSYS	
INIFR2	IDCAMS	allocation of GDG for FR file
INIFR3	IEBGENER	initialization from scratch of FR file
INIFQ1	BVPRMSYS	
INIFQ2	IDCAMS	allocation of GDG for FQ file
INIFQ3	IEBGENER	initialization from scratch of FQ file
INIFH1	BVPRMSYS	
INIFH2	IDCAMS	allocation of GDG for FH file
INIFH3	IEBGENER	initialization from scratch of FH file

These files are described in the 'Components' chapter, 'Development Database' subchapter, 'Pac/Impact' section.

Execution JCL

```
//$PRFJ.I20 JOB ($CCPT),'PAC I05GDG',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//**********************************************************************
//* VISUALAGE PACBASE                                                  *
//*                                                                    *
//*             - IMPACT ANALYSIS -                                    *
//*          INSTALLATION - I05GDG                                     *
//*    BUILDING OF INDEX DATA-GROUP FOR "FH" "FO" "FQ" "FR" FILES      *
//*                                                                    *
//*  ->NOTE                                                            *
//*    ----                                                            *
//*    IF "SMS" IS INSTALLED DELETE //GDGMOD DD STATEMENTS             *
//**********************************************************************
//BVPGDG   PROC BASE=$BASE,              CODE OF VAPAC DATABASE
//         USER=TEST,          PACKAGE CODE FOR IMPACT ANALYSIS
//         INDUN='$INDUN',         INDEX OF NON-VSAM USER FILES
//*:       VSAMCAT='$VCAT',                 USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',               SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         OUT=$OUT,                            OUTPUT CLASS
//         DSCB='$DSCB',                     DSCB MODEL FILE
//         VOLS='SER=$VOLUN',            RESULTS FILE VOLUME
//         UNITS=$UNITUN,                  RESULTS FILE UNIT
//         UWK=$UWK                             WORK UNIT
//**********************************************************************
//INIFO1 EXEC PGM=BVPRMSYS,PARM='&INDUN..&USER..&BASE'
//*-------------------------------------------------
```

```
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSABOUT DD SYSOUT=&OUT
//PACRIN DD DDNAME=SYSIN
//PACROU DD DSN=&&DFFO,DISP=(,PASS),UNIT=&UWK,SPACE=(TRK,1),
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//INIFO2  EXEC PGM=IDCAMS
//*----------------------
//*:STEPCAT DD DSN=&VCAT,DISP=SHR
//GDGMOD   DD DSN=&INDUN..&USER..&BASE.FO,
//         DISP=(,KEEP,DELETE),
//         UNIT=&UNITS,
//         VOL=&VOLS,
//         SPACE=(TRK,0),
//         DCB=(&DSCB,RECFM=FB,LRECL=266,BLKSIZE=26600)
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFFO,DISP=(OLD,DELETE)
//INIFO3  EXEC PGM=IEBGENER
//*-----------------------
//SYSIN    DD DUMMY
//SYSPRINT DD DUMMY
//SYSUT1   DD DUMMY,DCB=(RECFM=FB,LRECL=266,BLKSIZE=266)
//SYSUT2   DD DSN=&INDUN..&USER..&BASE.FO(+1),
//         DISP=(,CATLG,DELETE),
//         UNIT=&UNITS,
//         VOL=&VOLS,
//         SPACE=(TRK,1),
//         DCB=(&DSCB,RECFM=FB,LRECL=266,BLKSIZE=26600)
//*
//INIFR1 EXEC PGM=BVPRMSYS,PARM='&INDUN..&USER..&BASE'
//*-------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSABOUT DD SYSOUT=&OUT
//PACRIN DD DDNAME=SYSIN
//PACROU DD DSN=&&DFFR,DISP=(,PASS),UNIT=&UWK,SPACE=(TRK,1),
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//INIFR2  EXEC PGM=IDCAMS
//*----------------------
//*:STEPCAT DD DSN=&VCAT,DISP=SHR
//GDGMOD   DD DSN=&INDUN..&USER..&BASE.FR,
//         DISP=(,KEEP,DELETE),
//         UNIT=&UNITS,
//         VOL=&VOLS,
//         SPACE=(TRK,0),
//         DCB=(&DSCB,RECFM=FB,LRECL=72,BLKSIZE=21600)
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFFR,DISP=(OLD,DELETE)
//INIFR3  EXEC PGM=IEBGENER
//*-----------------------
//SYSIN    DD DUMMY
//SYSPRINT DD DUMMY
//SYSUT1   DD DUMMY,DCB=(RECFM=FB,LRECL=72,BLKSIZE=72)
```

```
//SYSUT2   DD DSN=&INDUN..&USER..&BASE.FR(+1),
//         DISP=(,CATLG,DELETE),
//         UNIT=&UNITS,
//         VOL=&VOLS,
//         SPACE=(TRK,1),
//         DCB=(&DSCB,RECFM=FB,LRECL=72,BLKSIZE=21600)
//*
//INIFQ1 EXEC PGM=BVPRMSYS,PARM='&INDUN..&USER..&BASE'
//*--------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT    DD SYSOUT=&OUT
//SYSABOUT DD SYSOUT=&OUT
//PACRIN DD DDNAME=SYSIN
//PACROU DD DSN=&&DFFQ,DISP=(,PASS),UNIT=&UWK,SPACE=(TRK,1),
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//INIFQ2  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VCAT,DISP=SHR
//GDGMOD   DD DSN=&INDUN..&USER..&BASE.FQ,
//         DISP=(,KEEP,DELETE),
//         UNIT=&UNITS,
//         VOL=&VOLS,
//         SPACE=(TRK,0),
//         DCB=(&DSCB,RECFM=FB,LRECL=100,BLKSIZE=21600)
//SYSPRINT DD SYSOUT=&OUT
//SYSIN     DD DSN=&&DFFQ,DISP=(OLD,DELETE)
//INIFQ3  EXEC PGM=IEBGENER
//*-----------------------
//SYSIN     DD DUMMY
//SYSPRINT DD DUMMY
//SYSUT1    DD DUMMY,DCB=(RECFM=FB,LRECL=100,BLKSIZE=100)
//SYSUT2    DD DSN=&INDUN..&USER..&BASE.FQ(+1),
//         DISP=(,CATLG,DELETE),
//         UNIT=&UNITS,
//         VOL=&VOLS,
//         SPACE=(TRK,1),
//         DCB=(&DSCB,RECFM=FB,LRECL=100,BLKSIZE=21600)
//*
//INIFH1 EXEC PGM=BVPRMSYS,PARM='&INDUN..&USER..&BASE'
//*--------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT    DD SYSOUT=&OUT
//SYSABOUT DD SYSOUT=&OUT
//PACRIN DD DDNAME=SYSIN
//PACROU DD DSN=&&DFFH,DISP=(,PASS),UNIT=&UWK,SPACE=(TRK,1),
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//INIFH2 EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VCAT,DISP=SHR
//GDGMOD   DD DSN=&INDUN..&USER..&BASE.FH,
//         DISP=(,KEEP,DELETE),
//         UNIT=&UNITS,
//         VOL=&VOLS,
```

```
//          SPACE=(TRK,0),
//          DCB=(&DSCB,RECFM=FB,LRECL=160,BLKSIZE=24000)
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFFH,DISP=(OLD,DELETE)
//INIFH3  EXEC PGM=IEBGENER
//*------------------------
//SYSIN    DD DUMMY
//SYSPRINT DD DUMMY
//SYSUT1   DD DUMMY,DCB=(RECFM=FB,LRECL=160,BLKSIZE=160)
//SYSUT2   DD DSN=&INDUN..&USER..&BASE.FH(+1),
//          DISP=(,CATLG,DELETE),
//          UNIT=&UNITS,
//          VOL=&VOLS,
//          SPACE=(TRK,1),
//          DCB=(&DSCB,RECFM=FB,LRECL=160,BLKSIZE=24000)
//*
// PEND
//GDG    EXEC BVPGDG
//INIFO1.PACRIN DD *
  DEFINE GENERATIONDATAGROUP -
        (NAME (&USERFO) LIMIT (3) SCR)
/*
//INIFR1.PACRIN DD *
  DEFINE GENERATIONDATAGROUP -
        (NAME (&USERFR) LIMIT (3) SCR)
/*
//INIFQ1.PACRIN DD *
  DEFINE GENERATIONDATAGROUP -
        (NAME (&USERFQ) LIMIT (3) SCR)
/*
//INIFH1.PACRIN DD *
  DEFINE GENERATIONDATAGROUP -
        (NAME (&USERFH) LIMIT (3) SCR)
/*
//
```

CICS Complement-Modification of transaction Output

When exiting the VA Pac 'bbbb' transaction, the system sends a CICS
RETURN through the BVPR005 program called by XCTL ('bbbb' is the
Database code valorized upon installation).

You may replace this program with another program, in order to return the
control to a general user menu or to any other operation.

You can download the BVPR005 source from the VisualAge Pacbase Support
site: http://www.ibm.com/software/awdtools/vapacbase/support.html

Chapter 4. Installation/Reinstallation of Client Components

Things to Know Before Installing

- To install the VisualAge Pacbase Client components on a Windows workstation, you must have an Administrator profile.
- VA Pac Client components are installed via InstallShield for Windows Installer (ISWI).

  If Windows Installer is not installed on the workstation, it will be installed automatically.
- You also need Microsoft Windows Script, version 5.1 or higher. You can download it from the following URL:

  http://www.microsoft.com/downloads
- Both the Administrator & Developer workbench and the eBusiness Tools components require, for their online help, that a standard internet browser be used (Mozilla Firefox or Internet Explorer is advised).
- The installation of a Client component does not require the prior installation on the server of the VA Pac Database(s) to which it will connect.

  However, the code of each VA Pac Database you must indicate when you install some Client components will have to be strictly reused when these Databases are installed at the server level.

A number of administration actions must be carried out online in the Administrator workbench in order to make operational a VisualAge Pacbase installation or re-installation. These actions are documented in the 'AD workbench User's Guide', chapter 'Prior Administration Actions'.

Root Directory

By default, the root directory of all the VisualAge Pacbase Client components is:

```
C:\Program Files\IBM\VisualAge_Pacbase_35

If you are connected to Developer workbench and need
a simultaneous connection to the Pacbench module
of VisualAge Pacbase WorkStation, it is absolutely
necessary to install the two components in the same
root directory.
```

The directories located under this root can be modified only once, at the beginning, i.e. when the first component is installed.

NOTE: Do not use blank characters in directory names.

The other components will necessarily be installed under this root directory (whether it has been modified or not).

However, for the installation of a later version of a component, the new root name is your choice, knowing that it must be different than the current installation root (the installation script controls that).

By 'version' one must understand the version identified by the first digits, e.g. '3.5'. Versions identified by 'Vnn' actually are sub-versions.

For more information, see Subchapter 'Component Updating, Modification, or Removing'.

Installation Startup

Insert the installation CD-Rom.

The execution of setup.exe launches the graphical interface of Wizard InstallShield which will guide you through the installation.

The first panel displays the text of the Java runtime license. You agree with the terms of the license ; the next panel then asks for your identification (Name and Organization).

NOTE: All the VisualAge Pacbase Client components are installed in a shared use mode on the workstation.

Then the list of the VisualAge Pacbase Client components is displayed.

Choose the Client component you want to install.

The continuation of the installation is described in the sub-chapters dedicated to each component.

Fundamentals of VA Pac Client-Server Communication

This section presents the principles of the communication between the Client components and the VisualAge Pacbase server.

The following pages contain important information essential to the choice of the communication protocol and the parameterization of the associated middleware.

This information will also be useful for future installations (other Client components or new versions of already installed components).

AVAILABLE COMMUNICATION TYPES

- If the VisualAge Pacbase server runs on Windows or UNIX, the VAP Socket protocol must be used.
- If it runs on MVS/CICS, you can either use the MVS CICS Socket, MVS CICS CPI-C, or MQ-CICS Bridge protocol, depending on which protocol is in use at the server level (see 'Installation of Server Components' chapter).

  For more information on this configuration, see subchapter 'Additional Information', section 'How to configure the MVS CICS CPI-C protocol'.
- If the server runs on MVS/IMS, you can use the IMS Connect or the MQ-IMS Bridge protocol, depending on the protocol in use at the server level (see 'Installation of Server Components' chapter).

MIDDLEWARE

The middleware must always be installed on each developer work station. This installation starts automatically during the first installation under a given root of one of the following Client components: Administrator and Developer workbench, VisualAge Pacbase Workstation, and eBusiness Tools.

The middleware installed on each developer work station ensures direct communication between the Client component(s) and the Server.

However you can also choose a communication via a gateway.

This gateway performs a centralized and optimized management of server access.

In this context, you must also install the middleware on an intermediate server by selecting the Middleware item in the list of Client components (see corresponding subchapter).

Client components then communicate via a gateway (the VisualAge Pacbase Gateway) which runs on this intermediate server.

COMMUNICATION FILES

For the Administrator & Developer workbench and the VisualAge Pacbase WorkStation, the parameterization of the communication is made in two files: the bases.ini and vaplocat.ini. files.

The vaplocat.ini file is also used by the eBusiness Tools component.

These files are automatically created and are located in a directory named 'common'.

A reinstallation does not affect the bases.ini and vaplocat.ini files. A base_new.ini file is created only as a reference. It contains the most recent version of this file.

IMPORTANT: To add/delete VisualAge Pacbase Databases, or modify parameters related to the communication, you will have to modify these files.

For details on how data is structured within both files, see the end of this chapter (Updating communication parameters).

THE VAPLOCAT.INI FILE
- When communication is direct, the vaplocat.ini file used is located on each Developer workstation.
- When communication is via a gateway, the vaplocat.ini file used is located on the intermediate server.

In both cases this file is located in the 'common' sub-directory of the installation root directory.

The location(s) is(are) described in this file.

A location :
- identifies the protocol used to access the VisualAge Pacbase server,
- gives the physical addresses of the server for this protocol,
- defines the communication parameters required for the operation of this protocol.

THE BASES.INI FILE

The bases.ini file is found on each Developer workstation, in the 'common' sub-directory of the installation root directory.

This file contains the list of accessible VisualAge Pacbase Databases. Each Database is associated with a location.

Several Databases can be associated with the same location. The locations are defined in the other file, the vaplocat.ini file.

Administrator & Developer workbench

If IBM SDK for Java 2 is not installed on your workstation, it will be automatically installed. For this installation, as for that of the Administrator & Developer workbench, the root being used depends on the current installation context. For complete details, refer to this chapter's first page.

The installation script then asks you to choose to install Administrator workbench or Developer workbench or both:

- Administrator workbench
- Developer workbench

  Developer workbench includes the following modules, each running independently:

  - Batch module,
  - eBusiness module, also including three of the eBusiness Tools:
    - Proxy Generator,
    - Location Editor,
    - Services Test Facility.
  - Services Modeler module (all of its functionalities being included in the eBusiness module).

Whether you install Administrator or Developer workbench or both, the CFM utility (Configuration File Manager) is always installed. CFM allows you to inhibit the display of selected browsers unused by your site's teams and/or to enable the display of browsers specific to Meta Entities defined on site. Consult the VisualAge Support team for more information.

In the next panel, you indicate the communication mode (direct communication or gateway).

NOTE: IMPORTANT information on communication issues are given at the beginning of this chapter.

This panel does not appear if you have already installed Administrator & Developer workbench or the VA Pac WorkStation under the same root.

- If you choose the direct communication option, the middleware installation script will automatically start once the installation of the workbench is finished. It will ask you to specify a number of communication parameters.

  For complete details on this part of the installation, refer to the Middleware subchapter.

- If you choose the gateway option, enter first the IP address of the gateway here. The installation of the middleware on the Developer workstation - also necessary in this context - will then start automatically after the installation of the workbench.

Next, in this same initial context, enter the (first) Database which the Administrator and Developer workbench will access.

To do this, a window enables you to enter:

1. The name of a VA Pac Database, already installed at the server level or not. The names entered here will be displayed in the connection smartguide, thus showing users which Databases they can connect to. The name given to each Database should therefore be clear enough to be easily identified in the list of Databases proposed by the connection smartguide.

2. The Database logical code.

   Maximum length: 4 characters.

   If the Database is not installed at the server level yet, please keep this code in mind: it will have to be used again upon this installation. The codes entered here will also be displayed in the connection smartguide.

   NOTE: The Database specifically dedicated to the site administration is automatically created. Its logical code is the '****' reserved code.

3. The location name

   Maximum length: 20 characters.

   Default: Location-1

   More than one Database may be associated with one location.

4. Finally, specify the user authentication mode at connection. Refer to the Database Administrator to ensure authentication measures at the server level are imposed at the workbench level.

   You select the mode via two check boxes.

   VisualAge Pacbase signon:

   The user will have to enter his/her code and password to connect to the VA Pac Database.

   Middleware signon:

   The user will have to enter his/her code and password to connect to the host system (in the two fields displayed under 'Middleware references' in the connection smartguide).

   If only the Middleware signon box is checked, VA Pac authentication is performed by the security system.

   If both boxes are checked, the user will have to enter his/her code and password to connect to the host system and to the Database.

   In this way, you have defined the access to a first VA Pac Database. The installation script then allows you to define communication and connection to as many other Databases as necessary.

The actual installation can then start ; press the [Install] button.

NOTE: This installation is followed by the installation of the eBusiness tools (if not already installed under the same root) and -- in the initial context defined above -- of the Middleware.

<u>START-UP FILES</u>

The start-up files are :
- wb_admin.bat
- wb_global.bat
- wb_batch.bat
- wb_dialog.bat
- wb_eBusiness.bat
- wb_services.bat
- wb_extensibility.bat
- wb_cfm.bat

These files are to be found under the root directory of the Administrator & Developer workbench ('adworkbench').

START MENU / PROGRAMS CHOICE

Once the installation is complete, the Windows desktop includes the VisualAge Pacbase 3.5 Components section in the Start Menu/Programs choice, with the following sub-sections:

```
Administrator-Developer workbench
                          Administration
                          Batch
                          Dialog
                          eBusiness
                          Services Modeler
                          Extensibility
                          cfm
                          Global
```

Open Jade and Tidy / Publishing facility

Since version 3.5 V05, the Publishing facility has used the XSL technology by default. So the OpenJade and Tidy tools are no longer needed.

However if you prefer to use the DSSSL publishing, you must install these products.

For the versions earlier than 3.5 V05, you must install OpenJade and Tidy to publish documents.

To obtain these tools, refer to the installation instructions on the VA Pac support internet page: http://www.ibm.com/software/awdtools/vapacbase/download.html .

eBusiness Tools

The eBusiness Tools are:
- Proxy Generator
- Location Editor
- Services Test Facility
- VisualAge Pacbase Web Connection (Dialog Web Revamping Generator)
- Web Application Models (WAM)

This installation allows the eBusiness Tools to be used independently of Developer workbench, without a connection to the VisualAge Pacbase server. eBusiness tools (save WAM) are installed as VisualAge for Java features and tools.

If IBM SDK for Java 2 is not installed on your workstation, it will be installed automatically. . For this installation, as for that of the eBusiness Tools, the root being used depends on the current installation context. For complete details, refer to this chapter's first page.

To start the installation, click on the [INSTALL] button.

The following lines are irrelevant as far as WAM is concerned.

The Middleware component is automatically installed after the installation of the eBusiness Tools if it does not already exist under the root of the current installation. You will then have to specify some communication parameters.

For information on this part of the installation, see the Middleware subchapter.

The middleware installed in this context allows communication between the server and the generated proxies. Communication parameters will have to be set by the developer with the Location Editor tool included in this installation.

Also, the eBusiness Tools component can run via a gateway. In this case you will also have to install the Middleware component and configure the communication parameters, on the intermediate server which hosts the VisualAge Pacbase gateway.

NOTE: IMPORTANT information on communication issues is given at the beginning of this chapter.

START-UP FILES

The start-up files are :

- For the Proxy Generator:
  ```
  vapGen.exe
  ```
- For the Location Editor:
  ```
  vapLocationEditor.exe
  ```
- For the Services Test Facility:
  ```
  vapServicesTestFacility.exe
  ```
- For VisualAge Pacbase Web Connection:
  ```
  PacWebgen.exe
  ```

These files are to be found in the following sub-directory:
```
ebusinesstools\bin
```
- Unlike the other eBusiness Tools, WAM is installed in its own directory named Wam. This directory contains a zipped file and a readme file. Read this file and follow the instructions included therein.

START MENU / PROGRAMS CHOICE

Once the installation is over, the Windows desktop includes the VisualAge Pacbase 3.5 Components section in its Start Menu/Programs choice, with the following sub-sections:
```
eBusinessTools
            Location Editor
            Proxy Generator
            Services test Facility
            Dialog Web Revamping Generator
```

VisualAge Pacbase WorkStation

WARNING: The WorkStation runs on a 16 or 32 bits environment. Check that the WorkStation is installed in an environment compatible with such applications.

The root used for this installation depends on this installation context. For complete details, refer to this chapter's first page.

The first panel invites you to select the language option of the VisualAge Pacbase WorkStation interface. The default language option is English.

In the following panel, you select the methodology to be implemented by the WorkStation.

NOTE: If you wish to install another methodology, you will have to repeat this installation process one more time.

If displayed, the 'Local Install' option must be selected.

NOTE: The 'sub-features' option is identical to the 'feature' option.

In the next panel, select the elements to install:
- One or both of the following modules:
  - Pacdesign,
  - Pacbench.
- The connection mode:
  - The connected mode where a connection to the VisualAge Pacbase Repository is systematically performed.
  - The open connection option where the user has to choose between the connected or the local mode.

In the next panel, you indicate the communication mode (direct communication or communication via a gateway).

NOTE: Important information on communication issues is given at the beginning of this chapter.

This panel is not displayed if you have already installed Administrator & Developer workbench or the VA Pac WorkStation under the same root.
- If you choose the direct communication option, the middleware installation script will automatically start once the installation of the workstation is finished. It will require the configuration of communication parameters.

  For information on this part the installation, see the subchapter Middleware.
- If you choose the gateway option, enter the IP address of the gateway here. The installation of the middleware on the Developer workstation - also necessary in this context - will then start automatically after the installation of the WorkStation.

Next, in this same initial context, indicate the first Database which the VisualAge Pacbase WorkStation will access.

To do this, a panel enables you to enter:
1. The name of a Database, already installed at the server level or not.

   The names entered here will be displayed in the connection smartguide, thus showing users which Databases they can connect to.

   The name given to each Database should therefore be clear enough to be easily identified in the list of Databases proposed by the connection smartguide.

NOTE: If you use a customized file for the parameters, enter, after the Database name, the name of this file, framed by the '<' and '>' signs.

Complete details on these parameters are given at the end of this subchapter.

2. The Database logical code.

    Maximum length: 4 characters.

    If the Database is not installed yet at the server level, please keep this code in mind: it will have to be used again upon this installation. The codes entered here will also be displayed in the connection smartguide.

    The Database specifically dedicated to the site administration is automatically created. Its logical code is the '****' reserved code.

    NOTE: A logical code must be unique for a given location (see next item 3.)

3. The location name

    Maximum length: 20 characters.

    Default: Location-1

    More than one Database may be associated with one location.

4. Finally, specify the user authentication mode upon connection. Refer to the Database Administrator to make sure that the authentication mode applied at the server level is also applied at the WorkStation level.

    You select the mode via two check boxes:

    'Pacbase is secured':

    indicates that the user will have to enter his/her code and password to connect to the VisualAge Pacbase Database.

    'Middleware is secured':

    indicates that the user will have to enter his/her code and password in the Middleware identification box to connect to the host system. If only the Middleware box is selected, VA Pac authentication is performed by the security system.

    If you check both boxes, the user will have to enter his/her code and password to connect to the host system and to the Database.

In this way, you have defined the access to a first VA Pac Database. The installation script then allows you to define communication and connection to as many other Databases as necessary.

The actual installation can then start ; press the [Install] button.

NOTE: This installation -- in the particular context defined below -- is automatically followed by the middleware installation.

START-UP FILE

The start-up file is :
```
pexec.exe
```

This file is to be found in the VisualAge Pacbase WorkStation root directory (SPAC\nnnl where 'nnn' identifies the WorkStation's version and 'l' its installed language).

START MENU / PROGRAMS CHOICE

Once the installation is completed, your Windows desktop includes the VisualAge Pacbase 3.5 Components section in its Menu Start/Programs choice, with the following sub-sections:
```
WorkStation
            WorkStation 3.5
            WorkStation 3.5 News
            <methodology> News
```

INSTALLATION PARAMETERS FILE

A number of the installation parameters of the VA Pac WorkStation are located in the Pacbase.dat file.

The WorkStation installation procedure automatically creates this file in the \SPAC\NNNL directory where 'NNN' indicates the version and 'L' the language code of the version installed.

The Pacbase.dat file, which necessarily conforms to the most recent installation, is therefore used by default when the WorkStation is started up.

However you can create one or more parameter files. This can be useful if more than one methodology is installed on a workstation, which is rather rare. It will then be easier to change the methodology when reconnecting.

The choice of file name is open but must conform to DOS file standard. The .dat extension is recommended.

These DOS files should resemble the Pacbase.dat file and should be stored in the same directory as this file.

When the VA Pac WorkStation is reinstalled, the *.dat files you created will not be deleted.

DESCRIPTION OF THE PARAMETERS FILE

Each of the lines in this file has the following structure:

- a three-digit identifier in positions 1 to 3
- the parameter label, whose position is unfixed
- the parameter value, between square brackets ([and]), whose position is also unfixed

The following is an example of a PACBASE.DAT file:

```
001 Station Version          [350F]
002 Server                   [PACBASE]
003 Communication Manager    [MWCOM]
004 Communication Parameters [MWCOM]
005 System                   [WINDOWS]
006 Method                   [MER]
007 EXE disk                 [C]
008 EXE disk(default)        [C]
009 System Data Disk         [C]
010 User Data Disk           [C]
011 Connection execution mode [E]
```

The Pacbase.dat file should not be destroyed.

The possible values for the Methodology parameter are:

Parameter value	Methodology name
MER	MERISE
DON	YSM
ADM	SSADM (in English only)
OMT	OMT
IFW	FAA

WARNING: The parameters 001 to 005 and 011 cannot be modified.

WARNING ON VAPLOCAT.INI FILE

The Vaplocat.ini file indicates the locations of the Databases and the communication parameters. If you modify this file while using the WorkStation, you must reboot your computer to take the modification into account.

For more details on this file, read the information developed in subchapters 'Things to Know Before Installing' and 'Editing communication Parameters'.

Web Application Models (WAM)

The root used for an installation depends on the context of that installation. For more information, see the first page of this chapter.

To start the WAM installation, press the [Install] button.

WAM is installed in its own directory named Wam. This directory contains a zipped file and a readme file. Read this file and follow the instructions included therein.

Middleware

The specific installation of the Middleware component on a dedicated machine (intermediate server) is necessary only when a communication via a gateway is used.

In fact, the Middleware component is automatically installed, immediately after the first installation (under a given root) of one of the other Client components.

The root used for an installation depends on the context of that installation. For more information, see the first page of this chapter.

To use the Administrator and Developer workbench or the VA Pac WorkStation, the location parameters of your VisualAge Pacbase Databases must always be specified.

NOTE: IMPORTANT information related to the communication is given in the beginning of this chapter.

- If communication is provided via the VisualAge Pacbase Gateway, installation of the Middleware on this intermediate server requires the definition of the location necessary for the first VA Pac Database.

NOTE: In the New location field, enter a name for each location.

WARNING: If there is more than one location to define, either for the same Database or to manage more than one Database, you must define these extra locations directly in the vaplocat.ini file.

For more information on updating this file, see subchapter 'Complementary Information', section 'Updating Communication Parameters'.

- If communication is direct, the locations are automatically displayed, as they have been predefined in the first phase of the Administrator & Developer workbench or the VA Pac WorkStation installation.

Next, whatever the Client component concerned, you have to specify a certain number of different parameters, depending on the protocol used.

LIST OF PARAMETERS
- VAP SOCKET
  - IP address: IP address and port used by the VA Pac server.

    Do not enter left-aligned '0', source of error with some configurations.
- MVS CICS SOCKET
  - IP address: IP address and port used by the VA Pac server.

    Do not enter left aligned '0', source of error with some configurations.
  - Transaction code: Code of the CICS transaction of the VA Pac Communication Monitor.
  - Code Page: Value identifying the coding of characters used by the VA Pac server.

    1140 (US EBCDIC) or 1146 (UK EBCDIC)
- MVS CICS CPI-C
  - Destination-id entry: BVPSCPI (default value).

    If you modify this value, it must be the same as the value entered in the Symbolic destination name, a parameter included in the configuration of this communication protocol.
  - Code page: Value identifying the coding of characters used by the VA Pac server.

    1140 (US EBCDIC) or 1146 (UK EBCDIC)
- MQ-CICS Bridge and MQ-IMS Bridge
  - LocCcsid: Character-set code of the machine in local (819 by default), used for the conversion of messages by MQSeries during the read and write of Queues.

    Maximum: 9 characters.
  - Queue Manager name: Name of the local Queue Manager of the client part.

    If there is an intermediate MQSeries Server on NT, this parameter must identify the intermediate NT Queue Manager and not the Queue Manager.

    Maximum: 4 characters.
  - Request Queue name:

    Maximum: 48 characters.
  - Reply Queue name:

    Maximum: 48 characters.
  - Transaction code:

Maximum of 4 characters for CICS.

Maximum of 8 characters for IMS.

- MVS IMS Connect
  - IP address: IP address and port used by the VA Pacbase server.
  - Transaction code: IMS transaction code of the VA Pacbase Communications Monitor.
  - Code page: Value identifying the coding of characters used by the VA Pacbase server.

    1140 (US EBCDIC) or 1146 (UK EBCDIC)
  - Data Store:

    Name of the link to IMS defined in IMS Connect (IMS Data Store ID).
  - RACF group: Name of the RACF group for IMS Connect.

You can now start the installation; press the [Install] button.

Additional Information

How to Configure the MVS CICS CPI-C Protocol

The following text gives you details on the configuration specific to the use of VisualAge Pacbase Client components.

The minimum prerequisites are:
- IBM Personal Communications 4.2
- Microsoft SNA Server 3.0A

  The Service Pack 2 must be installed for APPC corrections.

The protocol (CPI-C/APPC LU6.2) must be configured as follows:
- In the "Define CPI-C Side Information" window, type BVPSCPI in the "Symbolic destination name" field.

  This code identifies the monitor which sets up the connection between the Client components and the VisualAge Pacbase server programs which use APPC.

NOTE: It is possible to type a value other than BVPSCPI, provided the Symbolic destination name value is the same as the MONITOR parameter value in the vaplocat.ini file.

Example of a location in vaplocat.ini:

```
<MVS-DB2-CPIC>
COMM_TYPE=CPIC
MONITOR=BVPSCPI
```

```
MESSAGE_LENGTH=31744
IXO_TIMEOUT=30
HOST_ENCODING=1140 (US EBCDIC) or 1146 (UK EBCDIC)
```
- In the "TP name" field, type the CICS transaction code which is associated with the BVPSCPI communication monitor.

Editing Communication Parameters

The bases.ini File

You will need to update the bases.ini file to add or delete a Database, or to modify communication parameters.

By default this file's access path is:
```
C:\Program Files\IBM\VisualAge_Pacbase_35\Common\
```

This file's format meets the standards of Windows .ini files.

Each section in the bases.ini file defines a configuration allowing access to one VisualAge Pacbase Database. Each section's name must be framed by brackets [Section Name].

The name of each section will be presented to the user in the connection smartguide. In the displayed list of VA Pac Databases, the user picks the Database he/she wants to connect to. This is why section names need be very explicit. All the more so since you can manage several communication options for one VA Pac Database. To do so, define as many configurations/sections as needed for one Database, clearly differentiated from one another by their name.

NOTE: With the VA Pac WorkStation, you may use a customized parameters file. To do so, enter -- after the VA Pac Database name -- this file's name framed by the '<' and '>' signs. Complete details on these parameters are given above, at the end of the 'VisualAge Pacbase WorkStation' subchapter.

DESCRIPTION OF A SECTION'S CONTENTS

The parameters in each section are listed below. There is one parameter per line:
- baseCode = code of the VisualAge Pacbase Database (required)

  Maximum length: 4 characters

  NOTE: Concerning the VA Pac WorkStation, this code must be unique in the bases.ini file for a given Location.

- signOn = indicator for the control of the user signon. This indicator is required and takes one of the three following values:
  - VAPac: indicates that the user will have to give his/her code and password only when he/she connects to the VisualAge Pacbase Database.
  - Middleware: indicates that the user will have to give his/her code and password only when he/she connects to the host. The connection to the VA Pac Database will be controlled by RACF (or equivalent).
  - VAPac Middleware: indicates that the user will have to give his/her code and password when he/she connects to the host and to the Database (default option).
- communicationAdapter = indicates the communication mode in use.
  - DIRECT: local middleware
  - GATEWAY: remote middleware (via the VisualAge Pacbase gateway)

The following parameters vary according to the chosen option.

- connectionCleaningInterval = period of time (in millisecond) between two startups of connections cleaning procedures.

  Parameter needed for the VisualAge Pacbase Workstation only.

  Default value for Windows NT/2000/XP = 60000.

  For Windows 95/98, this parameter must be set to -1, and cannot be modified, to avoid problems of multi-threading, not supported by these platforms.

PARAMETERS FOR DIRECT ADAPTER (LOCAL MIDDLEWARE)

- locationsFile = indicates the path and name of the file which contains the locations definitions.

  Default: ..\common\vaplocat.ini

  CAUTION: The default value of this parameter should not be modified.
- location = location name for the Database

  Maximum length: 20 characters.

  Default: Location-1

  More than one Database can point to the same location.

  REMINDER: A location identifies the communication protocol used to access the VisualAge Pacbase server and the physical address of this server for this protocol.
- traceFile = path and name of the file which will receive the trace of the middleware execution.

  By default this file is automatically created (with timestamp) in the VapTrace sub-directory.

- traceLevel = trace level of the middleware execution. Its possible values are:
  - 0 : no trace
  - 1 : trace with errors (default)
  - 2 : standard trace, not detailed
  - 3 : trace for information
  - 4 and + : trace for debugging
- codePageFile = path and name of the file which contains the conversion table of the code pages.

  Default: ..\middleware\CharConv.txt

PARAMETERS FOR GATEWAY ADAPTER (REMOTE MIDDLEWARE)

- host = name or IP address of the host where the VisualAge Pacbase gateway is installed.

  Do not enter left aligned '0', source of error with some configurations.

  Default: 127.0.0.1 for a local host
- port = value of the IP port where the gateway receives the client requests.

  Default: 5647
- location = location name for the Database

  Maximum length: 20 characters.

  Default : Location-1

  More than one Database can point to the same location.

  REMINDER: A location identifies the communication protocol used to access the VisualAge Pacbase server and the physical address of this server for this protocol.
- The traceFile and traceLevel parameters can be used to start the GATEWAY. For more details, refer to the Middleware User's Guide.

NOTE: All the parameters which may be present in the bases.ini file are not explained here. In fact, a number of these parameters allow finer middleware settings, particularly used by proxies (generated by the eBusiness Tools). These parameters are used separately from the bases.ini file and are documented in the Proxy Programming Interface manual.

The vaplocat.ini File

You will have to update the vaplocat.ini file to add or delete a Database, or possibly modify other parameters described below.

By default, the path to this file is:

```
C:\Program Files\IBM\VisualAge_Pacbase_35\Common\
```

To add a VisualAge Pacbase Database, create a line on which you enter the location name between '<' and '>'.

The maximum length of this name is 20 characters.

According to the protocol selected, you will have to choose different parameters (one per line):

- VAP SOCKET

```
<LocationName>
COMM_TYPE=SOCKET
MONITOR=BVPSCPI
MESSAGE_LENGTH=31744
IXO_TIMEOUT=30
IXO_ADDRESS=127.0.0.1 3676
```

- MVS CICS SOCKET

```
<LocationName>
COMM_TYPE=TCPMVS
MONITOR=BVPSSOC
MESSAGE_LENGTH=31744
IXO_TIMEOUT=30
HOST_ENCODING=1140 (US) or 1146 (UK)
IXO_ADDRESS=127.0.0.1 3676
IXO_TRANSID=V303
```

- MVS CICS CPI-C

```
<LocationName>
COMM_TYPE=CPIC
MONITOR=BVPSCPI
MESSAGE_LENGTH=31744
IXO_TIMEOUT=30
HOST_ENCODING=1140 (US) or 1146 (UK)
```

- MQ-CICS Bridge

```
<LocationName>
MESSAGE_LENGTH=31744
MONITOR=BVPSCPI
COMM_TYPE=MQCICS
IXO_LOCALCCSID=819
IXO_QUEUEMANAGER=EECC
IXO_REQUESTQUEUE=VAP.CICS_BRIDGE.VAPCS.REQUESTER
IXO_REPLYQUEUE=VAP.CICS_BRIDGE.VAPCS.REPLY
IXO_DYNAMICREPLYQUEUE=VAP.CICS_BRIDGE.VAPCS.DYNAMICREPLY
IXO_TRANSID=WK51
IXO_REQUESTEXPIRY=120
IXO_TIMEOUT=35
IXO_HEADERVERSION=1
```

- IMS Connect

```
<LocationName>
COMM_TYPE=TCPIMS
MONITOR=XXXXXXXX
MESSAGE_LENGTH=31744
IXO_TIMEOUT=30
HOST_ENCODING=1140 (US) or 1146 (UK)
IXO_ADDRESS=127.0.0.1 3676
IXO_TRANSID=WK35
IXO_DATASTORE=IMSC
IXO_RACFGROUP=FR42
```

- MQ-IMS Bridge

```
<LocationName>
MESSAGE_LENGTH=31744
MONITOR=XXX
COMM_TYPE=MQIMS
IXO_LOCALCCSID=819
IXO_QUEUEMANAGER=EECC
IXO_REQUESTQUEUE=VAP.IMS_BRIDGE.VAPCS.REQUESTER
IXO_REPLYQUEUE=VAP.IMS_BRIDGE.VAPCS.REPLY
IXO_DYNAMICREPLYQUEUE=VAP.IMS_BRIDGE.VAPCS.DYNAMICREPLY
IXO_TRANSID=WK51
IXO_REQUESTEXPIRY=120
IXO_TIMEOUT=35
IXO_HEADERVERSION=1
```

DETAILS ON THE PARAMETERS

The following list is organized according to the alphabetical order of the parameters.

- COMM_TYPE:

  This parameter identifies the communication protocol in use.

  The possible values are:

  - SOCKET: VA Pac Server under Windows or UNIX, with the use of TCP/IP.
  - TCPMVS: VA Pac Server under MVS/CICS with the use of a TCP/IP listener.
  - CPIC: VA Pac Server under MVS/CICS, with the use of the CPI-C protocol.
  - MQCICS: VA Pac Server under MVS/CICS, with the use of the MQ-CICS-BRIDGE protocol.
  - MQMCICS: Same as MQCICS and if the middleware is installed on the same machine as MQSeries Server and you want to use a direct link with MQSeries.
  - TCPIMS: VA Pac Server under MVS/IMS, with the use of the IMS Connect protocol.
  - MQIMS: VA Pac Server under MVS/IMS, with the use of the MQ-IMS-BRIDGE protocol.

- MQMIMS: Same as MQIMS and if the middleware is installed on the same machine as MQSeries Server and you want to use a direct link with MQSeries.

- IXO_ADDRESS: IP address and port used by the VA Pac Server.

  Do not enter left-aligned '0', source of error with some configurations.

  The port number must correspond to the one indicated at the host machine configuration for OS390 CICS and IMS/VS.

  The same for Windows or UNIX, but for these platforms, a number specifically identifies a VA Pac Database. For more details, refer to the 'Installation of Server Environment' chapter, 'Repository Installation' subchapter, 'Development Databases' section, in the respective Installation Guides.

- IXO_DATASTORE: Name of link to IMS defined in IMS Connect (IMS DataStore ID).

- IXO_DYNAMICREPLYQUEUE

  MQ-CICS Bridge and MQ-IMS Bridge.

  When this parameter is set, the reply Queue is dynamically created by MQSeries to pass the response messages (consult the MQSeries documentation to use this type of Queue). This parameter must contain the dynamic name of the Queue (Dynamic Queue name) and the IXO_REPLYQUEUE parameter must contain the 'Queue Model' name (48 characters maximum).

- IXO_HEADERVERSION: Version of the MQCIH structure (for MQ-CICS Bridge) or of the MQIIH structure (for MQ-IMS Bridge).

  1 (default) or 2, depending on the Bridge interface in use (1 character maximum).

- IXO_LOCALCCSID: code of the character set of the machine locally

  MQ-CICS Bridge and MQ-IMS Bridge.

  This code (819 by default), used for the conversion of messages by MQSeries during the read and write of Queues.

  (9 characters maximum).

- IXO_QUEUEMANAGER: Local Queue Manager name of the client part.

  MQ-CICS Bridge and MQ-IMS Bridge.

  (4 characters maximum).

  If there is an intermediate MQSeries Server on NT, this parameter identifies the intermediate NT Queue Manager and not the Queue Manager.

- IXO_RACFGROUP: Name of RACF group for IMS Connect.

- IXO_REPLYQUEUE: Name of reply messages Queue.

  MQ-CICS Bridge and MQ-IMS Bridge.

  (48 characters maximum).

- IXO_REQUESTEXPIRY: Expiration delay of the request message, in seconds.

  MQ-CICS Bridge and MQ-IMS Bridge.

  (9 characters maximum).
- IXO_REQUESTQUEUE: Name of request messages Queue.

  MQ-CICS Bridge and MQ-IMS Bridge.

  (48 characters maximum).
- IXO_TIMEOUT: Maximum time required for a workstation to receive an answer from the server before indicating any communication error.

  This parameter is indicated in seconds. Its default value is 30.
- IXO_TRANSID: Transaction code.

  (4 characters maximum for CICS and 8 characters maximum for IMS).

  This IMS transaction will have to be declared on IMS by a GEN INPUT IMS as follows:

```
 APPLCTN  PSB=BVPSSOC
 TRANSACT CODE=WK35,SEGSIZE=32000,MODE=SNGL,SEGNO=00050,
          PRTY=(07,10,00002),PROCLIM=(00005,00015),EDIT=ULC,
          MSGTYPE=(MULTSEG,RESPONSE,$CLS)
```

- HOST_ENCODING: Identifies the encoding of the characters used by the VisualAge Pacbase server.

  1140 (US EBCDIC) or 1146 (UK EBCDIC)

  Not used with MQ-CICS Bridge and MQ-IMS Bridge.
- MESSAGE_LENGTH The value of this parameter MUST be 31744.
- MONITOR: Communication monitor code for VisualAge Pacbase, which is BVPSCPI, or BVPSSOC for MVS CICS SOCKET.

  Not used with IMS Connect and MQ-IMS Bridge.

  NOTE: For MVS CICS CPI-C, you can however enter a value other than BVPSCPI, bearing in mind that the value of the MONITOR parameter must be in all cases the same as the one set in the Symbolic destination name, a parameter included in the communication protocol configuration.

All the parameters of the vaplocat.ini file are not explained here. In fact, certain parameters allow finer middleware settings, particularly used by proxies (generated by eBusiness Tools). In this context, these parameters are edited with the Location Editor tool and are therefore documented in its online help. You can also consult the documentation of these parameters in the Middleware use's Guide.

Component Updating, Modification, or Removing

The VA Pac Client Components Installation CD-Rom also allows you to:

- 'Update' a component which is already installed.
- 'Modify' i.e. add a new sub-component to a component which is already installed.

  This option is available only with:

  - Administrator & Developer workbench:

    To add one of both workbenches as the other is already installed,

  - VisualAge Pacbase WorkStation:

    To add a Methodology.

- 'Remove' a component which is already installed.

  You can also use the Windows service 'Add/Remove' Programs in the Configuration Panel.

Chapter 5. Tests

List of Utilities

The summary table below lists the management utilities of the Administration and Development Databases.

JCL	Description
JCLARAD	Archiving of the Administration Database journal
JCLSVAD	Saving of the Administration Database
JCLROAD	Reorganization of the Administration Database
JCLRSAD	Restoration of the Administration Database
JCLPAGX	Extraction of Administration Database
JCLUPGP	Update in PAF batch format of Administration Database
JCLARCH	Storage of the Development Database journal
JCLSAVE	Saving of the Development Database
JCLMLIB	Library management
JCLREOR	Reorganization of the Development Database
JCLREST	Restoration of the Development Database
JCLUPDT	Batch update of the Development Database
JCLGPRT	Generation print
JCLEXLI	Library extraction
JCLEXPJ	Journal extraction
JCLEXTR	Entities extraction
JCLUXSR	sub-networks extraction

Installation Tests

The VA Pac Installation tests include the following operations:
- Generation-print, online and batch update tests,
- Administration procedures tests,
- Development procedures tests,
- Extraction utility tests.

Generation-Print, Online and Batch Update Tests

These tests consist of the following steps:
- Online use tests:
  - Opening the test Database files in on-line mode.
  - Testing screen branching.
  - Executing some updates.
- Batch updating tests:
  - Executing the 'JCLUPDT' JCL (UPDT procedure).
  - The Database files must be closed to on-line use.
- Test on generation and print of programs:
  - Executing the 'JCLGPRT' JCL (GPRT procedure).

Administration Database Procedures Tests

You must first consult and perform a number of updates with the Administrator workbench.

You can then carry out the procedure tests, knowing that the Administration Database files must be closed to on-line access.

These tests include the following steps, to be executed in this order:
- Archiving of the journal created during the use tests: execute the 'JCLARAD' JCL, which outputs a PK(1) file.
- Backup of the Administration Database: execute the 'JCLSVAD' JCL, which outputs a PE(1) file; as the evaluation key does not allow to execute this procedure, you must enter the access key previously provided.
- Reorganization of the sequential backup, PE(1), of the Administration Database: execute the 'JCLROAD' JCL, which outputs a PE(2) file.
- Restoration of the Administration Database using the PK(1) archived transaction file and the PE(2) Database backup file: execute the 'JCLRSAD' JCL.
- Extraction of Administration Database data: execute the 'JCLPAGX' JCL and save the GY file of extracted data.
- PAF update of the Administration Database: execute the 'JCLUPGP' JCL with the extracted file (result of the 'JCLPAGX' JCL execution).

Development Database Procedures Tests

You must first consult and perform a number of updates with the Developer workbench.

You can then carry out the procedure tests, knowing that the Development Database files must be closed to on-line access.

These tests include the following steps, to be executed in the following order:

- Archiving of the journal created during the use tests: execute the 'JCLARCH' JCL, which outputs a PJ(1) file.
- Direct backup of the Development Database: execute the 'JCLSAVE' JCL, which outputs a PC(1) file; as the evaluation key does not allow to execute this procedure, you must enter the access key previously provided.
- Library manager: add/delete a library in the Development Database: execute the 'JCLMLIB' JCL, which outputs a PC(2) file.
- Reorganization of the sequential backup, PC(2), of the Development Database: execute the 'JCLREOR' JCL, which outputs a PC(3) file.
- Restoration of the Development Database using the PJ(1) archived transaction file and the PC(3) Database backup file: execute the 'JCLREST' JCL.

The Development Database files must be closed to on-line use while these tests are being performed.

It is advised to briefly test on-line operations again, after restoring and re-opening the Development Database files to make sure that the application runs properly.

Extraction-Utility Tests

The purpose of these tests is to execute the Database extraction procedures.

These tests include the following steps, to be executed in the following order:

- Extraction of a library as transactions: execute the 'JCLEXLI' JCL.
- Extraction of entities from a library: execute the 'JCLEXTR' JCL.
- Extraction of selected transactions and/or lists of transactions from the archived journal (PJ): execute the 'JCLEXPJ' JCL.
- Extraction of sub-network: execute the 'JCLUXSR' JCL.

To run these tests, the development files can be open in on-line mode.

Each of these jobs can be followed by an UPDT or UPDP procedure to check the validity of these extracted transactions.

Chapter 6. Server Re-installation

A reinstallation of the system environment of the VisualAge Pacbase server is necessary in the case of corrections or enhancements on the version installed.

To install this version, download it from the CD-ROM to the dedicated PDS by using SMP/E and execute the provided JCLs if necessary.

This version is identified by a number and includes:

- An installation CD-ROM,
- The "Program Directory for VA Pacbase" specific to SMP/E,
- The list of corrected anomalies,
- Instructions -- possibly included -- to complete this chapter.

Generally, only system files and program libraries are impacted by this version.

In any case, load-modules are updated by SMP/E. They are copied in hlq.SBVPMBR8 and hlq.SBVPMTR8 PDS.

Remark in case of a previous SMP/E installation

The SMP/E reinstallation implies that the SMP/E context is empty for the product: either the product has never been installed with SMP/E, or the files related to SMP/E have been reinitialized for the previous version, or you want to create a new SMP/E environment for this reinstallation.

Otherwise, if you want to re-use the SMP/E files of the previous version, you can execute, before step 1, the SMP/E utility described in the Appendix at the end of this manual.

Two cases are possible:

Case 1: Standard re-installation

This operation consists in executing the jobs contained in the following JCL modules:

1. D04MBR : job $prfj.D4B renaming of batch user-exits load modules,
2. D06SKEL: loading of skeleton files,
3. D07AE0 : loading of error messages,

4. D08XMET: installation of the Administration Model, (see the description in the appendix at the end of the manual).

5. I05META: installation of the Development Model extension. This job must be run for each re-installed base (see the description in the appendix at the end of the manual).

Notes

If the execution report of the D08XMET JCL indicates that a re-organization is requested, you will have to run the following JCLs:

1. JCLSVAD: backup of the Administration Database,
2. JCLROAD: re-organization of the Administration Database,
3. JCLARAD: archiving of the Administration Database journal,
4. JCLRSAD: restoration of the Administration Database.

If the execution report of the I05META JCL indicates that a re-organization is requested, you will have to run the following JCLs:

1. JCLSAVE: backup of the Development Database,
2. JCLREOR: re-organization of the Development Database,
3. JCLARCH: archiving the Development Database journal,
4. JCLREST: restoration of the Development Database.

Case 2: Non-standard re-installation

It consists in executing specific operations detailed in the instructions included in the shipment.

Here are some general rules you must follow before executing the jobs previously described in the standard re-installation.

- If a JCL, a procedure or a SYSIN has been modified, you must rerun the hlq.SBVPINST(BVPPINIT) JCL and split the result file to re-install the JCLs as described in the chapter 3, 'Parameterization' subchapter.
- If a system or an Administration Database SYSIN has been modified, you must execute the D02CPAR JCL.
- If there is a new skeleton or system file, you must modify the D03DEFIN JCL and keep the DELETE/DEFINE of the new files only, then execute this JCL. And if needed, execute the D03INI JCL on the concerned files to re-initialize them.
- If there is a new procedure, you must run the D05PROC JCL.
- If there is a new SYSIN of the Development Database, execute the I02SY JCL.

Note:

The split of the BVPPINIT JCL result file, as well as the D02CPAR, D05PROC and I02SY JCLs respectively override all the JCLs, the system and Administration Database SYSINs, the procedures, and the Development Database SYSINs.

It is recommended to previously save the customized elements.

Chapter 7. Retrieval - Exchanges between 2.n & 3.n Databases

Retrieval of VisualAge Pacbase 2.0 and 2.5

Foreword

The installation of the release can be complemented by the execution of utilities procedures.

These procedures are dedicated to prepare the retrieval in the new release.

There are two types of procedures:

Procedures to be executed on the 2.5 Database.

See the manual related to the 2.5 utilities used to retrieve a 2.5 version.

These procedures are :
- UTAG : AG file purge,
- UTFG : PIA stamp,
- UTSD : association of keyword to a data structure type.

Procedures to be executed on the new Database.

See the 'Appendix' at the end of this manual for a detailed documentation.

These procedures are :
- UTU1 : extraction of 'UNS' lines,
- UTU2 : update of 'UNS' lines.

Operations to be Performed

The installation of this version requires, in the one hand, the retrieval of the AG (generation-print commands file), AE AP (user parameters files) and AB AC (PEI files) files in the new Administration Database, and on the other hand, the retrieval of the old Development Database.

Sequence of operations

It consists of seven steps:

1) Backup of all the old files required. You must execute the following procedures in the old version.

- SAVE: backup of the Development Database (PC),
- PARM: backup of the user parameters (PE),
- SVAG: backup of the generation-print commands (PG),
- SVPE: backup of the PEI environment (PP),
- ARCH: backup of the journal (PF).

2) Installation of the Administration Database

To install the Administration Database, execute the installation process up to the D07AE0 JCL.

This step creates the GN, GR, GY, GJ and GU files.

You must execute the following JCLs:
- Creation of the Administration Database,
    - D08INGU: creation and initialization of GU user codes file,
    - D08INIAD: creation and initialization of the Database backup file (PE file), and journal backup file (PK file),
    - D08RSAD: initialization of the Administration Database with installation data,
    - D08TINQJ: initialization of the QJ archive file
    - D08XMET: installation of the Administration Model (see the Appendix, at the end of the manual),
- Implementation of the access key from Administrator workbench by executing the following operations:
    - Input of access key,
    - targets definition,
    - key activation.
- Re-organization of the Administration Database if it is mentioned in the execution report of the preceding job (D08XMET).
    - JCLSVAD: backup of the Administration Database,
    - JCLROAD: re-organization of the Administration Database,
    - JCLARAD: initialization of the Administration Database journal file,
    - JCLRSAD: restoration of the Administration Database,
- Retrieval of the old Database data,
    - RPE250: retrieval of user parameters from the PE file which was generated during step 1,
    - RMP250: retrieval of 2.n user passwords (optional),

–   JCLSVAD: backup of the Administration Database.

3) Retrieval of a Development Database.

To perform this step, the installation process of the Development Database(s) must be run up to the I03INI JCL.

It consists in executing the following JCLs:

*   RPC250: retrieval of the old Development Database from the backup of the old Database which was created during step 1, and re-organization of the new Database.
*   JCLARCH: archiving of the Development Database,
*   I04REST: restoration of the new Development Database from the backup obtained previously; do not forget to specify the Development Database code in the user input of the procedure,
*   I05META: installation of the new Database Development Model (see the description in the appendix at the end of this manual and create the MR file to take its transactions into account in the re-organization),

The execution of the following procedures, even if it is not requested in the I05META report, is advised for a better optimization.

*   JCLSAVE: backup of the new Development Database,
*   JCLREOR: re-organization of new Development Database,
*   JCLREST: restoration of the Development Database from the backup file resulting from the preceding re-organization procedure.

Steps 4, 5, 6 and 7 are optional.

4) Retrieval of generation-print commands.

It involves executing the following JCLs:

*   RPG200: retrieval of a 2.0 PG file,
*   RPG250: retrieval of a 2.5 PG file.

5) Retrieval of PJ journal

It involves executing the following JCL:

*   RPJ250: retrieval of PJ file data.

6) Retrieval of PEI files.

It involves executing the following JCLs:

*   RPP250: retrieval of PP file,

- RPEI25: PEI retrieval.

7) Retrieval of Pac/Transfer parameters (UV).

It involves executing the following JCL:
- RUV250: retrieval of UV file data.

Retrieval of User Parameters (PE25)

PE25 - Introduction

Principle

This procedure (PE25) retrieves the PE file resulting from the user parameters backup executed by the PARM procedure, to update the Administration Database.

Execution conditions

The Administration Database files must be closed to on-line use.

Printed output

This procedure prints a report which indicates the errors encountered.

Result

This procedure integrates the 2.0 or 2.5 user parameters into the Administration Database.

Notes

If the Database to be retrieved is under RACF control, you cannot connect via the ADMIN code provided upon installation ; you must use an Administrator code of this Database.

The retrieval reinitializes the license assignments.

PE25 - Input / Processing / Results

A '*' line in which you indicate a user code and password.

An 'A' line (optional) in which you indicate the Administrator's code and name. This line is necessary only if a security system (RACF) is used.

The 'A' line has the following structure:

Position	Length	Value	Meaning
2	1	'A'	Line code
3	8	bbbbbbbb	Administrator's code
11	36		Administrator's name

A 'B' line by Database. You indicate in this line the characteristics of the Development Databases that will be managed in the new Administration Database. You must specify:

- the Database code: it is the logical code, which will be indicated upon the Database restoration.
- the Database name
- the transaction code: it is used to connect to the Database in character mode. The $BASE installation parameter is also used to code the file names.

If the Database code or name is not specified, an error message is sent and the procedure cannot be run.

The 'B' line has the following structure:

Position	Length	Value	Meaning
2	1	'B'	Line code
3	4	bbbb	Logical Database name
7	36		Database name
43	4	cccc	Transaction code

A 'C' line (optional) in which you indicate the code of the Database linked to the Optional Command Lines Set. If the command is common to all the Databases, do not enter this line and the Database code is '****'.

The 'C' line has the following structure:

Position	Length	Value	Meaning
2	1	'C'	Line code
3	4	bbbb	Database code

PE25 - Description of Steps
Input recognition: PTU001

Processing of user parameters (PE): PTU920

Code	Physical name	Type	Label
PAC7EN	&OLDPE	Input	User parameters, old version
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7MB	&&PE25MB	Input	User input
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7GY	&&PACGY	Output	User parameter transactions (length=310)
PAC7ET		Report	Error report

Transaction formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	&INDSV..BVPGR	Input	Administration Database data
PAC7AN	&INDSV..BVPGN	Input	Administration Database index
PAC7AE	&INDSV..BVPAE	Input	Error labels
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7GY	&&PACGZ	Input	Update transactions
PAC7MV	&&PAC7MV	Output	Formatted transactions (should be able to contain all input transactions and the elementary cancel transactions generated by multiple cancel transactions) (length=170)
PAC7ME	&&PAC7ME	Output	Work file (length=372)
PAC7MW		Output	Work file (length=170)
PAC7MX		Output	Work file (length=743)
PAC7MY		Output	Work file (length=743)

Administration Database update: PACA15

Code	Physical name	Type	Label
PAC7AR	&INDSV..BVPGR	Output	Administration Database data
PAC7AN	&INDSV..BVPGN	Output	Administration Database index

Code	Physical name	Type	Label
PAC7AY	&INDSV..BVPGY	Output	Administration Database extension
PAC7AJ	&INDSV..BVPGJ	Output	Administration Database journal
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGY	&INDSV..BVPGY	Input	Administration Database extension
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7ME	&&PAC7ME	Input	Work file
PAC7MV	&&PAC7MV	Input	Update transactions
PAC7RB	DUMMY	Output	UPDT erroneous transactions (length=80)
PAC7RY	DUMMY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)
PAC7IF		Report	Summary of erroneous transactions (length=132)

The list of the transactions specific to a user is preceded by a banner which contains the user's code.

Return codes:

- 0: OK without error
- 2: warning
- 4: error

PE25 - Execution JCL

```
//* -------------------------------------------------------
//*       VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*                    RETRIEVAL OF PE FILE
//*
//* -------------------------------------------------------
//*
//BVPPE25  PROC OUT=$OUT,                        OUTPUT CLASS
//         INDSV='$INDSV',          INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',      INDEX OF SYSTEM NON VSAM FILES
//*:       VSAMCAT='$VCAT',               USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',             SYSTEM VSAM CATALOG
```

```
//          STEPLIB='$HLQ..SBVPMBR8',     LIBRARY OF LOAD-MODULES
//          LSR='BLSR',                   LSR BATCH SYSTEM NAME
//          OUTL=$OUT,                    OUTPUT CLASS OF REPORTS
//          OLDPE=,                       DS NAME OF OLD PE
//          UWK=$UWK,                     WORK UNIT
//          SPAMB='(TRK,(100,10),RLSE)'   TRANSACTION SPACE
//*********************************************************************
//INPUT   EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&PE25MB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//VERIFY EXEC PGM=IDCAMS
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGY   DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGY),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//PTU920 EXEC PGM=BVPTU920
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7MB   DD DSN=&&PE25MB,DISP=(OLD,DELETE)
//PAC7EN   DD DSN=&OLDPE,DISP=SHR
//PAC7GY   DD DSN=&&PACGY,DISP=(,PASS),UNIT=&UWK,
//            SPACE=(TRK,(100,20),RLSE),
//            DCB=(RECFM=FB,LRECL=310,BLKSIZE=3100)
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7ET   DD SYSOUT=&OUT
//PAF900 EXEC PGM=BVPAF900,COND=(0,NE,PTU920)
//*----------------------------------------
```

```
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7GY   DD DSN=&&PACGY,DISP=(OLD,DELETE)
//PAC7ME   DD DSN=&&PAC7ME,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=372,BLKSIZE=27156)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MW   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MX   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PAC7MY   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PACA15 EXEC PGM=BVPACA15,
//            COND=((0,NE,PTU920),(0,NE,PAF900))
//*-------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDSV..BVPGJ,DISP=SHR
//ANLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
```

```
//GYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGY   DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7DC   DD DUMMY
//PAC7IE   DD SYSOUT=&OUTL
//PAC7IF   DD SYSOUT=&OUTL
//PAC7ME   DD DSN=&&PAC7ME,DISP=(OLD,DELETE)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(OLD,DELETE)
//PAC7RB   DD DUMMY
//PAC7RY   DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
```

Retrieval of the Development Database (PC25)

PC25 - Introduction

Principle

This procedure (PC25) retrieves the PC file output by the backup of the old Development Database into a PC file with the new format.

Execution conditions

None.

Printed output

This procedure prints a report which indicates the number of Manuals changed into Volumes, the code of the new Development Database and the number of records output by the PC file.

Result

The result of this procedure is a sequential image of the Development Database with the new format. This new PC file must be used as input to the next step: the re-organization step (required).

PC25 - Notes on Data Retrieval

Splitting up of the comment description (-G)

The comment description is split up into several descriptions.
• Comments
   They include the comments and the COBOL alias (-GC).
   Caution

In the 2.0 or 2.5 release, if the type of documentation line was not adapted to the entity type (ex: a generation line in a Data Element), it will become a comment.

- Generation lines

  They include the G, P, V and Z line types (-GG).

- Generation parameters

  They include the O line type (-GO).

- Error messages management

  They include the C, D, F ,S ,T, U line types (-GE).

- Call of entities via Relations

  They include the R line type (-CR).

- Specificity of the Input Aid entity

  The type on the input aid description determines the type value on the definition, i.e. 'C' for comments, 'G' for generation parameters or 'O' for generation options. The input aid calls are accessible through -GC, -GG or -GO.

WARNING:

If there are several type values on the same description in the 2.0 or 2.5 release, an error message is displayed, and the error must be corrected manually.

There again, if the input aid call is wrongly 'Generated' or 'dialogue option', it will become a comment.

Important: If in the 2.n release, a line with a type which is not a comment is overridden by a comment line, because of the -G splitting, this override is not transferred to the actual release, it must be done manually in the new Database.

Data structures table type

Data Structure with a table type (G, T, M, N) and a Logical View type (V) do not change. All other types (files...) become the Z type. The Report entity is no longer supported by the Data Structure, thus the J type no longer exists.

Transformation of U type manuals

Manuals are replaced with volumes, their codes are completed with '£IBM'.

Extension data: User entities, Input Aids, Report Layouts

There are no more continuation records for these entities. There is only one index for each main record and one index for each continuation record. This

Long data is created to concatenate the information included in the previous records. This data can be 1,000 characters long. It is split up into several records. Now a single index is created and it points to the first of these records.

PC25 - Input / Processing / Results

A * line with the code of the new Development Database.

This line is optional if the Database code indicated in the 2.5 release can be kept. This Database code must have been defined in the Administration Database.

If you do not specify any Database code, an error message is sent and the procedure cannot be run.

This line must be structured in this way:

Position	Length	Value	Meaning
2	1	'*'	Line code
3	4	bbbb	Code of new Database

PC25 - Description of Steps
Input recognition: PTU001

General processes: PTU911

Code	Physical name	Type	Label
PAC7MC	&OLDPC	Input	Sequential image of the network (old release)
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7MB	&&PC25MB	Input	User input
PAC7PB	&&PC	Output	First data record (length=153)
PAC7PE	&&PE	Output	User Entity Occurrence definition (2.5 release), Report layouts, and Comments (except the calls of Input Aids) (length=193)
PAC7PG	&&PG	Output	Description of Input Aids and Comments including calls of Input Aids. (length=193)

Code	Physical name	Type	Label
PAC7PL	&&PL	Output	Definition and Description of Volumes, Definition and Description of Manuals (length=193)
PAC7PZ	&&PZ	Output	User Entities and description of their Occurrences (2.5 release) (length=193)
PAC7PF	&&PF	Output	Other records (length=153)
PAC7PM	&&PM	Output	Report file (length=62)
PAC7ET		Report	Report only if absence of Database code

Manuals and volumes processing: PTU909

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7PB	&&PC	Input	First data record
PAC7PL	&&PL	Input	Definition and Description of Volumes and Manuals
PAC7PI	&&PI	Output	Sorted and re-formatted Volumes Definitions and Descriptions (length=153)
PAC7PM	&&PM	Input/Output	Report file
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Comments processing: PTU92A

Code	Physical name	Type	Label
PAC7PG	&&PG	Input	Description of Input Aids and of the call of Input Aids in the Comments
PAC7PM	&&PM	Input/Output	Report
PAC7PE	&&PH	Output	Description of Input Aids and of the call of Input Aids in Comments (length=193)

Code	Physical name	Type	Label
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Sort of Input aids : PTU92B

Code	Physical name	Type	Label
PAC7PE	&&PH	Input	Description of Input Aids and Comments including calls of Input Aids
PAC7PK	&&PK	Output	Description of Input Aids and Comments including calls of Input Aids (length=193)
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Sort of Input aids : PTU92C

Code	Physical name	Type	Label
PAC7PK	&&PK	Input	Description of Input Aids and Comments including calls of Input Aids
PAC7KP	&&KP	Output	Description of Input Aids and Comments including calls of Input Aids (length=193)
PAC7PB	&&PC	Input	First data record
PAC7PD	&&PD	Output	First data record (length=153)
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Report layout processing: PTU919

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages

Code	Physical name	Type	Label
PAC7PE	&&PE	Input	User Entity Occurrences Definition (2.5 rel.), Report layouts and Comments (except calls of input aids)
PAC7PB	&&PD	Input	First data record
PAC7PM	&&PM	Input/ Output	Report file
PAC7ZP	&&EP	Output	User entity Occurrences Definition (2.5 rel.), Report layouts (length=193)
PAC7PO	&&PO	Output	Comments (except the call of Input Aids) (length=153)
PAC7KP	&&KP	Input	Comments (including the calls of Input Aids)
PAC7PD	&&PB	Output	First data record (length=153)
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Meta entities processing: PTU912

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7PZ	&&PZ	Input	User Entities (2.5 release)
PAC7PB	&&PC	Input	First data record
PAC7ZP	&&ZP	Output	Development Model records (Definition and Descriptions) (length=193)
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

User entities processing: PTU913

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages

Code	Physical name	Type	Label
PAC7PX	&&EP	Input	Definition of User Entity Occurrences (2.5 release) and Report Layout
PAC7PZ	&&ZP	Input	Definition and Description of the Development Model and Description of User Entity Occurrences (2.5 rel.)
PAC7PB	&&PB	Input	First data record
PAC7ZP	&&ZX	Output	Long data of the Development Model, User Entities, Report layouts, and Comments (including the calls of Input Aids) (length=193)
PAC7PD	&&PR	Output	First data record (length=153)
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Sort of long data

Sort criteria: SRTPC25 member of the SY PDS

Code	Physical name	Type	Label
SORTIN	&&ZX	Input	Intermediate extension data
SORTOUT	&&XZ	Output	Sorted long data (length=193)
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Files merging: PTU914

This step consists in restoring the final sequential image from the intermediate files produced by the previous steps.

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7ZP	&&XZ	Input	Sorted long data

Code	Physical name	Type	Label
PAC7PO	&&PO	Input	Comments (no call of Input Aids)
PAC7PD	&&PR	Input	First data record
PAC7PI	&&PI	Input	Volumes Definition and Description
PAC7PF	&&PF	Input	Other records
PAC7PM	&&PM	Input	Report file
PAC7PC	&INDUN..&BASE.PC(+1)	Output	Sequential image of the network (present release)
PAC7ET		Report	Retrieval report

PC25 - Execution JCL

```
//* -------------------------------------------------------
//*        VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*                   RETRIEVAL OF PC FILE
//*
//* -------------------------------------------------------
//*
//BVPPC25  PROC BASE=$BASE,              CODE OF DEVPT DATABASE
//         INDSN='$INDSN',      INDEX OF SYSTEM NON VSAM FILES
//         INDSV='$INDSV',          INDEX OF SYSTEM VSAM FILES
//         INDUN='$INDUN',        INDEX OF USER NON VSAM FILES
//*:       VSAMCAT='$VCAT',              USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',            SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         SORTLIB='$BIBT',                    SORT LIBRARY
//         DSCB='$DSCB',                     DSCB MODEL FILE
//
//         OUT=$OUT,                           OUTPUT CLASS
//         VOLS='SER=$VOLUN',      VOLUME OF ARCHIVED JOURNAL
//         UNITS=$UNITUN,       BACKUP UNIT (DISK OR CARTRIDGE)
//         OLDPC=,                        DS NAME OF OLD PC
//         UWK=$UWK,                            WORK UNIT
//         SPAPC='(TRK,(300,10),RLSE)',  DEVPT DATABASE BACKUP 2
//         CYL='(10,1)'                     TEMPORARY SPACE
//***********************************************************
//INPUT  EXEC PGM=BVPTU001
//*-----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&PC25MB,DISP=(,PASS),
//         UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PTU911 EXEC PGM=BVPTU911
//*----------------------
```

```
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7MB   DD DSN=&&PC25MB,DISP=(OLD,DELETE)
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7MC   DD DSN=&OLDPC,DISP=SHR
//PAC7PF   DD DSN=&&PF,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=153,BLKSIZE=27846)
//PAC7PB   DD DSN=&&PC,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(TRK,1,RLSE),
//            DCB=(RECFM=FB,LRECL=153,BLKSIZE=27846)
//PAC7PE   DD DSN=&&PE,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=193,BLKSIZE=27985)
//PAC7PG   DD DSN=&&PG,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=193,BLKSIZE=27985)
//PAC7PL   DD DSN=&&PL,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=193,BLKSIZE=27985)
//PAC7PM   DD DSN=&&PM,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=62,BLKSIZE=6200)
//PAC7PZ   DD DSN=&&PZ,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=193,BLKSIZE=27985)
//PAC7ET   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTU909 EXEC PGM=BVPTU909,COND=(0,NE,PTU911)
//*----------------------------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7PB   DD DSN=&&PC,DISP=(OLD,PASS)
//PAC7PL   DD DSN=&&PL,DISP=(OLD,DELETE)
//PAC7PI   DD DSN=&&PI,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=153,BLKSIZE=27846)
//PAC7PM   DD DSN=&&PM,DISP=(OLD,PASS)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//PTU92A EXEC PGM=BVPTU92A,COND=(0,NE,PTU911)
//*----------------------------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
```

```
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//PAC7PG   DD DSN=&&PG,DISP=(OLD,DELETE)
//PAC7PM   DD DSN=&&PM,DISP=(OLD,PASS)
//PAC7PE   DD DSN=&&PH,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=193,BLKSIZE=27985)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//PTU92B EXEC PGM=BVPTU92B,COND=(0,NE,PTU911)
//*----------------------------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SYSOUX   DD SYSOUT=&OUT
//PAC7PE   DD DSN=&&PH,DISP=(OLD,DELETE)
//PAC7PK   DD DSN=&&PK,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=193,BLKSIZE=27985)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//PTU92C EXEC PGM=BVPTU92C,COND=(0,NE,PTU911)
//*----------------------------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SYSOUX   DD SYSOUT=&OUT
//PAC7PB   DD DSN=&&PC,DISP=(OLD,PASS)
//PAC7PK   DD DSN=&&PK,DISP=(OLD,DELETE)
//PAC7PD   DD DSN=&&PD,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(TRK,1,RLSE),
//            DCB=(RECFM=FB,LRECL=153,BLKSIZE=27846)
//PAC7KP   DD DSN=&&KP,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=193,BLKSIZE=27985)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//PTU919 EXEC PGM=BVPTU919,COND=(0,NE,PTU911)
//*----------------------------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
```

```
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7KP   DD DSN=&&KP,DISP=(OLD,DELETE)
//PAC7PB   DD DSN=&&PD,DISP=(OLD,DELETE)
//PAC7PE   DD DSN=&&PE,DISP=(OLD,DELETE)
//PAC7PM   DD DSN=&&PM,DISP=(OLD,PASS)
//PAC7PD   DD DSN=&&PB,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=153,BLKSIZE=27846)
//PAC7PO   DD DSN=&&PO,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=153,BLKSIZE=27846)
//PAC7ZP   DD DSN=&&EP,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=193,BLKSIZE=27985)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//PTU912 EXEC PGM=BVPTU912,COND=(0,NE,PTU911)
//*--------------------------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7PZ   DD DSN=&&PZ,DISP=(OLD,DELETE)
//PAC7ZP   DD DSN=&&ZP,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=193,BLKSIZE=27985)
//PAC7PB   DD DSN=&&PC,DISP=(OLD,DELETE)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//PTU913 EXEC PGM=BVPTU913,COND=(0,NE,PTU911)
//*--------------------------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7PB   DD DSN=&&PB,DISP=(OLD,DELETE)
//PAC7PD   DD DSN=&&PR,DISP=(NEW,PASS),UNIT=&UWK,
//            SPACE=(CYL,&CYL,RLSE),
//            DCB=(RECFM=FB,LRECL=153,BLKSIZE=27846)
//PAC7PZ   DD DSN=&&ZP,DISP=(OLD,DELETE)
//PAC7PX   DD DSN=&&EP,DISP=(OLD,DELETE)
//PAC7ZP   DD DSN=&&ZX,DISP=(NEW,PASS),UNIT=&UWK,
```

```
//           SPACE=(CYL,&CYL,RLSE),
//           DCB=(RECFM=FB,LRECL=193,BLKSIZE=27985)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//SORTZX EXEC PGM=SORT,COND=(0,NE,PTU911)
//*------------------------------------
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTIN   DD DSN=&&ZX,DISP=(OLD,DELETE)
//SORTOUT  DD DSN=&&XZ,DISP=(NEW,PASS),UNIT=&UWK,
//           SPACE=(CYL,&CYL,RLSE),
//           DCB=(RECFM=FB,LRECL=193,BLKSIZE=27985)
//SYSIN    DD DSN=&INDSN..BVPSY(SRTPC25),DISP=SHR
//PTU914 EXEC PGM=BVPTU914,COND=(0,NE,PTU911)
//*------------------------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7PF   DD DSN=&&PF,DISP=(OLD,DELETE)
//PAC7PD   DD DSN=&&PR,DISP=(OLD,DELETE)
//PAC7PI   DD DSN=&&PI,DISP=(OLD,DELETE)
//PAC7PM   DD DSN=&&PM,DISP=(OLD,DELETE)
//PAC7PO   DD DSN=&&PO,DISP=(OLD,DELETE)
//PAC7ZP   DD DSN=&&XZ,DISP=(OLD,DELETE)
//PAC7PC   DD DSN=&INDUN..BASE.PC(+1),
//           DISP=(,CATLG,DELETE),
//           UNIT=&UNITS,
//           VOL=&VOLS,
//           SPACE=&SPAPC,
//           DCB=(&DSCB,RECFM=VB,LRECL=1023,BLKSIZE=27998)
//PAC7ET   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

Generation-Print Commands Retrieval (PG20)

PG20 - Introduction

<u>Principle</u>

The PG20 procedure retrieves the 2.0 release PG file, sequential image of the generation-print commands, in the format of the new release.

It updates the Development Database with the generation-print commands and the Administration Database with the JCL command lines (displayed on the GP screen with the C4 option in the 2.0 release).

Execution conditions

The files of the Administration and Development Databases must be closed to on-line use.

Printed output

This procedure outputs a report which contains the errors encountered.

Note

The insertion of update transactions is possible only in libraries or sessions already defined in the Database, otherwise they are rejected.

The PG file may contain commands associated with a specific library or session which can be purged later.

The update of a generation-print command associated with an entity is not possible if the entity is not defined.

Example: for the GCP PROGRA command, the PROGRA program must be defined in the Database.

User codes present in the PG file and not present in the Administration Database are automatically created for users who have JCLs.

PG20 - Input / Processing / Results

A * line with the user code, password and the code of the Development Database for which the JCL command lines were previously updated in the Administration Database.

If you do not specify the user code or the Database code, an error message is sent and the procedure cannot be run.

The line structure is as follows:

Position	Length	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password

Position	Length	Value	Meaning
22	4	cccc	Database code

PG20 - Description of Steps

Input recognition: PTU001

Generation-print commands formatting: PTU908

Code	Physical name	Type	Label
PAC7IN	&OLDPG	Input	Generation-print commands, old release
PAC7OU	&&PG	Output	Re-formatted generation-print commands (length=150)

Generation-print commands processing: PTU921

Code	Physical name	Type	Label
PAC7PG	&&PG	Input	Generation-print commands, old release
PAC7AE	&INDSV..BVPAE	Input	Error labels
PAC7MB	&&PG20MB	Input	User Entities
PAC7GY	&&PACGY	Output	Generation-print commands transactions (length=310)
PAC7GZ	&&PACGZ	Output	JCL lines transactions (length = 310)
PAC7ET		Report	Error report

Transactions formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV.. &BASE.AN	Input	Development Database index
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7GY	&&PACGY	Input	Update transactions

Code	Physical name	Type	Label
PAC7MV	&&PAC7MV	Output	Formatted transactions (It should be able to contain all input transactions and the elementary deletion transactions which are generated by the multiple deletion transactions) (length=170)
PAC7ME	&&PAC7ME	Output	Work file (length=372)
PAC7MW		Output	Work file (length=170)
PAC7MX		Output	Work file (length=743)
PAC7MY		Output	Work file (length=743)

Update of the Development Database: PACA15

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Output	Development Database Data file
PAC7AN	&INDUV..&BASE.AN	Output	Development Database index
PAC7AY	&INDUV..&BASE.AY	Output	Development Database extension
PAC7AJ	&INDUV..&BASE.AJ	Output	Development Database journal
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database Index file
PACGGR	&INDSV..BVPGR	Input	Administration Database Data file
PACGGY	&INDSV..BVPGY	Input	Administration Database Extension
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7DC	DUMMY	Input	DSMS file of Development Database Elements
PAC7ME	&&PAC7ME	Input	Work file
PAC7MV	&&PAC7MV	Input	Update transactions
PAC7RB	DUMMY	Output	UPDT erroneous transactions (length=80)
PAC7RY	DUMMY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)
PAC7IF		Report	List of erroneous transactions (length=132)

The list of user transactions is preceded by a banner with the user code.

Return codes:
- 0: OK, no error
- 2: Warning
- 4: Error

Transaction formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	&INDSV..BVPGR	Input	Administration Database data
PAC7AN	&INDSV..BVPGN	Input	Administration Database index
PAC7AE	&INDSV..BVPAE	Input	Error labels
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7GY	&&PACGZ	Input	Update transactions
PAC7MV	&&PAC7MV	Output	Formatted transactions (should be able to contain all input transactions and the elementary cancel transactions generated by multiple cancel transactions) (length=170)
PAC7ME	&&PAC7ME	Output	Work file (length=372)
PAC7MW		Output	Work file (length=170)
PAC7MX		Output	Work file (length=743)
PAC7MY		Output	Work file (length=743)

Administration Database update: PACA15

Code	Physical name	Type	Label
PAC7AR	&INDSV..BVPGR	Output	Administration Database data
PAC7AN	&INDSV..BVPGN	Output	Administration Database index
PAC7AY	&INDSV..BVPGY	Output	Administration Database extension
PAC7AJ	&INDSV..BVPGJ	Output	Administration Database journal
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data

Code	Physical name	Type	Label
PACGGY	&INDSV..BVPGY	Input	Administration Database extension
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7ME	&&PAC7ME	Input	Work file
PAC7MV	&&PAC7MV	Input	Update transactions
PAC7RB	DUMMY	Output	UPDT erroneous transactions (length=80)
PAC7RY	DUMMY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)
PAC7IF		Report	Summary of erroneous transactions (length=132)

The list of the transactions specific to a user is preceded by a banner which contains the user's code.

Return codes:

- 0: OK without error
- 2: warning
- 4: error

PG20 - Execution JCL

```
//* -----------------------------------------------------
//*       VISUALAGE PACBASE
//*
//* -----------------------------------------------------
//*            RETRIEVAL OF PG FILE SINCE 2.0
//*
//* -----------------------------------------------------
//*
//BVPPG20  PROC BASE=$BASE,               CODE OF DEVPT DATABASE
//         OUT=$OUT,                                OUTPUT CLASS
//         INDUV='$INDUV',            INDEX OF USER VSAM FILES
//         INDSV='$INDSV',            INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',        INDEX OF SYSTEM NON VSAM FILES
//*:       VSAMCAT='$VCAT',                   USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',                 SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',   LIBRARY OF LOAD-MODULES
//         LSR='BLSR',                  LSR BATCH SYSTEM NAME
//         OUTL=$OUT,                 OUTPUT CLASS OF REPORTS
//         OLDPG=,                           DS NAME OF OLD PG
//         UWK=$UWK,                                WORK UNIT
//         SPAMB='(TRK,(100,10),RLSE)'      TRANSACTION SPACE
//*****************************************************************
```

```
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&PG20MB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//VERIFY EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDUV..&BASE.AJ,DISP=SHR
//PAC7AN   DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGY   DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAJ),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGY),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//PTU908 EXEC PGM=BVPTU908
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7IN   DD DSN=&OLDPG,DISP=SHR
//PAC7OU   DD DSN=&&PG,DISP=(,PASS),UNIT=&UWK,
//            SPACE=(TRK,(10,5),RLSE),
//            DCB=(RECFM=FB,LRECL=150,BLKSIZE=6150)
//PTU921 EXEC PGM=BVPTU921
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7MB   DD DSN=&&PG20MB,DISP=(OLD,DELETE)
//PAC7PG   DD DSN=&&PG,DISP=(OLD,DELETE)
//PAC7GY   DD DSN=&&PACGY,DISP=(,PASS),UNIT=&UWK,
//            SPACE=(TRK,(100,20),RLSE),
```

```
//              DCB=(RECFM=FB,LRECL=310,BLKSIZE=3100)
//PAC7GZ   DD DSN=&&PACGZ,DISP=(,PASS),UNIT=&UWK,
//              SPACE=(TRK,(100,20),RLSE),
//              DCB=(RECFM=FB,LRECL=310,BLKSIZE=3100)
//PAC7ET   DD SYSOUT=&OUT
//PAF90Y EXEC PGM=BVPAF900,COND=(0,NE,PTU921)
//*----------------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7GY   DD DSN=&&PACGY,DISP=(OLD,DELETE)
//PAC7ME   DD DSN=&&PAC7ME,DISP=(,PASS),UNIT=&UWK,
//              SPACE=&SPAMB,
//              DCB=(RECFM=FB,LRECL=372,BLKSIZE=27156)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),UNIT=&UWK,
//              SPACE=&SPAMB,
//              DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MW   DD DISP=(,DELETE),UNIT=&UWK,
//              SPACE=&SPAMB,
//              DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MX   DD DISP=(,DELETE),UNIT=&UWK,
//              SPACE=&SPAMB,
//              DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PAC7MY   DD DISP=(,DELETE),UNIT=&UWK,
//              SPACE=&SPAMB,
//              DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PACA1Y EXEC PGM=BVPACA15,COND=((0,NE,PTU921),(0,NE,PAF90Y))
//*----------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:         DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDUV..&BASE.AJ,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
```

```
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGY   DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7DC   DD DUMMY
//PAC7IE   DD SYSOUT=&OUTL
//PAC7IF   DD SYSOUT=&OUTL
//PAC7ME   DD DSN=&&PAC7ME,DISP=(OLD,DELETE)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(OLD,DELETE)
//PAC7RB   DD DUMMY
//PAC7RY   DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
//PAF90Z EXEC PGM=BVPAF900,COND=(0,NE,PTU921)
//*----------------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=10','BUFNI=10')
//ARLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=10')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7GY   DD DSN=&&PACGZ,DISP=(OLD,DELETE)
//PAC7ME   DD DSN=&&PAC7ME,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=372,BLKSIZE=27156)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MW   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MX   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PAC7MY   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
```

```
//PACA1Z EXEC PGM=BVPACA15,COND=((0,NE,PTU921),
//             (0,NE,PAF90Z))
//*-----------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDSV..BVPGJ,DISP=SHR
//ANLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=10','BUFNI=10')
//ARLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=10')
//AYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=10')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGY   DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7DC   DD DUMMY
//PAC7IE   DD SYSOUT=&OUTL
//PAC7IF   DD SYSOUT=&OUTL
//PAC7ME   DD DSN=&&PAC7ME,DISP=(OLD,DELETE)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(OLD,DELETE)
//PAC7RB   DD DUMMY
//PAC7RY   DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
```

Generation-Print Commands Retrieval (PG25)

PG25 - Introduction

Principle

The PG25 procedure retrieves the 2.5 PG file, which is the sequential image of
the generation-print commands, into the new format.

It updates the Development Database with the generation-print commands
and the Administration Database with the JCL command lines (displayed on
the GP screen with the C4 option in the 2.5 release).

Execution conditions

The files of the Administration and Development Databases must be closed to
on-line use.

Printed output

This procedure prints a report on the errors encountered.

Note

The insertion of update transactions is possible only in libraries or sessions already defined in the Database, otherwise they are rejected.

The PG file may contain commands associated with a specific library or session which can be purged later.

The update of a generation-print command associated with an entity is not possible if the entity is not defined. Example: for the GCP PROGRA command, the PROGRA program must be defined in the Database.

Any user who has JCL lines for online generation (GP screen, displayed in C4 option) is automatically created in the Administration Database.

PG25 - Input / Processing / Results

A * line with the user code, password and the code of the Development Database for which the JCL command lines were previously updated in the Administration Database.

If you do not specify the user code or the Database code, an error message is sent and the procedure cannot be run.

The line structure is as follows:

Position	Length	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
22	4	cccc	Database code

PG25 - Description of Steps
Input recognition: PTU001

Generation-print commands processing: PTU921

Code	Physical name	Type	Label
PAC7PG	&OLDPG	Input	Generation-print commands, old release
PAC7AE	&INDSV..BVPAE	Input	Error labels

Code	Physical name	Type	Label
PAC7MB	&&PG25MB	Input	User Entities
PAC7GY	&&PACGY	Output	Generation-print commands transactions (length=310)
PAC7GZ	&&PACGZ	Output	JCL lines transactions (length = 310)
PAC7ET		Report	Error report

Transactions formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV.. &BASE.AN	Input	Development Database index
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7GY	&&PACGY	Input	Update transactions
PAC7MV	&&PAC7MV	Output	Formatted transactions (It should be able to contain all input transactions and the elementary deletion transactions which are generated by the multiple deletion transactions) (length=170)
PAC7ME	&&PAC7ME	Output	Work file (length=372)
PAC7MW		Output	Work file (length=170)
PAC7MX		Output	Work file (length=743)
PAC7MY		Output	Work file (length=743)

Update of the Development Database: PACA15

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Output	Development Database Data file
PAC7AN	&INDUV..&BASE.AN	Output	Development Database index
PAC7AY	&INDUV..&BASE.AY	Output	Development Database extension
PAC7AJ	&INDUV..&BASE.AJ	Output	Development Database journal
PAC7AE	&INDSV..BVPAE	Input	Error messages

Code	Physical name	Type	Label
PACGGN	&INDSV..BVPGN	Input	Administration Database Index file
PACGGR	&INDSV..BVPGR	Input	Administration Database Data file
PACGGY	&INDSV..BVPGY	Input	Administration Database Extension
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7DC	DUMMY	Input	DSMS file of Development Database Elements
PAC7ME	&&PAC7ME	Input	Work file
PAC7MV	&&PAC7MV	Input	Update transactions
PAC7RB	DUMMY	Output	UPDT erroneous transactions (length=80)
PAC7RY	DUMMY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)
PAC7IF		Report	List of erroneous transactions (length=132)

The list of user transactions is preceded by a banner with the user code.

Return codes:

- 0: OK, no error
- 2: Warning
- 4: Error

Transaction formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	&INDSV..BVPGR	Input	Administration Database data
PAC7AN	&INDSV..BVPGN	Input	Administration Database index
PAC7AE	&INDSV..BVPAE	Input	Error labels
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7GY	&&PACGZ	Input	Update transactions

Code	Physical name	Type	Label
PAC7MV	&&PAC7MV	Output	Formatted transactions (should be able to contain all input transactions and the elementary cancel transactions generated by multiple cancel transactions) (length=170)
PAC7ME	&&PAC7ME	Output	Work file (length=372)
PAC7MW		Output	Work file (length=170)
PAC7MX		Output	Work file (length=743)
PAC7MY		Output	Work file (length=743)

Administration Database update: PACA15

Code	Physical name	Type	Label
PAC7AR	&INDSV..BVPGR	Output	Administration Database data
PAC7AN	&INDSV..BVPGN	Output	Administration Database index
PAC7AY	&INDSV..BVPGY	Output	Administration Database extension
PAC7AJ	&INDSV..BVPGJ	Output	Administration Database journal
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGY	&INDSV..BVPGY	Input	Administration Database extension
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7ME	&&PAC7ME	Input	Work file
PAC7MV	&&PAC7MV	Input	Update transactions
PAC7RB	DUMMY	Output	UPDT erroneous transactions (length=80)
PAC7RY	DUMMY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)
PAC7IF		Report	Summary of erroneous transactions (length=132)

The list of the transactions specific to a user is preceded by a banner which contains the user's code.

Return codes:

- 0: OK without error
- 2: warning
- 4: error

PG25 - Execution JCL

```
//* -------------------------------------------------------
//*       VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*                 RETRIEVAL OF PG FILE SINCE 2.5
//*
//* -------------------------------------------------------
//*
//BVPPG25  PROC BASE=$BASE,              CODE OF DEVPT DATABASE
//         OUT=$OUT,                              OUTPUT CLASS
//         INDUV='$INDUV',         INDEX OF USER VSAM FILES
//         INDSV='$INDSV',         INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',     INDEX OF SYSTEM NON VSAM FILES
//*:       VSAMCAT='$VCAT',              USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',       DEVPT SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         LSR='BLSR',                 LSR BATCH SYSTEM NAME
//         OUTL=$OUT,               OUTPUT CLASS OF REPORTS
//         OLDPG=,                       DS NAME OF OLD PG
//         UWK=$UWK,                              WORK UNIT
//         SPAMB='(TRK,(100,10),RLSE)'      TRANSACTION SPACE
//***********************************************************************
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&PG25MB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//VERIFY EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDUV..&BASE.AJ,DISP=SHR
//PAC7AN   DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGY   DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAJ),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAR),DISP=SHR
```

```
//           DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//           DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//           DD DSN=&INDSN..BVPSY(VERIFGY),DISP=SHR
//           DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//PTU921 EXEC PGM=BVPTU921
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7MB   DD DSN=&&PG25MB,DISP=(OLD,DELETE)
//PAC7PG   DD DSN=&OLDPG,DISP=SHR
//PAC7GY   DD DSN=&&PACGY,DISP=(,PASS),UNIT=&UWK,
//           SPACE=(TRK,(100,20),RLSE),
//           DCB=(RECFM=FB,LRECL=310,BLKSIZE=3100)
//PAC7GZ   DD DSN=&&PACGZ,DISP=(,PASS),UNIT=&UWK,
//           SPACE=(TRK,(100,20),RLSE),
//           DCB=(RECFM=FB,LRECL=310,BLKSIZE=3100)
//PAC7ET   DD SYSOUT=&OUT
//PAF90Y EXEC PGM=BVPAF900,COND=(0,NE,PTU921)
//*---------------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7GY   DD DSN=&&PACGY,DISP=(OLD,DELETE)
//PAC7ME   DD DSN=&&PAC7ME,DISP=(,PASS),UNIT=&UWK,
//           SPACE=&SPAMB,
//           DCB=(RECFM=FB,LRECL=372,BLKSIZE=27156)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),UNIT=&UWK,
//           SPACE=&SPAMB,
//           DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MW   DD DISP=(,DELETE),UNIT=&UWK,
//           SPACE=&SPAMB,
//           DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
```

```
//PAC7MX   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PAC7MY   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PACA1Y EXEC PGM=BVPACA15,COND=((0,NE,PTU921),(0,NE,PAF90Y))
//*-----------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDUV..&BASE.AJ,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGY   DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7DC   DD DUMMY
//PAC7IE   DD SYSOUT=&OUTL
//PAC7IF   DD SYSOUT=&OUTL
//PAC7ME   DD DSN=&&PAC7ME,DISP=(OLD,DELETE)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(OLD,DELETE)
//PAC7RB   DD DUMMY
//PAC7RY   DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
//PAF90Z EXEC PGM=BVPAF900,COND=(0,NE,PTU921)
//*---------------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=10','BUFNI=10')
//ARLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=10')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
```

```
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7GY   DD DSN=&&PACGZ,DISP=(OLD,DELETE)
//PAC7ME   DD DSN=&&PAC7ME,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=372,BLKSIZE=27156)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MW   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MX   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PAC7MY   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PACA1Z EXEC PGM=BVPACA15,COND=((0,NE,PTU921),
//            (0,NE,PAF90Z))
//*-------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDSV..BVPGJ,DISP=SHR
//ANLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=10','BUFNI=10')
//ARLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=10')
//AYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=10')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGY   DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7DC   DD DUMMY
//PAC7IE   DD SYSOUT=&OUTL
//PAC7IF   DD SYSOUT=&OUTL
//PAC7ME   DD DSN=&&PAC7ME,DISP=(OLD,DELETE)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(OLD,DELETE)
//PAC7RB   DD DUMMY
//PAC7RY   DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
```

Retrieval of PJ Transactions (PJ25)

PJ25 - Introduction

Principle

This procedure (PJ25) is used to change the PJ file, which is the journal file (transactions sequential file), into a new archive file in the new version format.

Execution conditions

None.

Printed output

This procedure generates a transaction file which indicates the number of transactions retrieved in their initial 2.n format the number of transactions converted in the new version format and the number of written transactions.

WARNING: The number of written transactions can be much higher than the number of read transactions. More than one transaction of the new version can be created from an old 2.n transaction, in particular for the meta entities and user entities.

Some Input Guide call transactions might be incomplete if their content is distributed on more than one transaction and if only one of these transactions is displayed in the journal. A message is displayed in this case.

Result

This procedure generates a PJ journal file in the new release format.

Comments

This conversion process of the journal is optional. It should be executed if required by the batch procedures (Use of Pac/Transfer).

This retrieval procedure must be used only for a conversion from a 2.0 or 2.5 version into the new version.

To retrieve some transactions, it is sometimes necessary to search for information in the new version Database. But the corresponding data may no longer exist in the new Database (example: session or library deleted). In such a case, the old transaction is retrieved with its 2.n format.

PJ25 - Description of Steps

Processing of PJ transactions sequential file: PTU918

Code	Physical name	Type	Label
PAC7PJ	&OLDPJ	Input	journal file old version
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PAC7JP	&&NEWPJ	Output	Journal file in the new format (length=170)
PAC7ET		Report	Report

PJ25 - Execution JCL

```
//* ------------------------------------------------------
//*         VISUALAGE PACBASE
//*
//* ------------------------------------------------------
//*                   RETRIEVAL OF PJ FILE
//*
//* ------------------------------------------------------
//*
//BVPPJ25  PROC BASE=$BASE,              CODE OF DEVPT DATABASE
//         OUT=$OUT,                             OUTPUT CLASS
//         INDUV='$INDUV',            INDEX OF USER VSAM FILES
//         INDSV='$INDSV',          INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',      INDEX OF SYSTEM NON VSAM FILES
//*:       VSAMCAT='$VCAT',                 USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',         DEVPT SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         LSR='BLSR',                 LSR BATCH SYSTEM NAME
//         OLDPJ=,                       DS NAME OF OLD PJ
//         UWK=$UWK                            WORK UNIT
//****************************************************************
//VERIFY EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AN   DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AY   DD DSN=&INDUV..&BASE.AY,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAR),DISP=SHR
```

```
//          DD DSN=&INDSN..BVPSY(VERIFAY),DISP=SHR
//PTU918 EXEC PGM=BVPTU918
//*-----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//          DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7PJ   DD DSN=&OLDPJ,DISP=SHR
//PAC7JP   DD DSN=&&NEWPJ,DISP=(,CATLG),UNIT=&UWK,
//            SPACE=(TRK,(300,80),RLSE),
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=27880)
//PAC7ET   DD SYSOUT=&OUT
```

Retrieval of PP file (PP25)

PP25 - Introduction

Principle

This procedure retrieves the 2.0 or 2.5 PP file, which is the sequential image of
the Production Environment Interface, and updates the Development
Database of the installed version.

Execution conditions

The Development Database files must be closed in the on-line mode.

Printed output

This procedure outputs a report which indicates the error encountered.

Result

The procedure generates a transaction file which contains the existing
production environments, the list of the generated entities, the default
environments (-GO of the Library), the list of production sessions in the new
format, and updates the Development Database of the installed version.

Note

Any update transactions in a session or library which is not already defined in the Database will be rejected.

The PP file may contain environments with library codes or sessions to be created or purged later in the 2.0 or 2.5 Database.

When creating environments in the oldest Session (0001 or the Library initialization Session), a default Application is automatically created in the same context.

PP25 - Input / Processing / Results

A '*' line with a user code and a password.

If the user code is not indicated, an error message is displayed and the procedure cannot be run.

The structure of the line is presented as follows:

Position	Length	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	3	'***'	Option to update the environments
			in inter-library

PP25 - Description of Steps
Input recognition: PTU001

Management of production environment: PTU923

Code	Physical name	Type	Label
PAC7PP	&OLDPP	Input	Back up of production environment (old release)
PAC7AE	&INDSV..BVPAE	Input	Error message
PAC7MB	&&PP25MB	Input	User input
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data

Code	Physical name	Type	Label
PAC7GY	&&PACGY	Output	Records of production environments (length=310)
PAC7ET		Report	Report in case of error

Transactions formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV.. &BASE.AN	Input	Development Database index
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7GY	&&PACGY	Input	Update transactions
PAC7MV	&&PAC7MV	Output	Formatted transactions (It should be able to contain all input transactions and the elementary deletion transactions which are generated by the multiple deletion transactions) (length=170)
PAC7ME	&&PAC7ME	Output	Work file (length=372)
PAC7MW		Output	Work file (length=170)
PAC7MX		Output	Work file (length=743)
PAC7MY		Output	Work file (length=743)

Development Database update: PACA15

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Output	Development Database data
PAC7AN	&INDUV.. &BASE.AN	Output	Development Database index
PAC7AY	&INDUV..&BASE.AY	Output	Development Database extension
PAC7AJ	&INDUV..&BASE.AJ	Output	Development Database journal
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data

Code	Physical name	Type	Label
PACGGY	&INDSV..BVPGY	Input	Administration Database extension
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7ME	&&PAC7ME	Input	Work file
PAC7MV	&&PAC7MV	Input	Update transactions
PAC7RB	DUMMY	Output	UPDT erroneous transactions (length=80)
PAC7RY	DUMMY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)
PAC7IF		Report	Summary of erroneous transactions (length=132)

The list of the transactions specific to a user is preceded by a banner which contains the user's code.

Return codes:

- 0: OK without error
- 2: warning
- 4: error

PP25 - Execution JCL

```
//* --------------------------------------------------------
//*         VISUALAGE PACBASE
//*
//* --------------------------------------------------------
//*               RETRIEVAL OF PP FILE
//*
//* --------------------------------------------------------
//*
//BVPPP25  PROC BASE=$BASE,             CODE OF DEVPT DATABASE
//         OUT=$OUT,                              OUTPUT CLASS
//         INDUV='$INDUV',             INDEX OF USER VSAM FILES
//         INDSV='$INDSV',           INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',       INDEX OF SYSTEM NON VSAM FILES
//*:       VSAMCAT='$VCAT',                   USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',                 SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         LSR='BLSR',                   LSR BATCH SYSTEM NAME
//         OUTL=$OUT,                  OUTPUT CLASS OF REPORTS
//         OLDPP=,                         DS NAME OF OLD PP
//         UWK=$UWK,                               WORK UNIT
//         SPAMB='(TRK,(100,10),RLSE)'       TRANSACTION SPACE
//****************************************************************
```

```
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&PP25MB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//VERIFY EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDUV.&BASE.AJ,DISP=SHR
//PAC7AN   DD DSN=&INDUV.&BASE.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUV.&BASE.AR,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGY   DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAJ),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGY),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//PTU923 EXEC PGM=BVPTU923
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//AELSR    DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AE   DD SUBSYS=(&LSR,'DDNAME=AELSR')
//ANLSR    DD DSN=&INDUV.&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV.&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV.&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7MB   DD DSN=&&PP25MB,DISP=(OLD,DELETE)
//PAC7PP   DD DSN=&OLDPP,DISP=SHR
//PAC7GY   DD DSN=&&PACGY,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=310,BLKSIZE=3100)
//PAC7ET   DD SYSOUT=&OUT
//PAF900 EXEC PGM=BVPAF900,COND=(0,NE,PTU923)
//*----------------------------------------
```

```
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7GY   DD DSN=&&PACGY,DISP=(OLD,DELETE)
//PAC7ME   DD DSN=&&PAC7ME,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=372,BLKSIZE=27156)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MW   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MX   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PAC7MY   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PACA15 EXEC PGM=BVPACA15,COND=((0,NE,PTU923),(0,NE,PAF900))
//*---------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT    DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDUV..&BASE.AJ,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
```

```
//PACGGY   DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7DC   DD DUMMY
//PAC7IE   DD SYSOUT=&OUTL
//PAC7IF   DD SYSOUT=&OUTL
//PAC7ME   DD DSN=&&PAC7ME,DISP=(OLD,DELETE)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(OLD,DELETE)
//PAC7RB   DD DUMMY
//PAC7RY   DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
```

PEI Retrieval (RPP2)

RPP2 - Introduction

Principle

This procedure retrieves the old PEI environment from a 2.0 or 2.5 version and updates the Development Database of the version installed.

It takes into account the transactions of environments for which entities are generated.

Execution condition

The Development Database files must be closed to on-line use.

Result

The result is a Development Database which integrates the migrated environments.

Notes

Any update transaction in a Library or a Session which does not exist in the new Database will be rejected.

The prior existence of the target environment is required.

RPP2 - Input / Processing / Results

A '*' line with a user code and password, as well as the source environments and the target environment.

If the '*' line is missing or incorrect, an error message is sent and the procedure cannot be run.

The structure of the line is as follows:

Pos.	Length	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	10	1234567890	One-character codes of the environments to be retrieved
29	2	EE	Code of the target environment

RPP2 - Description of Steps

Input recognition: PTU001

PEI retrieval. Step 1: PTU950

Code	Physical name	Type	Label
PAC7PP	&OLDPP	Input	Backup of PEI file (old version)
PAC7MB	&&RPP2MB	Input	User input
PAC7GY	&&PP	Output	Intermediate transactions for PTU955

PEI retrieval. Step 2: PTU955

Code	Physical name	Type	Label
PAC7GY	&&PP	Output	Intermediate transactions output by PTU950
PAC7GY	&&PACGY	Output	Transactions from production environments (length=310)
SORTWK01		Tri	
SORTWK02		Tri	
SORTWK03		Tri	

Transactions formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AE	&INDSV..BVPAE	Input	Error messages

Code	Physical name	Type	Label
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7GY	&&PACGY	Input	Update transactions
PAC7MV	&&PAC7MV	Output	Formatted transactions (It should be able to contain all input transactions and the elementary deletion transactions which are generated by the multiple deletion transactions) (length=170)
PAC7ME	&&PAC7ME	Output	Work file (length=372)
PAC7MW		Output	Work file (length=170)
PAC7MX		Output	Work file (length=743)
PAC7MY		Output	Work file (length=743)

Update of the Development Database: PACA15

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Output	Development Database Data file
PAC7AN	&INDUV..&BASE.AN	Output	Development Database index
PAC7AY	&INDUV..&BASE.AY	Output	Development Database extension
PAC7AJ	&INDUV..&BASE.AJ	Output	Development Database journal
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database Index file
PACGGR	&INDSV..BVPGR	Input	Administration Database Data file
PACGGY	&INDSV..BVPGY	Input	Administration Database Extension
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7DC	DUMMY	Input	DSMS file of Development Database Elements
PAC7ME	&&PAC7ME	Input	Work file
PAC7MV	&&PAC7MV	Input	Update transactions
PAC7RB	DUMMY	Output	UPDT erroneous transactions (length=80)
PAC7RY	DUMMY	Output	UPDP erroneous transactions (length=310)

Code	Physical name	Type	Label
PAC7IE		Report	Update report (length=132)
PAC7IF		Report	List of erroneous transactions (length=132)

The list of user transactions is preceded by a banner with the user code.

Return codes:
- 0: OK, no error
- 2: Warning
- 4: Error

RPP2 - Execution JCL

```
//* -------------------------------------------------------
//*         VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*                RETRIEVAL OF PEI FILE
//*
//* -------------------------------------------------------
//*
//BVPRPP2  PROC BASE=$BASE,                CODE OF DEVPT DATABASE
//         OUT=$OUT,                                 OUTPUT CLASS
//         INDUV='$INDUV',               INDEX OF USER VSAM FILES
//         INDSV='$INDSV',             INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',         INDEX OF SYSTEM NON VSAM FILES
//*:       VSAMCAT='$VCAT',                     USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',                   SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',     LIBRARY OF LOAD-MODULES
//         LSR='BLSR',                     LSR BATCH SYSTEM NAME
//         OUTL=$OUT,                    OUTPUT CLASS OF REPORTS
//         OLDPP=,                             DS NAME OF OLD PP
//         UWK=$UWK,                                   WORK UNIT
//         SPAMB='(TRK,(100,10),RLSE)',        TRANSACTION SPACE
//         CYL='(10,1)'                         TEMPORARY SPACE
//****************************************************************
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&RPP2MB,DISP=(,PASS),
//         UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//VERIFY EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
```

```
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDUV.&BASE.AJ,DISP=SHR
//PAC7AN   DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGY   DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAJ),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGY),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//PTU950 EXEC PGM=BVPTU950
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7MB   DD DSN=&&RPP2MB,DISP=(OLD,DELETE)
//PAC7PP   DD DSN=&OLDPP,DISP=SHR
//PAC7OU   DD DSN=&&PP,DISP=(,PASS),UNIT=&UWK,
//            SPACE=(TRK,(10,5),RLSE),
//            DCB=(RECFM=FB,LRECL=111,BLKSIZE=6660)
//PTU955 EXEC PGM=BVPTU955,COND=(0,NE,PTU950)
//*----------------------------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7OU   DD DSN=&&PP,DISP=(OLD,DELETE)
//PAC7GY   DD DSN=&&PACGY,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=310,BLKSIZE=3100)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//PAF900 EXEC PGM=BVPAF900,COND=(0,NE,PTU950)
//*----------------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:         DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
```

```
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7GY   DD DSN=&&PACGY,DISP=(OLD,DELETE)
//PAC7ME   DD DSN=&&PAC7ME,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=372,BLKSIZE=27156)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MW   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MX   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PAC7MY   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PACA15 EXEC PGM=BVPACA15,COND=((0,NE,PTU950),(0,NE,PAF900))
//*-----------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDUV..&BASE.AJ,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGY   DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7DC   DD DUMMY
//PAC7IE   DD SYSOUT=&OUTL
```

```
//PAC7IF   DD SYSOUT=&OUTL
//PAC7ME   DD DSN=&&PAC7ME,DISP=(OLD,DELETE)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(OLD,DELETE)
//PAC7RB   DD DUMMY
//PAC7RY   DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
```

Retrieval of passwords (UTMP)

UTMP - Introduction

Principle

The purpose of this procedure is to retrieve the 2.n user passwords, using as input the PE file produced by the backup of users parameters (PARM procedure), and to integrate them into the Administration Database users file.

Passwords are refreshed according to the option specified on the '*' line.

Execution conditions

The users file of the Administration Database must be closed to online use.

Printed report

In case of a wrong creation, the procedure prints an error message in display format.

Result

The procedure integrates 2.0 or 2.5 user passwords into the Administration Database.

UTMP - Description of Steps

2.N passwords retrieval: PTURMP

Code	Physical name	Type	Label
PAC7MB	&&UTMPMB	Input	User input
PAC7CE	&OLDPE	Input	Old version user parameters
PACGGU	&INDSV..BVPGU	Input	Administration Database users

UTMP - Execution JCL
```
//* -----------------------------------------------------
//*      VISUALAGE PACBASE
//*
```

```
//* ------------------------------------------------------
//*              PASSWORD RETRIEVAL
//*
//* ------------------------------------------------------
//*
//BVPUTMP  PROC OUT=$OUT,                          OUTPUT CLASS
//         INDSV='$INDSV',          INDEX OF SYSTEM VSAM FILES
//*:       VSAMCAT='$VCAT',                   USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',                 SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         UWK=$UWK,                                  WORK UNIT
//         OLDPE=                           DS NAME OF OLD PE
//****************************************************************
//INPUT  EXEC PGM=BVPTU001
//*-----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&UTMPMB,DISP=(,PASS),
//           UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PTURMP EXEC PGM=BVPTURMP
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//PAC7MB   DD DSN=&&UTMPMB,DISP=(OLD,DELETE)
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//PAC7CE   DD DSN=&OLDPE,DISP=SHR
```

Retrieval of Pac/Transfer Parameters (UV25)

UV25 - Introduction

Principle

The UV25 procedure retrieves the UV PacTransfer parameters file, 2.0 or 2.5
release, in the new format.

It updates the Administration Database.

Execution conditions

The Administration Database files must be closed to on-line use.

Printed output

This procedure prints a report on the errors encountered.

UV25 - Input / Processing / Results

A '*' line with a user code, a password and the code of the Development Database concerned by the transfers.

If you do not specify the user code or the Database code, an error message is sent and the procedure cannot be run.

The line structure must be as follows:

Position	Length	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
22	4	cccc	Database code

UV25 - Description of Steps

Input recognition: PTU001

Processing of transfer parameters: PTU922

Code	Physical name	Type	Label
PAC7UV	&OLDUV	Input	Transfer parameters, old release
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7MB	&&UV25MB	Input	User input
PAC7GY	&&PACGY	Output	Transfer parameter transactions (length=310)
PAC7ET		Report	Report in case of error

Transaction formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	&INDSV..BVPGR	Input	Administration Database data
PAC7AN	&INDSV..BVPGN	Input	Administration Database index
PAC7AE	&INDSV..BVPAE	Input	Error labels
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users

Code	Physical name	Type	Label
PAC7GY	&&PACGZ	Input	Update transactions
PAC7MV	&&PAC7MV	Output	Formatted transactions (should be able to contain all input transactions and the elementary cancel transactions generated by multiple cancel transactions) (length=170)
PAC7ME	&&PAC7ME	Output	Work file (length=372)
PAC7MW		Output	Work file (length=170)
PAC7MX		Output	Work file (length=743)
PAC7MY		Output	Work file (length=743)

Update of the Administration Database: PACA15

Code	Physical name	Type	Label
PAC7AR	&INDSV..BVPGR	Output	Administration Database Data file
PAC7AN	&INDSV..BVPGN	Output	Administration Database Index file
PAC7AY	&INDSV..BVPGY	Output	Administration Database extension
PAC7AJ	&INDSV..BVPGJ	Output	Administration Database journal
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database Index file
PACGGR	&INDSV..BVPGR	Input	Administration Database Data file
PACGGY	&INDSV..BVPGY	Input	Administration Database Extension
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7DC	DUMMY	Input	DSMS file of Development Database elements
PAC7ME	&&PAC7ME	Input	Work file
PAC7MV	&&PAC7MV	Input	Update transactions
PAC7RB	DUMMY	Output	UPDT erroneous transactions (length=80)
PAC7RY	DUMMY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)

Code	Physical name	Type	Label
PAC7IF		Report	Summary of erroneous transactions (length=132)

The list of transactions specific to a user is preceded by a banner with this user's code.

Return codes:

- 0 : OK without error
- 2 : warning
- 4 : error

UV25 - Execution JCL

```
//* ------------------------------------------------------
//*       VISUALAGE PACBASE
//*
//* ------------------------------------------------------
//*                RETRIEVAL OF UV FILE
//*
//* ------------------------------------------------------
//*
//BVPUV25  PROC OUT=$OUT,                          OUTPUT CLASS
//         INDSV='$INDSV',           INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',       INDEX OF SYSTEM NON VSAM FILES
//*:       VSAMCAT='$VCAT',                   USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',                 SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         LSR='BLSR',                   LSR BATCH SYSTEM NAME
//         OUTL=$OUT,                   OUTPUT CLASS OF REPORTS
//         OLDUV=,                         DS NAME OF OLD UV
//         UWK=$UWK,                               WORK UNIT
//         SPAMB='(TRK,(100,10),RLSE)'      TRANSACTION SPACE
//****************************************************************
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&UV25MB,DISP=(,PASS),
//           UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//VERIFY EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGY   DD DSN=&INDSV..BVPGY,DISP=SHR
```

```
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGY),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//PTU922 EXEC PGM=BVPTU922
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7MB   DD DSN=&&UV25MB,DISP=(OLD,DELETE)
//PAC7UV   DD DSN=&OLDUV,DISP=SHR
//PAC7GY   DD DSN=&&PACGY,DISP=(,PASS),UNIT=&UWK,
//            SPACE=(TRK,(100,20),RLSE),
//            DCB=(RECFM=FB,LRECL=310,BLKSIZE=3100)
//PAC7ET   DD SYSOUT=&OUT
//PAF900 EXEC PGM=BVPAF900,COND=(0,NE,PTU922)
//*----------------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7GY   DD DSN=&&PACGY,DISP=(OLD,DELETE)
//PAC7ME   DD DSN=&&PAC7ME,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=372,BLKSIZE=27156)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MW   DD DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MX   DD DISP=(,DELETE),UNIT=&UWK,
```

```
//              SPACE=&SPAMB,
//              DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PAC7MY  DD DISP=(,DELETE),UNIT=&UWK,
//              SPACE=&SPAMB,
//              DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PACA15 EXEC PGM=BVPACA15,
//              COND=((0,NE,PTU922),(0,NE,PAF900))
//*-------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDSV..BVPGJ,DISP=SHR
//ANLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGY   DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7DC   DD DUMMY
//PAC7IE   DD SYSOUT=&OUTL
//PAC7IF   DD SYSOUT=&OUTL
//PAC7ME   DD DSN=&&PAC7ME,DISP=(OLD,DELETE)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(OLD,DELETE)
//PAC7RB   DD DUMMY
//PAC7RY   DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
```

MB Transactions exchanges between 2.n & 3.n (MB25)

MB25 - Introduction

Principle

This procedure retrieves the 2.0 or 2.5 UPDT format transactions in the new release.

Limits

The User Entities, User Entity Occurrences, Relations, U-type Volumes are not processed.

The P.I.A. calls are processed as comments.

The P.I.A. types change between the 2.n and 3.n versions: to allow the exchange of transactions between these 2 versions, execute, in the 2.n version, the UTFG procedure which assigns the types in the 3.n version.

Execution conditions

None.

Printed output

This procedure prints a report of the errors encountered.

Result

This procedure generates a transaction file for the new version UPDT procedure and a revoked transactions file.

MB25 - Description of Steps

MB file retrieval: PTU926

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7MB	&OLDMB	Input	2.5 MB transactions
PAC7MV	&&PACMV	Output	Retrieval transactions for UPDT
PAC7ME	&&PACME	Output	Revoked transactions
PAC7EF		Report	Retrieval reports
PAC7DD		Report	Batch procedure authorization option

MB25 - Execution JCL

```
//* ------------------------------------------------------
//*       VISUALAGE PACBASE
//*
//* ------------------------------------------------------
//*               RETRIEVAL OF MB FILE
//*
//* ------------------------------------------------------
//*
//BVPMB25  PROC BASE=$BASE,                 CODE OF DEVPT DATABASE
```

```
//          OUT=$OUT,                           OUTPUT CLASS
//          INDUV='$INDUV',          INDEX OF USER VSAM FILES
//          INDSV='$INDSV',          INDEX OF SYSTEM VSAM FILES
//          INDSN='$INDSN',      INDEX OF SYSTEM NON VSAM FILES
//*:        VSAMCAT='$VCAT',             USER VSAM CATALOG
//*:        SYSTCAT='$SCAT',         DEVPT SYSTEM VSAM CATALOG
//          STEPLIB='$HLQ..SBVPMBR8',   LIBRARY OF LOAD-MODULES
//          LSR='BLSR',                 LSR BATCH SYSTEM NAME
//          OLDMB=,                         DS NAME OF OLD MB
//          UWK=$UWK                            WORK UNIT
//****************************************************************
//VERIFY EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//PTU926 EXEC PGM=BVPTU926
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7MB   DD DSN=&OLDMB,DISP=SHR
//PAC7MV   DD DSN=&&PACMV,DISP=(,PASS),UNIT=&UWK,
//           SPACE=(TRK,(100,20),RLSE),
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7ME   DD DSN=&&PACME,DISP=(,PASS),UNIT=&UWK,
//           SPACE=(TRK,(100,20),RLSE),
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7EF   DD SYSOUT=&OUT
//PAC7DD   DD SYSOUT=&OUT
```

GY Transactions exchanges between 2.n & 3.n (GY25)

GY25 - Introduction

Principle

This procedure retrieves the 2.0 or 2.5 UPDP format transactions into the new release.

Limits

The User Entities, Relations, U-type Manuals are not processed.

The P.I.A. calls are processed as comments.

The P.I.A. types change between the 2.n and 3.n versions: to allow the transactions exchange between these versions, execute in 2.n the UTFG procedure which assigns the 3.n types.

Execution conditions

None.

Printed output

This procedure prints a report of the errors encountered.

Result

This procedure generates a transaction file for the UPDP procedure of the new release and a revoked transactions file.

GY25 - Description of Steps

GY file retrieval: PTU927

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7GY	&OLDGY	Input	2.5 GY transactions
PAC7MV	&&PACMV	Output	Retrieval transactions for UPDP

Code	Physical name	Type	Label
PAC7ME	&&PACME	Output	Revoked transactions
PAC7EF		Report	Retrieval reports
PAC7DD		Report	Authorization option

GY25 - Execution JCL

```
//* -------------------------------------------------------
//*         VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*                   RETRIEVAL OF GY FILE
//*
//* -------------------------------------------------------
//*
//BVPGY25  PROC BASE=$BASE,              CODE OF DEVPT DATABASE
//         OUT=$OUT,                               OUTPUT CLASS
//         INDUV='$INDUV',            INDEX OF USER VSAM FILES
//         INDSV='$INDSV',          INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',      INDEX OF SYSTEM NON VSAM FILES
//*:       VSAMCAT='$VCAT',                  USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',          DEVPT SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',     LIBRARY OF LOAD-MODULES
//         LSR='BLSR',                   LSR BATCH SYSTEM NAME
//         OLDGY=,                         DS NAME OF OLD GY
//         UWK=$UWK                                WORK UNIT
//****************************************************************
//VERIFY EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//PTU927 EXEC PGM=BVPTU927
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
```

```
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7GY   DD DSN=&OLDGY,DISP=SHR
//PAC7MV   DD DSN=&&PACMV,DISP=(,PASS),UNIT=&UWK,
//            SPACE=(TRK,(100,20),RLSE),
//            DCB=(RECFM=FB,LRECL=310,BLKSIZE=3100)
//PAC7ME   DD DSN=&&PACME,DISP=(,PASS),UNIT=&UWK,
//            SPACE=(TRK,(100,20),RLSE),
//            DCB=(RECFM=FB,LRECL=310,BLKSIZE=3100)
//PAC7EF   DD SYSOUT=&OUT
//PAC7DD   DD SYSOUT=&OUT
```

MB Transactions exchanges between 3.n & 2.n (MB30)

MB30 - Introduction

Principle

This procedure retrieves the UPDT format transactions of the new release to
the 2.0 or 2.5 release.

Limits

The User Entities, Meta entities, Relations, Descriptions, Keywords, associated
Documentation and Relation calls are not processed.

Execution conditions

None.

Printed output

This procedure prints a report of the errors encountered.

Result

This procedure generates a transaction file for the 2.0 or 2.5 UPDT procedure
and a revoked transactions file.

MB30 - Description of Steps

MB file retrieval: PTU928

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7MB	&OLDMB	Input	MB transactions of the new version
PAC7MV	&&PACMV	Output	Retrieval transactions for UPDT
PAC7ME	&&PACME	Output	Revoked transactions
PAC7EF		Report	Retrieval reports
PAC7DD		Report	Authorization option

MB30 - Execution JCL

```
//* -------------------------------------------------------
//*      VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*                RETRIEVAL OF MB FILE
//*
//* -------------------------------------------------------
//*
//BVPMB30  PROC BASE=$BASE,              CODE OF DEVPT DATABASE
//         OUT=$OUT,                            OUTPUT CLASS
//         INDUV='$INDUV',              INDEX OF USER VSAM FILES
//         INDSV='$INDSV',            INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',        INDEX OF SYSTEM NON VSAM FILES
//*:       VSAMCAT='$VCAT',                 USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',         DEVPT SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         LSR='BLSR',                 LSR BATCH SYSTEM NAME
//         OLDMB=,                      DS NAME OF OLD MB
//         UWK=$UWK                            WORK UNIT
//*************************************************************
//VERIFY EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
```

```
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//PTU928 EXEC PGM=BVPTU928
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7MB   DD DSN=&OLDMB,DISP=SHR
//PAC7MV   DD DSN=&&PACMV,DISP=(,PASS),UNIT=&UWK,
//             SPACE=(TRK,(100,20),RLSE),
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7ME   DD DSN=&&PACME,DISP=(,PASS),UNIT=&UWK,
//             SPACE=(TRK,(100,20),RLSE),
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7EF   DD SYSOUT=&OUT
//PAC7DD   DD SYSOUT=&OUT
```

GY Transactions exchanges between 3.n & 2.n (GY30)

GY30 - Introduction

Principle

This procedure retrieves the UPDP format transactions of the new release into the 2.0 or 2.5 release.

Limits

The Meta entities, Relations, Descriptions, Keywords, associated Documentation and Relation calls are not processed.

But, User entities are retrieved as 2.n User entity occurrences. The user will have to create the corresponding 2.n user entity.

Execution conditions

None.

Printed output

This procedure prints a report of the errors encountered.

Result

This procedure generates a transaction file for the 2.0 or 2.5 UPDP procedure and a revoked transactions file.

GY30 - Description of Steps

GY file retrieval: PTU929

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7GY	&OLDGY	Input	GY transactions of the new version
PAC7MV	&&PACMV	Output	Retrieval transactions for UPDP
PAC7ME	&&PACME	Output	Revoked transactions
PAC7EF		Report	Retrieval reports
PAC7DD		Report	Authorization option

GY30 - Execution JCL

```
//* -------------------------------------------------------
//*        VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*                  RETRIEVAL OF GY FILE
//*
//* -------------------------------------------------------
//*
//BVPGY30  PROC BASE=$BASE,              CODE OF DEVPT DATABASE
//         OUT=$OUT,                               OUTPUT CLASS
//         INDUV='$INDUV',          INDEX OF USER VSAM FILES
```

```
//          INDSV='$INDSV',              INDEX OF SYSTEM VSAM FILES
//          INDSN='$INDSN',              INDEX OF SYSTEM NON VSAM FILES
//*:        VSAMCAT='$VCAT',                        USER VSAM CATALOG
//*:        SYSTCAT='$SCAT',               DEVPT SYSTEM VSAM CATALOG
//          STEPLIB='$HLQ..SBVPMBR8',       LIBRARY OF LOAD-MODULES
//          LSR='BLSR',                          LSR BATCH SYSTEM NAME
//          OLDGY=,                              DS NAME OF OLD GY
//          UWK=$UWK                                     WORK UNIT
//****************************************************************
//VERIFY EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//PAC7AN   DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AY   DD DSN=&INDUV..&BASE.AY,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAY),DISP=SHR
//PTU929 EXEC PGM=BVPTU929
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7GY   DD DSN=&OLDGY,DISP=SHR
//PAC7MV   DD DSN=&&PACMV,DISP=(,PASS),UNIT=&UWK,
//            SPACE=(TRK,(100,20),RLSE),
//            DCB=(RECFM=FB,LRECL=310,BLKSIZE=3100)
```

```
//PAC7ME   DD DSN=&&PACME,DISP=(,PASS),UNIT=&UWK,
//            SPACE=(TRK,(100,20),RLSE),
//            DCB=(RECFM=FB,LRECL=310,BLKSIZE=3100)
//PAC7EF   DD SYSOUT=&OUT
//PAC7DD   DD SYSOUT=&OUT
```

Procedures - Summary Table of Changes

List of new procedures since the 2.5

Procedure	Comments
ARAD	Archiving Administration Database
ARPM	Archiving the QJ journal of SCM module
INAE	Initialization of the error messages file (AE)
INGU	Initialization of the user codes files (GU)
INQJ	Initialization of SCM Tools Interface archive journal
GPMC	Generation of MOVE CORRESPONDING
GPRC	Generation (COBOL API)
ROAD	Re-organization of Administration Database
RSAD	Restoration of Administration Database
PACG	Backup of Administration Database
PAGX	Extraction of Administration Database
UKD1	Batch update of access keys and rights
VING	Update of Administration Model
PACS	Management of Development Database
MLIB	Management of libraries
SAVE	Backup of Development Database
GY25	Retrieval of GY file for UPDP to 3.n
MB25	Retrieval of MB file for UPDT to 3.n
GY30	Retrieval of GY file for UPDP to 2.n
MB30	Retrieval of MB file for UPDT to 2.n
PC25	Retrieval of Development Database
PE25	Retrieval of user parameters (PE)
PG20	Retrieval of 2.0 generation-print commands (PG)
PG25	Retrieval of 2.5 generation-print commands (PG)
PJ25	Retrieval of 2.n journal
PP25	Retrieval of PP file
RPP2	Retrieval of PEI environment

Procedure	Comments
UTMP	Retrieval of passwords
UV25	Retrieval of PacTransfer parameters (UV)
UTM1	Conversion of meta entities (step 1)
UTM2	Conversion of meta entities (step 2)
UTU1	Extraction of 'P' lines with 'UNS'
UTU2	Update of 'P' lines with 'UNS'
STAT	Database statistics
VINS	Update of Development Model
CHPM	Integrity control of environments/elements
CPPM	Comparison between Database and user configuration
EXPM	Extraction of environments
GPPM	Generation report written into QJ
HIPM	Database automatic freeze
SIPM	Generation simulation
UBPM	Generation of batch transactions from QJ
TRED	PacTransfer: print of parameters
UPGP	PAF update of Administration Database
CEND	Intra-Endevor integrity validation
CIND	Inter-Environments integrity validation
GPND	Endevor : recognition of parameters
JJND	Endevor : retrieval of archived journal
JRND	Endevor : retrieval of archived journal transactions
LSND	Endevor : Update of library/session table
MEND	Endevor : Formatting of update transactions
MNDO	Endevor : Formatting of update transactions in 2.5
RIND	Endevor : Creation of Infopac elements (retrieval of existing data)
RPND	Endevor : Creation of VA Pacbase elements (retrieval of existing data)
RPTY	Endevor : Retrieval of the types file
RP25	Endevor : user entities retrieval
RRND	Endevor : Retrieval of existing data
TYND	Endevor : Types loading
UPND	Endevor : Import of VA Pacbase elements into Endevor

List of procedures suppressed since 2.5 release

Procedure	Program	Comments
CPSN	PTU850 PTU855	Integrated into PACX procedure
EMSN	PTU810	
MESN	PTU815	
SASN	PTU130 PTU140	Integrated into PACS procedure
UXSR	UTIXSR	Integrated into PACS procedure
CRYP	PACU99	
PARM	PACU15 PACU80	
LOAE	PACU80	
REAG	PTU560	
SVAG	PTU550	
GET0	PACTI1	
GET1	PACT41	
GET2	PACT41 PACT51	
GRPE	PACR40	
INPE	PACR01	
PP16	PACR90	
PRPE	PACR10	
RSPE	PACR61	
SVPE	PACR60	
RVDE	PREI00 PRE986	
RVKE	PREI40 PREI50	
STOP	PTUR00	
TRRT	REUV802 PTUG90	
VDWN	PVA100 PVA110	
VPUR	PVA400	
VPU1	PVA300 PVA305 PVA310	
VPU2	PVA320	
LVBL	PTULVB	
QREO	PTUN00 PTUN10 PTUN40	
RPPG	PTU908	

Procedure	Program	Comments
RPTD	PTAR20	

Retrieval of VisualAge Pacbase 3.0

Operations to be Performed

The 3.5 version can be installed in the same environment as the 3.0 version. This case is considered as a re-installation.

Before, it is recommended to save the Development and Administration Databases (SAVE, ARCH, SVAD, ARAD) in the 3.0 version.

- If this version is installed in the same environment as the 3.0, refer to the 'Re-installation of Server' chapter in this manual.

  After the Administration Model update (VING execution), connect to the Administrator workbench to enter the new access key.

- If this version is installed in a new environment, after the execution of all the steps of the server part installation, the Databases must be restored following the steps:
  - RSAD : restoration of the Administration Database,
  - VING : update of the Administration Model,
  - Connection via the Administration workbench to enter and activate the new access key to the system,
  - REST : restoration of each Development Database,
  - VINS : update of the Development Model for each Development Database.

- In any case, the reorganization of Databases is required (ARCH, SAVE, REOR, REST).

Chapter 8. RPP Utilities

Adaptation of JCL to large databases

Introduction

The procedures used for the migration contain default settings that should be changed depending on the volume of the database to migrate.

These parameters (SPAOT, SPAGY...) define the size of temporary files, output files or sort files.

The following tables contain the correspondence between the number of records or entities of a database in current session and the size to specify in the parameters of procedures for large-volume files.

Estimation Criteria

The database restoration report (PAC7EU) gives an estimate of the number of records to take into account to calculate the size of large files (parameters in migration procedures).

The LOGICAL number of DATA FILE is significant and can be used as reference records number.

This number of records corresponds to the parameter N used in the following calculation rules.

Calibration

1. MIBR procedure

1.1. Assignment

See below the summary of ratios to set the file assignment parameters in the procedures:

DDNAME	Number of tracks for N records	Assignment parameters
&&GY	N / 130	&SPAGY
&&PACXWD	N / 110	&SPATD

DDNAME	Number of tracks for N records	Assignment parameters
&OUTFILE (TA2)	N / 185	&SPAOT

Note: the temporary files &&PAC7AT, &&PAC7TA, and &&PAC7TI have the same parameters as &OUTFILE.

The following table shows the steps where these files are used, in the order of the steps in the MIBR procedure.

These files are temporary and are deleted after the last step where they are used, except &OUTFILE that contains the TA2.

It is therefore possible to reserve the disk space for all files or adapt it to the freeing of files space during the procedure execution progress.

DDNAME	PACX2	PACS96	PATI 7	PACS91	PACS98
&&PAC7AT			X	X	
&&GY	X	X			
&&PAC7TA		X	X		
&&PAC7TI				X	X
&&PACXWD	X				
&OUTFILE (TA2)					X

1.2 Sort files

It is recommended to assign 2000 CYL by million records, distributed evenly on the various sort files.

2. Procedures MIA1,2,3,4

For procedures MIA1, MIA2, MIA3, and MIA4, the assignment depends on the number of entities 'n' (batch programs, screens, clients or servers according to the procedure):

Procedure / DDNAME	Number of tracks depending on the number of entities	Assignment parameters
&OUTFIL2	n * 3	&SPAOT
&OUTFILE	n * 6	&SPAOU

MIAM - Migration Help Function

MIAM - Introduction

Principle

This procedure provides the following functions:

- Search for special characters: loading of the special characters file (CS file).
- Search for entities whose code corresponds to a string not allowed (not compatible with Windows for example): loading of the special characters file (CS file).
- Search for Segments renamed as 00 in the -CD or -W when the Segment 00 exists in the network, and also calls of different Data Structures for the same Segment code.
- Search for -CD with selection of Segments on continuation line whereas the first line does not contain any selection.
- Search for Reports with duplicate labels.
- Search for gaps in the sequence of label numbers of Reports.
- Search for structures called in categories of a Report and not defined in the description of the Report.
- Search for Report structure lines calling several Data Elements with the same position.
- Search for labels called in Report categories and not defined in the description of the Report.
- Search in the -GE: references to Segments or Data Elements that do not exist in the -CE or -CS of Screens, or reference to a Text that does not exist.
- Search for Programs with a generation variant different from N and with only a Definition.
- Search for Standard or Client Screens, other than Help screens, with a generation variant different from N and with only a Definition or -CE lines.
- Search in the Screen -CS for multiple uses of the same Segment in display or reception in the same category.
- Search in the Screen -CE for lines with an L nature and an erroneous length.
- Search for Macro working lines that declare a table whose name contains the $ character.
- Search for working lines not to retrieve (with a type M, C, L or A).
- Search for obsolete generation variants.
- Search for generation variants or Block types that are not defined in the targets of the VA Pacbase access key.
- Search for Screens and Programs (not typed as Macros or not used as Macros) generated with the same external name.

- Search for duplicate map names for Standard or Client Screens that have a generation variant X0, X1, X2, X3, 00, 01, 02, 03, 4F, 80, 10, or 12.
- Search for the uses of Model entities in standard entities.
- Search for EL-type function lines with a level not compatible with a CO- DU- DW-type function that precedes them.
- Search for orphan conditions: condition lines with a type AN OR DU DW DC DI DV coming from a Macro and preceded by an IF-type condition line that does not come from a Macro.
- Search for duplicate P-lines with an N type.
- Search for P-lines of Macro with a function level lower than 99 associated with an operator code different from 'N', '*', 'SUP' and '$n'.
- Search for P entities to be transformed into Macros: loading of PM file.
- Search for Programs coming from PacReverse.
- Search in standard, client or server Screens, for P lines that contain 99BL, 99IT, 99DV, 99DI, 99DC preceded in the same function/subfunction by a comment line with an OR- or AN-type.
- Search, in Screens, for erroneous conditions for the P lines with a *A *P *R type, when these lines are present in functions 20 25 30 35 60 65.
- Search for entities not to retrieve: loading of the NR file used by the MIBR and MIBJ procedures. This applies to:
  - Data Elements with a usage not recognized in RPP (different from 0 1 2 3 5 6 7 8 9 C D F G H I J N O P Q R T U W X Y Z); Data Elements with a usage 4 and a Large Object type (L-type) are exceptions and are recognized,
  - Database Blocks with a type AR, D1, D3, QA, QD, QG, QI, QO, QV, SE, TI, TR
  - Reports for layouts.
  - Bulk-type Meta Entities and the associated User Entities
  - Pacdesign Meta Entities and the associated User Entities as well as the Data Elements that define the 7M 7N 5Q Meta Entities if they have not been retrieved with the MT parameter in the BVPAMIAM file.
  - F-type Dialogs or Screens (Folder Server) or FV (Folder View).
  - Dialogs, Screens or Programs that contain PAF commands (EXP operator) if the PF parameter with a value NO was indicated in the BVPAMIAM parameter file.

For each case, a record is written in the RQ file of errors.

Description of CS file of special characters or strings that are detected:

Pos.	Len.	Value	Meaning
1	2		Type of character
		WN	Character not compatible with WINDOWS
		CS	Special character
3	6		Detected character or string
9	6		Substitute character or string: this field must be filled in before the execution of the MIBA or MIBR procedures
15	66		FILLER

Description of NR file of entities not to retrieve:

Pos.	Len.	Meaning
1	3	Library code
4	3	PAF type
7	30	Entity code
37	2	Block type
39	1	Data Element usage
40	6	Meta Entity
46	35	FILLER

Description of NS file:

This file contains:
- Screens that have only a Definition and/or -CE lines,
- Programs that have only a definition,
- Screens with an N generation variant.

Pos.	Len.	Meaning
1	3	Library code
4	3	PAF type
7	30	Entity code

Description of PM file of non typed Macros

Pos.	Len.	Meaning
1	6	Entity code

Pos.	Len.	Meaning
7	44	FILLER

Description of RQ file of errors:

Pos.	Len.	Value	Meaning
1	3		Library
4	3		PAF type
7	6		Entity code
13	24		FILLER
37	3		Error type
		BL	Block not to retrieve
		CS	Special character
		DI1	Dialog with an F type (Folder) or an FV type (Folder View)
		EC2	Screen with an F type (Folder) or an FV type (Folder View)
		EC3	Screen whose -CS contains multiple uses of the same Segment in display or reception in the same category
		EC4	Standard or Client Screen with a generation variant different from N, that contains only a definition or -CE lines
		EC5	P line with 99BL, 99IT, 99DV, 99DI, 99DC, preceded by a comment line with an OR- or AN-type
		EC6	P line with a *A *P *R type, with an erroneous condition in functions 20 25 30 35 60 65
		EC7	Screen that contain L-lines with an erroneous length in its -CE
		ET1	Report with duplicate label
		ET3	Report for PDM layout
		ET4	Non existing label called in a category of the Report
		ET5	Non existing structure called in a category of the Report
		ET6	Structure that calls several Data Elements with the same position
		ET7	Missing label in the labels sequence of the Report
		EU1	Pacdesign User Entity not retrieved
		EU2	Bulk-type User Entity not retrieved

Pos.	Len.	Value	Meaning
		GE1	Non-existing reference (-GE)
		MCN	Macro with no type (indicating PARAM or NO PARAM)
		MP4	EL-type function whose level is not compatible with a preceding CO- DU- or DW-type function
		MT1	Pacdesign Meta Entity not retrieved
		MT2	Bulk-type Meta Entity not retrieved
		MT3	Data Element of Meta Entity not retrieved
		NEX	Duplicate name of generated entity
		MEX	Duplicate name of generated MAP
		NV1	Function level not compatible with the operator
		OR1	Orphan conditions
		PA1	Presence of PAF operator
		RU1	Use of Model entity in standard entity
		PG1	Duplicate P-line with N type
		PG2	Program with an obsolete type and structure
		PG3	Program with a variant or type and structure not yet taken into account
		PG4	Program coming from PacReverse not taken into account
		PG5	Program with a generation variant different from N, that contains a definition only
		SG1	Conflict of Segment naming in -CD or -W
		SG2	On -CD, no selection on first line but selection on continuation lines
		UR	Data Element usage not to retrieve
		VAR	Obsolete generation variant
		VAK	Generation variant or Block type not defined in the access key targets
		WK	Working line with a type M C L or A
		WK1	Macro working line that declares a table whose name contains a $ character
		WN	Characters not compatible with WINDOWS
40	40		Error label
80	2		Section
82	2		Paragraph

Pos.	Len.	Value	Meaning
84	3		Line number
87	2		File code
89	4		Segment code
93	2		Label number
95	6		Volume code
101	6		Data Element code
107	3		PAF type
110	6		Entity code
116	2		User Entity call type
118	3		Screen type (1)
121	30		FILLER

(1) The Screen type is only specified for errors detected on the definition of the Screen, with the value SRC for a standard Screen, CLI for a Client Screen, SRV for Server Screen and, ECR for the other Screens.

Consequences and actions to be taken for the different error types.

Code	Meaning	Consequence	Possible action	Consequence if no action
CS	Special character	Population of the CS file	(1)	TA2 import rejected. Generation error if the entity is used.
WN	Character not allowed (ex: not compatible with Windows)	Population of the CS file	(1)	TA2 import rejected. Generation error if the entity is used.
MCN	Non typed Macro	Population of the PM file	(2)	
VAR	Obsolete generation variant	Error in the RQ file	Populate the NR file	Generation rejected
EC3	Multiple use of the same Segment in display or reception in the same category of the -CS of a Screen	Error in the RQ file	Correct in VA Pacbase	Generation error

Code	Meaning	Consequence	Possible action	Consequence if no action
EC5	P line with 99BL, 99IT, 99DV, 99DI, 99DC preceded by a comment line with an OR- or AN-type	Error in the RQ file	Correct in VA Pacbase	Dot not generated before the line
EC7	-CE line with an L type and an erroneous length	Error in the RQ file	Correct in VA Pacbase : remove he line and create it again	Generation difference in the migration help
ET1	Report with duplicate label	Error in the RQ file	Correct in VA Pacbase	Warning in RPP
ET4	Non existing label called in a category of the Report	Error in the RQ file	Correct in VA Pacbase: remove the call to the label	Generation difference in the migration help
ET5	Non existing structure called in a category of the Report	Error in the RQ file	Correct in VA Pacbase: remove the call to the structure	Generation difference in the migration help
ET6	Structure that calls several Data Elements with the same position	Error in the RQ file	Correct in VA Pacbase: correct the structure	Generation difference in the migration help
ET7	Missing label in the labels sequence of the Report	Error in the RQ file	Correct in VA Pacbase: correct	Generation difference in the migration help
GE1	Non-existing reference (-GE)	Error in the RQ file	Correct in VA Pacbase: modify the -CE or -CS or the call to text reference	Error reported in the TA2 import (change into comments)
MP4	EL-type function whose level is not compatible with a preceding CO- DU- or DW-type function	Error in the RQ file	Correct in VA Pacbase	Differences at generation

Code	Meaning	Consequence	Possible action	Consequence if no action
NEX	Duplicate name of generated entity in a same library	Error in the RQ file	Correct in VA Pacbase: change the external names or select the N variant for programs to be kept with the same model or populate the NR file	To keep several entities that have the same external name, it is required to migrate manually
MEX	Duplicate name of generated MAP in a same library	Error in the RQ file	Correct in VA Pacbase: change the external names	To keep several entities that have the same external name, it is required to migrate manually
NV1	Function level not compatible with the operator	Error in the RQ file	Correct in VA Pacbase: modify the level and/or the operator	Possible generation error
OR1	Orphan conditions	Error in the RQ file	Correct in VA Pacbase	Possible generation error for complex cases
RU1	Model entity used in standard entity	Error in the Q file		
PG1	Duplicate P-line with N type	Error in the RQ file	Correct in VA Pacbase	Possible generation error
PG3	Program with a variant or type and structure not yet taken into account	Error in the RQ file	Wait for development	Cannot be migrated
PG4	Program coming from PacReverse not taken into account	Error in the RQ file	Wait for development	Cannot be migrated
SG1	Conflict of Segment naming in -CD or -W	Error in the RQ file		Generation differences in the migration help
SG2	On -CD: no selection on first line but selection on continuation line	Error in the RQ file		Generation differences in the migration help

Code	Meaning	Consequence	Possible action	Consequence if no action
WK	Working line with M C L or A type	Error in the RQ file		Not taken into account
WK1	Working line with a table name that contains a $ character	Error in the RQ file	Manually correct in RPP or in the MIMA file or after dispatching	Erroneous index of the table
BL	Database Block not to retrieve	Population of NR file	(3)	
DI1	Dialog with an F type (Folder Server) or FV type (Folder view)	Population of NR file	(3)	
EC2	Screen with an F type (Folder Server) or FV type (Folder view)	Population of NR file	(3)	
ET3	Report for PDM layout	Population of NR file	(3)	
EU1	Pacdesign User Entity not retrieved	Population of NR file	(3) Caution: this is an option. The input of the procedure must be modified to retrieve it	
EU2	Bulk-type UE not retrieved	Population of NR file	(3)	
MT1	Pacdesign Meta Entity not retrieved	Population of NR file	(3) Caution: this is an option. The input of the procedure must be modified to retrieve it	
MT2	Bulk-type Meta Entity not retrieved	Population of NR file	(3)	

Code	Meaning	Consequence	Possible action	Consequence if no action
MT3	Data Element of Meta Entity not retrieved	Population of NR file except for a Data Element of 7N 7M 5Q Meta Entities if the MT parameter is positioned in the BVPAMIAM file	(3)	
PA1	Presence of PAF operator	Population of NR file	(3)	
PG2	Program with an obsolete type and structure	Population of NR file	(3)	
UR	Data Element usage not to retrieve	Population of NR file	(3)	
EC4	Screen with only a definition or -CE lines	Population of NS file	(4)	
PG5	Program with only a definition	Population of NS file	(4)	

(1) The CS file of special characters is used to replace characters or strings with valid values.

This file is used by the MIBA, MIBR, MIBJ, and MIMA procedures.

If there is no substitution value, the MIBA, MIBJ, and MIBR procedures stop.

(2) The PM file of Programs used as Macros (but that are not typed as Macros) allows the MIBA, MIBR, and MIBJ procedures to process them as Macros.

(3) The NR file contains the entities that are not retrieved after the processing.

This applies to the MIBR and MIBJ procedures.

This file can be edited and populated with obsolete entities.

(4) The NS file contains 'banner' Screens or Screens and Programs with a definition only, and Screens with an N type of COBOL to generate.

MIAM - User Input

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password
19	3		Extraction Library code
		***	All Libraries
		bbb	bbb Library
22	4	nnnn	Session number (blank = current session)
26	1		Session status
		'T'	If selection of frozen session
		' '	If selection of current or H session

This processing takes into account the parameter file hlq.SBVPINST(BVPAMIAM), provided at installation with the following structure:

Pos.	Len.	Value	Meaning
1	2	'BL'	Type of block not retrieved
		'CS'	Special character
		'MT'	Forced retrieval of Meta Entity (1)
		'PF'	Indicates whether to retrieve the Programs or Screens that contain PAF operators. By default, they are retrieved. Add a PF line with the value NO in position 3 not to retrieve them.
		'UR'	Recognized Data Element usage
		'VO'	Authorized types of COBOL to generate for Screens (2)
		'VP'	Authorized types of COBOL to generate for Programs (2)
		'VS'	Authorized types of COBOL to generate for C/S entities (2)
		'WK'	Type of working line not to retrieve
		'WN'	String not allowed (not compatible with Windows for example)
3	78		Value of the parameter

This file contains the standard parameters provided at installation to allow the procedure to complete the necessary checks.

In this file, you can add special characters to be searched for. To do so, add a CS-type line with the character to be searched for.

(1) The MT parameter is used to force the retrieval of Meta Entities with a code 7N (Endevor), 7M (Environment) or 5Q (Quality) and the retrieval of Pacdesign Meta Entities (use the DS value). Only these four values on 2 characters are taken into account.

(2) By default, the authorized values of the COBOL types to generate are:

VO: 'NX013O456M7U8FIKQZ'

VP: 'N013458FIKOUXQZC'

VS: 'NX03457OU8FIRQ'.

You can replace them with the values indicated in each parameter. You must indicate all the COBOL types to be recognized in each parameter.

If several lines exist for the same type, only the last line is taken into account.

Note:

It is not necessary to sort the parameter file. Any unknown value is ignored.

Parameters can be removed.

MIAM - Description of Steps

Input recognition: PTU001

Initialization of the output file(s)

Initialization of the KSDS work file: IDCAMS

Migration Help Function : BVPLTPAM

Code	Physical name	Type	Label
PAC7AE	&INDMV..BVPAE	Input	Error messages
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7MB	&&MIAMMB	Input	User Input
PAC7CK	&INPARAM	Input	Analysis parameters
PAC7CS	&OUTCSPE	Output	Special characters
PAC7NR	&OUTNREP	Output	Entities not to retrieve
PAC7NS	&OUTNMIG	Output	Programs or Screens with only a definition or -CE lines
PAC7PM	&OUTPMAC	Output	Programs to be transformed into Macros
PAC7RQ	&OUTRQER	Output	Detected errors
PAC7DD		Report	Error report

MIAM - Execution JCL

```
//* -------------------------------------------------------
//*       VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*                   MIGRATION HELP
//*
//* -------------------------------------------------------
//*
//BVPMIAM  PROC BASE=$BASE,               CODE OF DEVPT DATABASE
//         INDSV='$INDSV',                INDEX OF VSAM SYSTEM FILES
//         INDUV='$INDUV',                INDEX OF USER VSAM FILES
//         INDSN='$INDSN',          INDEX OF NON VSAM FOR MIGRATION
//*:       VSAMCAT='$VCAT',                  USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',                SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',     LIBRARY OF LOAD-MODULES
//         LSR='BLSR',                   LSR BATCH SYSTEM NAME
//         OUT=$OUT,                            OUTPUT CLASS
//         INPARAM=,                         PARAMETER'S FILE
//         OUTCSPE=,                     SPECIAL CARACTERS FILE
//         OUTNREP=,                 NOT RETRIEVED ENTITIES FILE
//         OUTNMIG=,     PROGRAMS OR SCREENS WITH ONLY DEF OR -CE
//         OUTPMAC=,                  MACROS WITHOUT TYPE FILE
//         OUTRQER=,                            ERRORS FILE
//         VOLS='SER=$VOLUN',                 BACKUP VOLUME
//         UNITS=$UNITUN,                       BACKUP UNIT
//         UWK=$UWK,                              WORK UNIT
//         SPAMB='(TRK,(5,1),RLSE)',      REQUEST FILE SPACE
//         SPAOT='(TRK,(500,80),RLSE)'    OUTPUT FILE SPACE
//****************************************************************
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
```

```
//        DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&MIAMMB,DISP=(,PASS),
//         UNIT=&UWK,SPACE=&SPAMB,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLCSPE  EXEC PGM=BVPRMSYS,PARM='&OUTCSPE'
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LICSPE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISCSPE  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LICSPE,DISP=(OLD,DELETE)
//PRDCSPE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISCSPE),PARM='&OUTCSPE'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLCSPE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELCSPE  EXEC PGM=IDCAMS,COND=(4,EQ,LISCSPE)
//*-------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLCSPE,DISP=(OLD,DELETE)
//PRLNREP  EXEC PGM=BVPRMSYS,PARM='&OUTNREP'
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LINREP,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISNREP  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LINREP,DISP=(OLD,DELETE)
//PRDNREP  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISNREP),PARM='&OUTNREP'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLNREP,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
```

```
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELNREP  EXEC PGM=IDCAMS,COND=(4,EQ,LISNREP)
//*---------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLNREP,DISP=(OLD,DELETE)
//PRLNMIG  EXEC PGM=BVPRMSYS,PARM='&OUTNMIG'
//*---------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LINMIG,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISNMIG  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LINMIG,DISP=(OLD,DELETE)
//PRDNMIG  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISNMIG),PARM='&OUTNMIG'
//*-----------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLNMIG,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELNMIG  EXEC PGM=IDCAMS,COND=(4,EQ,LISNMIG)
//*---------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLNMIG,DISP=(OLD,DELETE)
//PRLPMAC  EXEC PGM=BVPRMSYS,PARM='&OUTPMAC'
//*---------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIPMAC,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISPMAC  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIPMAC,DISP=(OLD,DELETE)
//PRDPMAC  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISPMAC),PARM='&OUTPMAC'
//*-----------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLPMAC,DISP=(,PASS),SPACE=(TRK,1),
```

```
//            UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELPMAC  EXEC PGM=IDCAMS,COND=(4,EQ,LISPMAC)
//*--------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLPMAC,DISP=(OLD,DELETE)
//PRLRQER  EXEC PGM=BVPRMSYS,PARM='&OUTRQER'
//*------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIRQER,DISP=(,PASS),SPACE=(TRK,1),
//            UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISRQER  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIRQER,DISP=(OLD,DELETE)
//PRDRQER  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISRQER),PARM='&OUTRQER'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLRQER,DISP=(,PASS),SPACE=(TRK,1),
//            UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELRQER  EXEC PGM=IDCAMS,COND=(4,EQ,LISRQER)
//*--------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLRQER,DISP=(OLD,DELETE)
//PLTPAM EXEC PGM=BVPLTPAM
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//PAC7MB   DD DSN=&&MIAMMB,DISP=(OLD,PASS)
//PAC7CK   DD DSN=&INPARAM,DISP=SHR
//PAC7CS   DD DSN=&OUTCSPE,DISP=(,CATLG),
//            UNIT=&UNITS,VOL=&VOLS,
```

```
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=6160,LRECL=80)
//PAC7NR   DD DSN=&OUTNREP,DISP=(,CATLG),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=6160,LRECL=80)
//PAC7NS   DD DSN=&OUTNMIG,DISP=(,CATLG),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=6160,LRECL=80)
//PAC7PM   DD DSN=&OUTPMAC,DISP=(,CATLG),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=500,LRECL=50)
//PAC7RQ   DD DSN=&OUTRQER,DISP=(,CATLG),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=15000,LRECL=150)
//SYSPRINT DD SYSOUT=&OUT
//PAC7DD   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

MIBA - Batch Migration

MIBA - Introduction

<u>Principle</u>

This procedure is a utility that prepares the batch migration after the extraction of entities in the Repository. It formats files that will be used by the migration tools.

MIBA - User Input

It is the user input of the PACX procedure, with the following specific values:

One '*' line as follows:

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password
19	3	bbb	Extraction Library code
22	4	nnnn	Session number (Blank=current session)
26	1	'T'	Session status if Test session
29	4	EXTR	Extractor code
34	1	'1'	Formatting for UPDP (PAF)

Pos.	Len.	Value	Meaning
55	1	'1'	Timestamp request indicator

'O'-line: Control cards in front/back of the generation commands

Pos.	Len.	Value	Meaning
2	1	'O'	Line code
3	3	bbb	Generation command
			'GCP': Program
			'GCO': Dialog
			'GGC': Client
			'GGS': Server
7	2	be	Control card in front
9	2	af	Control card in back

You must add the following command line:

Pos.	Len.	Value	Meaning
2	4	'W'	Line code
3	1	'1'	Line number
4	2	'EX'	
6	1	'+'	Library selection code:
			Library and its upper-libraries with the generation of identification lines (* lines)
7	33	Choice	Entity to be extracted, coded in the same way as the 'Choice' field in online mode.
40	4		Extraction type:
		'ALL '	Entity and used entities

Principle of migration

For a given entity, the extraction is performed from each library of each element of its folder, within the same network.

First step: PACX extraction in view '+'

When the definition of en entity is extracted, the Library of each element in its folder is searched for.

The highest-level library is the reference library. The folder of the entity is created later (next step) in each lower-level library found.

In a network, all the libraries that contain an element of the folder are detected.

For each library, a command line in view 'C' of the extracted entity, and an appropriate assign card are formatted and sorted. All these lines make up the input file of the second step.

Second step: PACX extraction in view 'C'

The entities extraction is performed in the extraction library and in the higher-level libraries. An entity folder is created in each extraction library. It is inherited from the higher or equal level libraries.

The PACX extraction has been enhanced:
• When a Segment is extracted, its Data Structure is also extracted.
• When a Screen is extracted, the Definition of its Dialog is also extracted.

Only the erroneous requests are included in the PAC7EZ report.

This procedure requires the PAC7PM file as input to the BVPACS96 program.

This file, defined with 50-character records, contains, in position 1, the VA Pac codes of the Programs used as Macrostructures but not defined as such in the Repository.

This file is produced by the MIAM procedure.

This procedure also allows to replace unknown special characters in an entity code with other characters or to replace unauthorized words (Windows reserved words for example) with other codes. The matching table is the PAC7CS file used as input to the BVPACS94 and BVPACS96 programs (optional file, created by the MIAM procedure).

This procedure also generates the input transactions for the procedures:
• MIMA (migration of macrostructures): GCM and GMO commands.
• GPRT (PRINT - GENERATION): GCP, GCO, GGC and GGS commands
• MIA1 (migration of Programs): GCP commands
• MIA2 (migration of Screens): GCO commands
• MIA3 (migration of Clients): GGC commands
• MIA4 (migration of Servers): GGS commands

- The control cards in front/back of these records come from the 'O'-lines of user input.

.**Notes:** GMO commands: creation of high priority Macros

All the specific lines of a Screen that cause the move of a Macro function or subfunction are gathered in the high priority Macro.

When the repository is migrated, the Screens that contain specific relative positions (*A, *P, *C, *R) are detected. A GMO command line is created for each of these Screens, which will be transformed into high priority Macros.

These Macros will be generated by the MIMA procedure under the name: Screen code suffixed by 'SP'.

MIBA - Description of Steps

Input recognition: PTU001

Initialization of the output file(s)

Initialization of the KSDS work file: IDCAMS

Extraction: PACX

This step extracts transactions according to user input.

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7PJ	DUMMY	Input	Archived transactions
PAC7MB	&&MIBAMB	Input	User input
PAC7MA	DUMMY	Input	Work file
PAC7ES	DUMMY	Input	Work file

Code	Physical name	Type	Label
PAC7BM	&&PACXBM	Input/Output	User input
PAC7MM	&&PACXMM	Input/Output	Work file
PAC7MJ	&&PACXMJ	Input/Output	Work file
PAC7TE	&&PACXTE	Input/Output	Work file
PAC7RE	&&PACXRE	Input/Output	Work file
PAC7RM	&&PACXRM	Input/Output	Work file
PAC7WD	&&PACXWD	Input/Output	Extracted transactions
SYSEXT	&INDUV..SYSEXT.&USER	Input/Output	Work file
PAC7MV	&&MV	Output	Work file
PAC7CP	DUMMY	Output	Work file
PAC7MR	&&MR	Output	Work file
PAC7MX	&&MX	Output	Entities not extracted (PACX)
PAC7GY	DUMMY	Output	Extracted transactions for UPDP
PAC7RQ	&&QR	Output	Matching Entity/Library
PAC7TD	&&TD	Output	Work file
PAC7UE	&&UE	Output	Work file
PAC7IA		Report	General printout of the program stream
PAC7DD		Report	Errors on input transactions
PAC7ED		Report	Extractions report
PAC7EE		Report	Extractions report
PAC7EG		Report	Extractions report
PAC7EM		Report	Extractions report
PAC7EP		Report	Extractions report
PAC7EQ		Report	Extractions report
PAC7EU		Report	Extractions report
PAC7EZ		Report	Extractions report
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Return codes:

- 0: No error
- 4: Error in user input (detailed in PAC7EE) or in extractions (detailed in PAC7EZ)
- 8: Error in '*' line (detailed in PAC7DD)

Deletion of the KSDS work file: IDCAMS

Sort and formatting of command lines: BVPACS92

Code	Physical name	Type	Label
PAC7QR	&&QR	Input	Matching Entity/Library
PAC7RQ	&&PACXRQ	Output	Matching Entity/Library after sort
PAC7MZ	&&PACXMB	Output	Command lines for PACX input
PAC7ER	DUMMY	Output	List of duplicated entities
PAC7EE	DUMMY	Output	Entities not retrieved, produced by MIBR
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Initialization of the KSDS work file: IDCAMS

Extraction: PACX2

This step extracts the transactions according to the user input generated by the BVPACS92 program.

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users

Code	Physical name	Type	Label
PAC7PJ	DUMMY	Input	Archived transactions
PAC7MB	&&PACXMB	Input	User input
PAC7MA	DUMMY	Input	Work file
PAC7ES	DUMMY	Input	Work file
PAC7BM	&&PACXBM	Input/Output	User input
PAC7MM	&&PACXMM	Input/Output	Work file
PAC7MJ	&&PACXMJ	Input/Output	Work file
PAC7TE	&&PACXTE	Input/Output	Work file
PAC7RE	&&PACXRE	Input/Output	Work file
PAC7RM	&&PACXRM	Input/Output	Work file
PAC7WD	&&PACXWD	Input/Output	Extracted transactions
SYSEXT	&INDUV..SYSEX2.&USER	Input/Output	Work file
PAC7MV	&&MV	Output	Work file
PAC7MR	&&MR	Output	Work file
PAC7MX	&&MX	Output	Entities not extracted (PACX)
PAC7CP	&&CP	Output	Work file
PAC7GY	&&GY	Output	Extracted transactions for UPDP
PAC7RQ	DUMMY	Output	Matching Entity/Library
PAC7TD	&&TD	Output	Work file
PAC7UE	&&UE	Output	Work file
PAC7IA		Report	General printout of the program stream
PAC7DD		Report	Errors on input transactions
PAC7ED		Report	Extractions report
PAC7EE		Report	Extractions report
PAC7EG		Report	Extractions report
PAC7EM		Report	Extractions report
PAC7EP		Report	Extractions report
PAC7EQ		Report	Extractions report
PAC7EU		Report	Extractions report
PAC7EZ		Report	Extractions report
SORTWK01		Sort	

Code	Physical name	Type	Label
SORTWK02		Sort	
SORTWK03		Sort	

Return codes:

- 0: No error
- 4: Error in user input (detailed in PAC7EE) or in extractions (detailed in PAC7EZ)
- 8: Error in '*' line (detailed in PAC7DD)

Deletion of the KSDS work file: IDCAMS

Sort and formatting of command lines: BVPACS92

Code	Physical name	Type	Label
PAC7QR	&&QR	Input	Matching Entity/Library
PAC7RQ	&&PACXRQ	Output	Matching Entity/Library after sort
PAC7MZ	&&PACXMB	Output	Command lines for PACX input
PAC7ER	DUMMY	Output	List of duplicated entities
PAC7EE	DUMMY	Output	Entities not retrieved, produced by MIBR
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Batch migration : BVPACS96

Code	Physical name	Type	Label
PAC7MB	&&MIBAMB	Input	User input
PAC7GY	&&GY	Input	File resulting from PACX extraction
PAC7PM	&INPUTMIB	Input	File with the list of Pgms to be transformed into PMS
PAC7CS	&INPUTSPE	Input	Special characters matching file
PAC7TA	&&PAC7TA	Output	File containing transactions grouped by type
PAC7MM	&OUTMIMA	Output	File containing MIMA commands
PAC7MI	&OUTGCP	Output	File containing GCP commands

Code	Physical name	Type	Label
PAC7MO	&OUTGCO	Output	File containing GCO commands
PAC7MC	&OUTGGC	Output	File containing GGC commands
PAC7MS	&OUTGGS	Output	File containing GGS commands

Reorganization of transactions : BVPACS97

Code	Physical name	Type	Label
PAC7TA	&&PAC7TA	Input	File containing transactions grouped by type
PAC7AT	&&PAC7AT	Output	File with transactions grouped by type, sorted again

Sort and formatting of import file: BVPACS91

Code	Physical name	Type	Label
PAC7AT	&&PAC7AT	Input	File containing transactions grouped by type
PAC7TI	&&PAC7TI	Output	File with transactions grouped by type, sorted again
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Global sort: BVPACS98

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Output	Development Database data
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7CP	&&CP	Input	Counter of extracted entities
PAC7RQ	&&PAC7QR	Input	Matching Entity/lowest Library
PAC7TI	&&PAC7TI	Input	File with transactions grouped by type, sorted again
PAC7TG	&OUTFILE	Output	Result file with global sort
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

MIBA - Execution JCL

```
//* -------------------------------------------------------
//*          VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*                    BATCH MIGRATION
//*
//* -------------------------------------------------------
//*
//BVPMIBA  PROC BASE=$BASE,                CODE OF DEVPT DATABASE
//         INDSV='$INDSV',             INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',            INDEX OF SYSTEM NON VSAM FILE
//         INDUV='$INDUV',              INDEX OF USER VSAM FILES
//*:       VSAMCAT='$VCAT',                  USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',                SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         SORTLIB='$BIBT',                       SORT LIBRARY
//         USER=,                                    USER CODE
//         LSR='BLSR',                       LSR BATCH SYSTEM NAME
//         OUT=$OUT,              UTILITIES AND ERRORS OUTPUT CLASS
//         OUTL=$OUT,                     OUTPUT CLASS OF REPORTS
//         UWK=$UWK,                                 WORK UNIT
//         SPAMB='(TRK,(5,1),RLSE)',         REQUEST FILE SPACE
//         SPAMV='(TRK,(50,10),RLSE)',          UPDT FILE SPACE
//         SPAGY='(TRK,(50,10),RLSE)',          UPDP FILE SPACE
//         SPATD='(TRK,(50,10),RLSE)',          CPSN FILE SPACE
//         INPUTMIB=,                        PROGRAM/MACRO FILE
//         INPUTSPE=,                        SPECIAL CHAR FILE
//         OUTMIMA=,                        OUTPUT MIMA COMMAND
//         OUTFILE=,                        OUTPUT FILE MIGRATION
//         OUTGCP=,                          OUTPUT GCP COMMAND
//         OUTGCO=,                          OUTPUT GCO COMMAND
//         OUTGGC=,                          OUTPUT GGC COMMAND
//         OUTGGS=,                          OUTPUT GGS COMMAND
//         VOLS='SER=$VOLUN',                    BACKUP VOLUME
//         UNITS=$UNITUN,                          BACKUP UNIT
//         SPAOT='(TRK,(500,80),RLSE)',      OUTPUT FILE SPACE
//         SRTSPC='(100,10)'                   TEMPORARY SPACE
//*****************************************************************
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&MIBAMB,DISP=(,PASS),
//         UNIT=&UWK,SPACE=&SPAMB,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLFILE EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
```

```
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
//*--------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
//PRLMIMA  EXEC PGM=BVPRMSYS,PARM='&OUTMIMA'
//*------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIMIMA,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISMIMA  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIMIMA,DISP=(OLD,DELETE)
//PRDMIMA  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISMIMA),PARM='&OUTMIMA'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLMIMA,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELMIMA  EXEC PGM=IDCAMS,COND=(4,EQ,LISMIMA)
//*--------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLMIMA,DISP=(OLD,DELETE)
//PRLGCP   EXEC PGM=BVPRMSYS,PARM='&OUTGCP'
//*------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIGCP,DISP=(,PASS),SPACE=(TRK,1),
```

```
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISGCP  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIGCP,DISP=(OLD,DELETE)
//PRDGCP  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISGCP),PARM='&OUTGCP'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLGCP,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELGCP  EXEC PGM=IDCAMS,COND=(4,EQ,LISGCP)
//*--------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLGCP,DISP=(OLD,DELETE)
//PRLGCO  EXEC PGM=BVPRMSYS,PARM='&OUTGCO'
//*--------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIGCO,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISGCO  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIGCO,DISP=(OLD,DELETE)
//PRDGCO  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISGCO),PARM='&OUTGCO'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLGCO,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELGCO  EXEC PGM=IDCAMS,COND=(4,EQ,LISGCO)
//*--------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLGCO,DISP=(OLD,DELETE)
//PRLGGC  EXEC PGM=BVPRMSYS,PARM='&OUTGGC'
//*--------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
```

```
//PACROU DD DSN=&&LIGGC,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISGGC  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIGGC,DISP=(OLD,DELETE)
//PRDGGC  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISGGC),PARM='&OUTGGC'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLGGC,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELGGC  EXEC PGM=IDCAMS,COND=(4,EQ,LISGGC)
//*------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLGGC,DISP=(OLD,DELETE)
//PRLGGS  EXEC PGM=BVPRMSYS,PARM='&OUTGGS'
//*------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIGGS,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISGGS  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIGGS,DISP=(OLD,DELETE)
//PRDGGS  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISGGS),PARM='&OUTGGS'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLGGS,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELGGS  EXEC PGM=IDCAMS,COND=(4,EQ,LISGGS)
//*------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLGGS,DISP=(OLD,DELETE)
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*-----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
```

```
//PACRIN DD DSN=&INDSN..BVPSY(DFSYSEXT),DISP=SHR
//PACROU DD DSN=&&DFSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFSYSEXT,DISP=(OLD,DELETE)
//MAXKEY   EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF   DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//MAXKEY   DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//*
//PACX   EXEC PGM=BVPACX,REGION=0K
//*-----------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7PJ   DD DUMMY
//PAC7IA   DD SYSOUT=&OUTL
//PAC7DD   DD SYSOUT=&OUTL
//PAC7ED   DD SYSOUT=&OUTL
//PAC7EE   DD SYSOUT=&OUTL
//PAC7EG   DD SYSOUT=&OUTL
//PAC7EM   DD SYSOUT=&OUTL
//PAC7EP   DD SYSOUT=&OUTL
//PAC7EQ   DD SYSOUT=&OUTL
//PAC7EU   DD SYSOUT=&OUTL
//PAC7EZ   DD SYSOUT=&OUTL
//PAC7MA   DD DUMMY
//PAC7ES   DD DUMMY
//SYLSR    DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//SYSEXT   DD SUBSYS=(&LSR,'DDNAME=SYLSR')
//PAC7MB   DD DSN=&&MIBAMB,DISP=(OLD,PASS)
```

```
//PAC7BM   DD DSN=&&PACXBM,DISP=(,DELETE),UNIT=&UWK,
//            DCB=BLKSIZE=3440,SPACE=&SPAMB
//PAC7MM   DD DSN=&&PACXMM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=113,BLKSIZE=11300)
//PAC7MJ   DD DSN=&&PACXMJ,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=158,BLKSIZE=6320)
//PAC7TE   DD DSN=&&PACXTE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=323,BLKSIZE=6460)
//PAC7RE   DD DSN=&&PACXRE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=36,BLKSIZE=6012)
//PAC7RM   DD DSN=&&PACXRM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7RQ   DD DSN=&&QR,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7WD   DD DSN=&&PACXWD,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//PAC7MV   DD DSN=&&MV,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MR   DD DSN=&&MR,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MX   DD DSN=&&MX,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7TD   DD DSN=&&TD,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7CP   DD DUMMY
//PAC7GY   DD DUMMY
//PAC7UE   DD DSN=&&UE,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=230,BLKSIZE=6440)
//SYSUDUMP DD SYSOUT=&OUT
//*
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*---------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLSYSEXT),DISP=SHR
//PACROU DD DSN=&&DLSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
```

```
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*-----------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLSYSEXT,DISP=(OLD,DELETE)
//PACS92 EXEC PGM=BVPACS92,COND=(4,LT,PACX)
//*---------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7ER   DD DUMMY
//PAC7EE   DD DUMMY
//PAC7QR   DD DSN=&&QR,DISP=(OLD,PASS)
//PAC7RQ   DD DSN=&&PACXRQ,DISP=(,PASS),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAMV,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MZ   DD DSN=&&PACXMB,DISP=(,PASS),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAMB,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*-----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DFSYSEX2),DISP=SHR
//PACROU DD DSN=&&DFSYSEX2,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFSYSEX2,DISP=(OLD,DELETE)
//MAXKEY   EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF   DD DSN=&INDUV..SYSEX2.&USER,DISP=SHR
//MAXKEY   DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//*
//PACX2  EXEC PGM=BVPACX,REGION=0K,COND=(4,LT,PACX)
//*-----------------------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
```

```
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7PJ   DD DUMMY
//PAC7IA   DD SYSOUT=&OUTL
//PAC7DD   DD SYSOUT=&OUTL
//PAC7ED   DD SYSOUT=&OUTL
//PAC7EE   DD SYSOUT=&OUTL
//PAC7EG   DD SYSOUT=&OUTL
//PAC7EM   DD SYSOUT=&OUTL
//PAC7EP   DD SYSOUT=&OUTL
//PAC7EQ   DD SYSOUT=&OUTL
//PAC7EU   DD SYSOUT=&OUTL
//PAC7EZ   DD SYSOUT=&OUTL
//PAC7MA   DD DUMMY
//PAC7ES   DD DUMMY
//SYLSR    DD DSN=&INDUV..SYSEX2.&USER,DISP=SHR
//SYSEXT   DD SUBSYS=(&LSR,'DDNAME=SYLSR')
//PAC7MB   DD DSN=&&PACXMB,DISP=(OLD,DELETE,DELETE)
//PAC7BM   DD DSN=&&PACXBM,DISP=(,DELETE),UNIT=&UWK,
//            DCB=BLKSIZE=3440,SPACE=&SPAMB
//PAC7MM   DD DSN=&&PACXMM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=113,BLKSIZE=11300)
//PAC7MJ   DD DSN=&&PACXMJ,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=158,BLKSIZE=6320)
//PAC7TE   DD DSN=&&PACXTE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=323,BLKSIZE=6460)
//PAC7RE   DD DSN=&&PACXRE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=36,BLKSIZE=6012)
//PAC7RM   DD DSN=&&PACXRM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7CP   DD DSN=&&CP,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7RQ   DD DUMMY
//PAC7WD   DD DSN=&&PACXWD,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
```

```
//              DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//PAC7MV   DD DSN=&&MV,DISP=(,PASS),UNIT=&UWK,
//             SPACE=&SPAMV,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MR   DD DSN=&&MR,DISP=(,PASS),UNIT=&UWK,
//             SPACE=&SPAMV,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MX   DD DSN=&&MX,DISP=(,PASS),UNIT=&UWK,
//             SPACE=&SPAMB,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7TD   DD DSN=&&TD,DISP=(,PASS),UNIT=&UWK,
//             SPACE=&SPATD,
//             DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7GY   DD DSN=&&GY,DISP=(,PASS),UNIT=&UWK,
//             SPACE=&SPAGY,
//             DCB=(RECFM=FB,LRECL=310,BLKSIZE=6200)
//PAC7UE   DD DSN=&&UE,DISP=(,PASS),UNIT=&UWK,
//             SPACE=&SPAMV,
//             DCB=(RECFM=FB,LRECL=230,BLKSIZE=6440)
//SYSUDUMP DD SYSOUT=&OUT
//*
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLSYSEX2),DISP=SHR
//PACROU DD DSN=&&DLSYSEX2,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLSYSEX2,DISP=(OLD,DELETE)
//PACS94 EXEC PGM=BVPACS94,COND=((4,LT,PACX),
//     (4,LT,PACX2))
//*-----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7CS   DD DSN=&INPUTSPE,DISP=SHR
//PAC7RQ   DD DSN=&&PACXRQ,DISP=(OLD,PASS)
//PAC7QR   DD DSN=&&PAC7QR,DISP=(,PASS),UNIT=&UWK,
//             SPACE=&SPAMV,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS96 EXEC PGM=BVPACS96,COND=((4,LT,PACX),
//     (4,LT,PACX2),(4,LT,PACS94))
```

```
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7GY   DD DSN=&&GY,DISP=(OLD,PASS)
//PAC7MB   DD DSN=&&MIBAMB,DISP=(OLD,PASS)
//PAC7CS   DD DSN=&INPUTSPE,DISP=SHR
//PAC7PM   DD DSN=&INPUTMIB,DISP=SHR
//PAC7TA   DD DSN=&&PAC7TA,DISP=(,PASS),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAOT,
//         DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//PAC7MM   DD DSN=&OUTMIMA,DISP=(,CATLG),UNIT=&UWK,
//           SPACE=&SPAMB,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MI   DD DSN=&OUTGCP,DISP=(,CATLG),UNIT=&UWK,
//           SPACE=&SPAMB,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MO   DD DSN=&OUTGCO,DISP=(,CATLG),UNIT=&UWK,
//           SPACE=&SPAMB,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MC   DD DSN=&OUTGGC,DISP=(,CATLG),UNIT=&UWK,
//           SPACE=&SPAMB,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MS   DD DSN=&OUTGGS,DISP=(,CATLG),UNIT=&UWK,
//           SPACE=&SPAMB,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7NO   DD DUMMY,AMP=AMORG
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS97 EXEC PGM=BVPACS97,COND=((4,LT,PACX),
//      (4,LT,PACX2),(4,LT,PACS94))
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7TA   DD DSN=&&PAC7TA,DISP=(OLD,PASS)
//PAC7AT   DD DSN=&&PAC7AT,DISP=(,PASS),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAOT,
//         DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS91 EXEC PGM=BVPACS91,COND=((4,LT,PACX),
//      (4,LT,PACX2),(4,LT,PACS94))
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7AT   DD DSN=&&PAC7AT,DISP=(OLD,PASS)
//PAC7TI   DD DSN=&&PAC7TI,DISP=(,PASS),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAOT,
```

```
//          DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS98 EXEC PGM=BVPACS98,COND=((4,LT,PACX),
//       (4,LT,PACX2),(4,LT,PACS94))
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7RQ   DD DSN=&&PAC7QR,DISP=(OLD,PASS)
//PAC7CP   DD DSN=&&CP,DISP=(OLD,PASS)
//PAC7TI   DD DSN=&&PAC7TI,DISP=(OLD,PASS)
//PAC7TG   DD DSN=&OUTFILE,DISP=(,CATLG),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAOT,
//         DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

MIBR - Batch Migration of the Context

MIBR - Introduction

<u>Principle</u>

This procedure is a utility that prepares the batch migration after the extraction of entities from the Repository in a given context (session and ascending or descending network of a library). It formats files that will be used by the migration tools.

MIBR - User Input

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password
22	4	nnnn	Session number (Blank = current session)
26	1		Session status

Pos.	Len.	Value	Meaning
		'T'	If selection of frozen session
		' '	If current or H session
33	1		Code of library extraction
		'A'	Extraction of a lower level library and its higher level libraries
		'D'	Extraction of a library and its depending libraries
		'U'	Extraction of only one library

As many lines as Libraries to be extracted.

Pos.	Len.	Value	Meaning
3	3	bbb	Code of the library to be extracted

'O'-line: Control cards in front/back of generation commands

Pos.	Len.	Value	Meaning
2	1	'O'	Line code
3	3	bbb	Generation command
			'GCP': Program
			'GCO': Dialog
			'GGC': Client
			'GGS': Server
7	2	be	Control card in front
9	2	af	Control card in back

'P' line: project created after the libraries split

Pos.	Len.	Value	Meaning
2	1	'P'	Line code
3	3	bbb	Code of library to split
6	3	ccc	Type of Pacbase entity to move
			'E ': Data Element
			'S ': Data Structure and Segment
			'R ': Report
			'B ': Database Block

Pos.	Len.	Value	Meaning
			'P ': Program
			'O ': Dialog and Screen
			'F ': Client Meta Entity
			'$tt': Client User Entity (tt = call type)
			'T' : Text
9	15		Code of the new project

Principle of migration

An extraction context is selected. The session and the library, from which the ascending or descending network will be extracted, are specified.

First step: Extraction of entities present in the context.

All the indexes in the database are read sequentially.

The selection is made on the primary indexes of all the entity families. The highest level library of the entity definition is the reference library. If an element of the folder is detected in a lower level library, the entity folder will be created later in this library (next step).

The overrides of the entity definitions and complete folders are thus detected in a libraries network (it means the multiple presence of the definition or the existence of one or more elements of its folder in a library different from the definition library).

In a network, all the libraries that contain an element of the folder are detected.

For each library, a command line in view 'C' of the extracted entity, with an appropriate assign card, is formatted and sorted. All these lines make up the input file of the third step.

Second step: recognition of entities not retrieved

This step allows not to retrieve in output all the entities listed in the PAC7NR file.

Then, it requires the presence of the files of the entities not retrieved. These files are provided by MIAM (NRFILE) and by the user (NTFILE).

Third step: PACX extraction in view 'C'

The entities are extracted in the extraction library and in its higher-level libraries. An entity folder is created in each extraction library. It is inherited from the higher or equal level libraries.

The PACX extraction has been enhanced:
- When a Segment is extracted, its Data Structure is also extracted.
- When a Screen is extracted, the Definition of its Dialog is also extracted.

Erroneous requests only are printed in the PAC7EZ report.

This procedure requires the PAC7PM file as input to the BVPACS96 program.

This file, defined with 50-character records, contains in position 1 the VA Pacbase codes of the Programs used as Macrostructures but not defined as such in the Repository.

This file is produced by the MIAM procedure.

This procedure also allows to replace unknown special characters in an entity code with another character, or to replace Windows reserved words with another code.

The matching table is represented by the PAC7CS file used as input to the BVPACS94 and BVPACS96 programs (optional file, created by the MIAM procedure).

This procedure also generates the input transactions for the following procedures:
- MIMA (migration of macrostructures): GCM and GMO commands.
- MIA1 (migration of Programs): GCP commands
- MIA2 (migration of Screens): GCO commands
- MIA3 (migration of Clients): GGC commands
- MIA4 (migration of Servers): GGS commands
- The control cards in front/back of these records come from the 'O'-lines of the user input. (See subchapter "MIAx - Optional control cards")

.Notes: GMO commands: creation of high priority Macros

All the specific lines of a Screen that cause the move of a Macro function or subfunction are gathered in the high priority Macro.

When the repository is migrated, the Screens that contain specific relative positions (*A, *P, *C, *R) are detected. A GMO command line is created for each of these Screens, which will be transformed into high priority Macros.

These Macros will be generated by the MIMA procedure under the name: Screen code suffixed by 'SP'.

The MODE option of the migration help comes from the NSFILE (MIAM) and NMFILE (user) files (See chapter "Migration perimeter")

This procedure also produces the following lists:
- The OUTDUPL file contains the list of the duplicated entities.

  When a part or several parts of an entity folder exist in a Library that is not the Definition Library (in the same Library network), the entity is duplicated in the Library of the override.
- The OUTEXCL file contains the list of the entities that are excluded from the migration:

  The entities that are not retrieved by the MIAM procedure (NRFILE), the user entities that are not retrieved (NTFILE), and the entities that are not retrieved by the MIBR procedure (Volume and Model entities).

MIBR - Libraries splitting

Some very large libraries can be reduced by the MIBR procedure because this procedure splits them.

The library to be reduced is divided into N new projects.

Using P lines, you must specify the new project where each relevant Pacbase entity will be moved to. All the projects are dependent and their hierarchy depends on the associated Pacbase entity type.

The order is described in the input table of the P line.

However, you can put the projects of the User Entities wherever you want to.

The same project can be associated with several Pacbase entity types if their types are directly dependent (immediate hierarchy).

To ensure that the list of the new projects created by the library split is coherent, a control verifies that all the Pacbase entity types (except the Meta Entities) are present in the P lines.

Limits of P input:

- 5 libraries to split

- 40 projects by library

It means 30 projects for the User Entities and one project by type for all the other Pacbase entities. The generic code $** can be used to group all the User Entities in the same project. You can create one project for one given User Entity and another project for all the other UE ($**).

- The project code cannot contain the special characters ' \ /:%?<>"| ' or be the reserved word 'INTER'.

Rules of use:

To use this option, the migration request is made in descending mode 'D'.

Order of MIBR user input:

- All the cards of libraries networks extraction.

- All the optional cards in front/back.

- All the projects cards.

Respect the hierarchy of the libraries to split by sorting the P lines from the highest to the lowest level libraries.

The MIBR procedure saves the dispatching user requests. Thus, they can be taken into account by the MIBJ procedure.

The OUTSPLT file produced by MIBR will be used as input to the MIBJ procedure.

It contains all the projects coming from the libraries split and their hierarchy.

MIBR - Migration perimeters

All the VA Pacbase Programs and Screens are not in production. A migration help is proposed for these entities. It determines if the migration must be effective, standard or partial. To prevent manual modifications in the repository (deletion of the "Type of COBOL to generate", ...) or in the MIAn.txt files (deletion of entities..), the MIBR procedure automates these actions.

This procedure enables you to constitute filters from the NRFILE and NSFILE files (produced by the MIAM procedure), and from the NTFILE and NMFILE user files.

You can select a list of entities not to be migrated.

You can assign a migration help MODE to the entities.

Filter of the model:

You can update the NTFILE file by indicating a list of entities not to be migrated to RPP.

This file has the following structure:

Pos.	Len.	Meaning
1	3	Library code
4	3	PAF type
7	30	Entity code

Filter of the entities to be generated:

A MODE option is created for the migration help.

It can take the following values:

N: No migration of the source code (the design is migrated)

S: Standard migration

You can update the NMFILE file by assigning a migration help MODE to the Program and Screen entities that are not to undergo a standard migration.

This file has the following structure:

Pos.	Len.	Meaning
1	3	Library code
4	3	PAF type
7	30	Entity code
49	1	Migration help mode

The NSFILE file that is produced by the MIAM procedure contains the Screens or Programs whose source code is not to be migrated (Screens with an N type of COBOL to generate, Screens with a Definition only or with Descriptions only, or Programs with a Definition only). It is concatenated with the NMFILE file and transformed into an indexed file.

When the command files of the MIAn procedures are created, the migration help MODE option is deduced from the indexed file. If the entity is not to be migrated, it is not included in the MIAn.txt files.

Sample MIA2 command line:

Z90GCO COECRAC9 MODE=S

MIBR - Description of Steps

Input recognition: PTU001

Initialization of the output file(s)

Loading the NR file: entities not retrieved: BVPACS9B

Code	Physical name	Type	Label
PAC7NT	&NTFILE	Input	Entities not retrieved, produced by user file
PAC7RN	&NRFILE	Input	Entities not retrieved, produced by MIAM
PAC7NR	&INDUV..MIAMNR. &USER	Output	Entities not retrieved, produced by MIAM, formatted
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Loading entities not migrated and not standard :BVPACS9C

Code	Physical name	Type	Label
PAC7NM	&NMFILE	Input	Entities with a non-standard migration mode
PAC7NS	&NSFILE	Input	Entities not migrated, produced by MIAM
PAC7NO	&INDUV..MIBXNO. &USER	Output	Entities not migrated and not standard, formatted
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Network extraction: BVPACS21

Code	Physical name	Type	Label
PAC7AE	&INDMV..BVPAE	Input	Error messages
PACGGR	&INDSV..BVPGR	Input	Administration Database data

Code	Physical name	Type	Label
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PAC7MB	&&MIBRMB	Input	User transactions
PAC7RQ	&&QR	Output	Matching Entity/lowest Library
PAC7DD		Report	Error report

Processing of entities not retrieved: BVPACS9A

Code	Physical name	Type	Label
PAC7NR	&NRFILE	Input	Entities not retrieved, produced by MIAM
PAC7QR	&&QR	Input	Matching Entity / lowest level library
PAC7RQ	&&RQ	Output	Matching Entity / refined library
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Sort and formatting of command lines: BVPACS92

Code	Physical name	Type	Label
PAC7QR	&&RQ	Input	Matching Entity/Library
PAC7RQ	&&PACXRQ	Output	Matching Entity/Library after sort
PAC7MZ	&&PACXMB	Output	Command lines for PACX input
PAC7ER	&OUTDUPL	Output	List of duplicated entities
PAC7EE	&&EE	Output	Entities not retrieved, produced by MIBR
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Initialization of the KSDS work file: IDCAMS

Extraction: PACX2

This step extracts the transactions according to the user input generated by the BVPACS92 program.

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7PJ	DUMMY	Input	Archived transactions
PAC7MB	&&PACXMB	Input	User input
PAC7MA	DUMMY	Input	Work file
PAC7ES	DUMMY	Input	Work file
PAC7BM	&&PACXBM	Input/Output	User input
PAC7MM	&&PACXMM	Input/Output	Work file
PAC7MJ	&&PACXMJ	Input/Output	Work file
PAC7TE	&&PACXTE	Input/Output	Work file
PAC7RE	&&PACXRE	Input/Output	Work file
PAC7RM	&&PACXRM	Input/Output	Work file
PAC7WD	&&PACXWD	Input/Output	Extracted transactions
SYSEXT	&INDUV..SYSEX2.&USER	Input/Output	Work file
PAC7MV	&&MV	Output	Work file
PAC7MR	&&MR	Output	Work file
PAC7MX	&&MX	Output	Entities not extracted (PACX)
PAC7CP	&&CP	Output	Work file

Code	Physical name	Type	Label
PAC7GY	&&GY	Output	Extracted transactions for UPDP
PAC7RQ	DUMMY	Output	Matching Entity/Library
PAC7TD	&&TD	Output	Work file
PAC7UE	&&UE	Output	Work file
PAC7IA		Report	General printout of the program stream
PAC7DD		Report	Errors on input transactions
PAC7ED		Report	Extractions report
PAC7EE		Report	Extractions report
PAC7EG		Report	Extractions report
PAC7EM		Report	Extractions report
PAC7EP		Report	Extractions report
PAC7EQ		Report	Extractions report
PAC7EU		Report	Extractions report
PAC7EZ		Report	Extractions report
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Return codes:

- 0: No error
- 4: Error in user input (detailed in PAC7EE) or in extractions (detailed in PAC7EZ)
- 8: Error in '*' line (detailed in PAC7DD)

Deletion of the KSDS work file: IDCAMS

Batch migration: BVPACS94

Code	Physical name	Type	Label
PAC7RQ	&&PACXRQ	Input	Matching Entity/lowest Library
PAC7CS	&INPUTSPE	Input	Special characters matching file
PAC7QR	&OUTSPLT	Output	Matching Entity/lowest Library

Batch migration : BVPACS96

Code	Physical name	Type	Label
PAC7NO	&INDUV..MIBXNO. &USER	Input	Entities with migration mode
PAC7MB	&&MIBRMB	Input	User input
PAC7GY	&&GY	Input	File resulting from PACX extraction
PAC7PM	&INPUTMIB	Input	File with the list of Pgms to be transformed into PMS
PAC7CS	&INPUTSPE	Input	Special characters matching file
PAC7TA	&&PAC7TA	Output	File containing transactions grouped by type
PAC7MM	&OUTMIMA	Output	File containing MIMA commands
PAC7MI	&OUTGCP	Output	File containing GCP commands
PAC7MO	&OUTGCO	Output	File containing GCO commands
PAC7MC	&OUTGGC	Output	File containing GGC commands
PAC7MS	&OUTGGS	Output	File containing GGS commands

Reorganization of transactions : BVPACS97

Code	Physical name	Type	Label
PAC7TA	&&PAC7TA	Input	File containing transactions grouped by type
PAC7AT	&&PAC7AT	Output	File with transactions grouped by type, sorted again

Sort and formatting of import file: BVPACS91

Code	Physical name	Type	Label
PAC7AT	&&PAC7AT	Input	File containing transactions grouped by type
PAC7TI	&&PAC7TI	Output	File with transactions grouped by type, sorted again
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Global sort: BVPACS98

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Output	Development Database data
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7CP	&&CP	Input	Counter of extracted entities
PAC7RQ	&OUTSPLT	Input	Splitting libraries for MIBJ
PAC7TI	&&PAC7TI	Input	File with transactions grouped by type, sorted again
PAC7TG	&OUTFILE	Output	Result file with global sort
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Excluded entities from migration : BVPACS9F

Code	Physical name	Type	Label
PAC7NT	&NTFILE	Input	Entities not retrieved, produced by user file
PAC7EE	&&EE	Input	Entities not retrieved, produced by MIBR
PAC7NR	&NRFILE	Input	Entities not retrieved, produced by MIAM
PAC7EX	&OUTEXCL	Output	List of excluded entities
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

MIBR - Execution JCL

```
//* -------------------------------------------------------
//*        VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*                 BATCH MIGRATION
//*
//* -------------------------------------------------------
//*
//BVPMIBR  PROC BASE=$BASE,               CODE OF DEVPT DATABASE
//         INDSV='$INDSV',            INDEX OF VSAM SYSTEM FILES
//         INDSN='$INDSN',        INDEX OF NON VSAM SYSTEM FILES
//         INDUV='$INDUV',             INDEX OF USER VSAM FILES
//*:       VSAMCAT='$VCAT',                USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',              SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',     LIBRARY OF LOAD-MODULES
```

```
//         SORTLIB='$BIBT',                          SORT LIBRARY
//         USER=,                                       USER CODE
//         LSR='BLSR',                         LSR BATCH SYSTEM NAME
//         OUT=$OUT,              UTILITIES AND ERRORS OUTPUT CLASS
//         OUTL=$OUT,                       OUTPUT CLASS OF REPORTS
//         UWK=$UWK,                                    WORK UNIT
//         SPAMB='(TRK,(5,1),RLSE)',         REQUEST FILE SPACE
//         SPAMV='(CYL,(50,50),RLSE)',          UPDT FILE SPACE
//         SPAGY='(CYL,(150,150),RLSE)',        UPDP FILE SPACE
//         SPAOT='(CYL,(100,100),RLSE)',      OUTPUT FILE SPACE
//         SPATD='(CYL,(150,150),RLSE)',        CPSN FILE SPACE
//         NRFILE=,                 NOT RETRIEVED ENTITIES FILE
//         NSFILE=,                  NOT MIGRATED SCREEN FILE
//         NTFILE=,             NOT RETRIEVED ENTITIES USER FILE
//         NMFILE=,                  MIGRATED MODE USER FILE
//         INPUTMIB=,                       PROGRAM/MACRO FILE
//         INPUTSPE=,                        SPECIAL CHAR FILE
//         OUTMIMA=,                        OUTPUT MIMA COMMAND
//         OUTFILE=,                       OUTPUT FILE MIGRATION
//         OUTGCP=,                          OUTPUT GCP COMMAND
//         OUTGCO=,                          OUTPUT GCO COMMAND
//         OUTGGC=,                          OUTPUT GGC COMMAND
//         OUTGGS=,                          OUTPUT GGS COMMAND
//         OUTDUPL=,                   OUTPUT DUPLICATE ENTITIES
//         OUTEXCL=,                    OUTPUT EXCLUDED ENTITIES
//         OUTSPLT=,           OUTPUT MIBJ SPLITTING LIBRARIES
//         VOLS='SER=$VOLUN',                     BACKUP VOLUME
//         UNITS=$UNITUN,                          BACKUP UNIT
//         SRTSPC='(150,150)'              TEMPORARY SPACE
//*****************************************************************
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&MIBRMB,DISP=(,PASS),
//         UNIT=&UWK,SPACE=&SPAMB,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLFILE  EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*--------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR

//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*-------------------------------------------------------
```

```
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
//*---------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
//PRLMIMA  EXEC PGM=BVPRMSYS,PARM='&OUTMIMA'
//*---------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIMIMA,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISMIMA  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIMIMA,DISP=(OLD,DELETE)
//PRDMIMA  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISMIMA),PARM='&OUTMIMA'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLMIMA,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELMIMA  EXEC PGM=IDCAMS,COND=(4,EQ,LISMIMA)
//*---------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLMIMA,DISP=(OLD,DELETE)
//PRLGCP   EXEC PGM=BVPRMSYS,PARM='&OUTGCP'
//*---------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIGCP,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISGCP   EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIGCP,DISP=(OLD,DELETE)
//PRDGCP   EXEC PGM=BVPRMSYS,COND=(4,EQ,LISGCP),PARM='&OUTGCP'
```

```
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLGCP,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELGCP  EXEC PGM=IDCAMS,COND=(4,EQ,LISGCP)
//*---------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLGCP,DISP=(OLD,DELETE)
//PRLGCO  EXEC PGM=BVPRMSYS,PARM='&OUTGCO'
//*---------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIGCO,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISGCO  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIGCO,DISP=(OLD,DELETE)
//PRDGCO  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISGCO),PARM='&OUTGCO'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLGCO,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELGCO  EXEC PGM=IDCAMS,COND=(4,EQ,LISGCO)
//*---------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLGCO,DISP=(OLD,DELETE)
//PRLGGC  EXEC PGM=BVPRMSYS,PARM='&OUTGGC'
//*---------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIGGC,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISGGC  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIGGC,DISP=(OLD,DELETE)
```

```
//PRDGGC  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISGGC),PARM='&OUTGGC'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLGGC,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELGGC  EXEC PGM=IDCAMS,COND=(4,EQ,LISGGC)
//*----------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLGGC,DISP=(OLD,DELETE)
//PRLGGS  EXEC PGM=BVPRMSYS,PARM='&OUTGGS'
//*--------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIGGS,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISGGS  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIGGS,DISP=(OLD,DELETE)
//PRDGGS  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISGGS),PARM='&OUTGGS'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLGGS,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELGGS  EXEC PGM=IDCAMS,COND=(4,EQ,LISGGS)
//*--------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLGGS,DISP=(OLD,DELETE)
//PRLDUPL EXEC PGM=BVPRMSYS,PARM='&OUTDUPL'
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIDUPL,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISDUPL EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
```

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//SYSIN    DD DSN=&&LIDUPL,DISP=(OLD,DELETE)
//PRDDUPL  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISDUPL),PARM='&OUTDUPL'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLDUPL,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELDUPL  EXEC PGM=IDCAMS,COND=(4,EQ,LISDUPL)
//*---------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLDUPL,DISP=(OLD,DELETE)
//PRLEXCL  EXEC PGM=BVPRMSYS,PARM='&OUTEXCL'
//*---------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIEXCL,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISEXCL  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIEXCL,DISP=(OLD,DELETE)
//PRDEXCL  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISEXCL),PARM='&OUTEXCL'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLEXCL,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELEXCL  EXEC PGM=IDCAMS,COND=(4,EQ,LISEXCL)
//*---------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLEXCL,DISP=(OLD,DELETE)
//PRLSPLT  EXEC PGM=BVPRMSYS,PARM='&OUTSPLT'
//*---------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LISPLT,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISSPLT  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
```

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//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LISPLT,DISP=(OLD,DELETE)
//PRDSPLT  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISSPLT),PARM='&OUTSPLT'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLSPLT,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELSPLT  EXEC PGM=IDCAMS,COND=(4,EQ,LISSPLT)
//*--------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLSPLT,DISP=(OLD,DELETE)
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DFMIAMNR),DISP=SHR
//PACROU DD DSN=&&DFMIAMNR,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFMIAMNR,DISP=(OLD,DELETE)
//MAXKEY   EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF   DD DSN=&INDUV..MIAMNR.&USER,DISP=SHR
//MAXKEY   DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DFMIBXNO),DISP=SHR
//PACROU DD DSN=&&DFMIBXNO,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFMIBXNO,DISP=(OLD,DELETE)
//MAXKEY   EXEC PGM=IDCAMS
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
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//SYSPAF   DD DSN=&INDUV..MIBXNO.&USER,DISP=SHR
//MAXKEY   DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//PACS9B EXEC PGM=BVPACS9B
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7RN   DD DSN=&NRFILE,DISP=SHR
//PAC7NT   DD DSN=&NTFILE,DISP=SHR
//PAC7NR   DD DSN=&INDUV..MIAMNR.&USER,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS9C EXEC PGM=BVPACS9C
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7NS   DD DSN=&NSFILE,DISP=SHR
//PAC7NM   DD DSN=&NMFILE,DISP=SHR
//PAC7NO   DD DSN=&INDUV..MIBXNO.&USER,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS21 EXEC PGM=BVPACS21
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7MB   DD DSN=&&MIBRMB,DISP=(OLD,PASS)
//PAC7RQ   DD DSN=&&QR,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7DD   DD SYSOUT=&OUT
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//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS9A EXEC PGM=BVPACS9A,COND=(4,LT,PACS21)
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7NR   DD DSN=&INDUV..MIAMNR.&USER,DISP=SHR
//PAC7QR   DD DSN=&&QR,DISP=(OLD,DELETE)
//PAC7RQ   DD DSN=&&RQ,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLMIAMNR),DISP=SHR
//PACROU DD DSN=&&DLMIAMNR,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*-----------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLMIAMNR,DISP=(OLD,DELETE)
//PACS92 EXEC PGM=BVPACS92,COND=(4,LT,PACS21)
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7QR   DD DSN=&&RQ,DISP=(OLD,DELETE)
//PAC7RQ   DD DSN=&&PACXRQ,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7ER   DD DSN=&OUTDUPL,DISP=(,CATLG),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7EE   DD DSN=&&EE,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MZ   DD DSN=&&PACXMB,DISP=(,PASS),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAMV,
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//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*-----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DFSYSEX2),DISP=SHR
//PACROU DD DSN=&&DFSYSEX2,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFSYSEX2,DISP=(OLD,DELETE)
//MAXKEY   EXEC PGM=IDCAMS
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF   DD DSN=&INDUV..SYSEX2.&USER,DISP=SHR
//MAXKEY   DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//*
//PACX2  EXEC PGM=BVPACX,REGION=0K,COND=(4,LT,PACS21)
//*-------------------------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7PJ   DD DUMMY
//PAC7IA   DD SYSOUT=&OUTL
//PAC7DD   DD SYSOUT=&OUTL
//PAC7ED   DD SYSOUT=&OUTL
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//PAC7EE   DD SYSOUT=&OUTL
//PAC7EG   DD SYSOUT=&OUTL
//PAC7EM   DD SYSOUT=&OUTL
//PAC7EP   DD SYSOUT=&OUTL
//PAC7EQ   DD SYSOUT=&OUTL
//PAC7EU   DD SYSOUT=&OUTL
//PAC7EZ   DD SYSOUT=&OUTL
//PAC7MA   DD DUMMY
//PAC7ES   DD DUMMY
//SYLSR    DD DSN=&INDUV..SYSEX2.&USER,DISP=SHR
//SYSEXT   DD SUBSYS=(&LSR,'DDNAME=SYLSR')
//PAC7MB   DD DSN=&&PACXMB,DISP=(OLD,DELETE,DELETE)
//PAC7BM   DD DSN=&&PACXBM,DISP=(,DELETE),UNIT=&UWK,
//            DCB=BLKSIZE=3440,SPACE=&SPAMV
//PAC7MM   DD DSN=&&PACXMM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=113,BLKSIZE=11300)
//PAC7MJ   DD DSN=&&PACXMJ,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=158,BLKSIZE=6320)
//PAC7TE   DD DSN=&&PACXTE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=323,BLKSIZE=6460)
//PAC7RE   DD DSN=&&PACXRE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=36,BLKSIZE=6012)
//PAC7RM   DD DSN=&&PACXRM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7WD   DD DSN=&&PACXWD,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7MV   DD DUMMY
//PAC7MR   DD DUMMY
//PAC7MX   DD DUMMY
//PAC7RQ   DD DUMMY
//PAC7TD   DD DUMMY
//PAC7UE   DD DUMMY
//PAC7CP   DD DSN=&&CP,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7GY   DD DSN=&&GY,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAGY,
//            DCB=(RECFM=FB,LRECL=310,BLKSIZE=6200)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//*
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*----------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
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//PACRIN DD DSN=&INDSN..BVPSY(DLSYSEX2),DISP=SHR
//PACROU DD DSN=&&DLSYSEX2,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLSYSEX2,DISP=(OLD,DELETE)
//PACS94 EXEC PGM=BVPACS94,COND=((4,LT,PACS21),
//      (4,LT,PACX2))
//*-------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7CS   DD DSN=&INPUTSPE,DISP=SHR
//PAC7RQ   DD DSN=&&PACXRQ,DISP=(OLD,DELETE)
//PAC7QR   DD DSN=&OUTSPLT,DISP=(,CATLG),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAMV,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS96 EXEC PGM=BVPACS96,COND=((4,LT,PACS21),
//      (4,LT,PACX2),(4,LT,PACS94))
//*-------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7NO   DD DSN=&INDUV..MIBXNO.&USER,DISP=SHR
//PAC7GY   DD DSN=&&GY,DISP=(OLD,DELETE)
//PAC7MB   DD DSN=&&MIBRMB,DISP=(OLD,PASS)
//PAC7CS   DD DSN=&INPUTSPE,DISP=SHR
//PAC7PM   DD DSN=&INPUTMIB,DISP=SHR
//PAC7TA   DD DSN=&&PAC7TA,DISP=(,PASS),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//PAC7MM   DD DSN=&OUTMIMA,DISP=(,CATLG),UNIT=&UWK,
//          SPACE=&SPAMV,VOL=&VOLS,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MI   DD DSN=&OUTGCP,DISP=(,CATLG),UNIT=&UWK,
//          SPACE=&SPAMV,VOL=&VOLS,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MO   DD DSN=&OUTGCO,DISP=(,CATLG),UNIT=&UWK,
//          SPACE=&SPAMV,VOL=&VOLS,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MC   DD DSN=&OUTGGC,DISP=(,CATLG),UNIT=&UWK,
//          SPACE=&SPAMV,VOL=&VOLS,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MS   DD DSN=&OUTGGS,DISP=(,CATLG),UNIT=&UWK,
//          SPACE=&SPAMV,VOL=&VOLS,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SYSPRINT DD SYSOUT=&OUT
```

```
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*----------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLMIBXNO),DISP=SHR
//PACROU DD DSN=&&DLMIBXNO,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*----------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLMIBXNO,DISP=(OLD,DELETE)
//PACS97 EXEC PGM=BVPACS97,COND=((4,LT,PACS21),
//      (4,LT,PACX2),(4,LT,PACS94))
//*------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7TA   DD DSN=&&PAC7TA,DISP=(OLD,DELETE)
//PAC7AT   DD DSN=&&PAC7AT,DISP=(,PASS),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS91 EXEC PGM=BVPACS91,COND=((4,LT,PACS21),
//      (4,LT,PACX2),(4,LT,PACS94))
//*------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7AT   DD DSN=&&PAC7AT,DISP=(OLD,DELETE)
//PAC7TI   DD DSN=&&PAC7TI,DISP=(,PASS),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS98 EXEC PGM=BVPACS98,COND=((4,LT,PACS21),
//      (4,LT,PACX2),(4,LT,PACS94))
//*--------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
```

```
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7CP   DD DSN=&&CP,DISP=(OLD,PASS)
//PAC7RQ   DD DSN=&OUTSPLT,DISP=SHR
//PAC7TI   DD DSN=&&PAC7TI,DISP=(OLD,DELETE)
//PAC7TG   DD DSN=&OUTFILE,DISP=(,CATLG),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAOT,
//         DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS9F EXEC PGM=BVPACS9F,COND=((4,LT,PACS21),
//       (4,LT,PACX2),(4,LT,PACS98),(4,LT,PACS94))
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7NR   DD DSN=&NRFILE,DISP=SHR
//PAC7NT   DD DSN=&NTFILE,DISP=SHR
//PAC7EE   DD DSN=&&EE,DISP=(OLD,DELETE)
//PAC7EX   DD DSN=&OUTEXCL,DISP=(,CATLG),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAOT,
//         DCB=(RECFM=FB,BLKSIZE=6160,LRECL=80)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

MIBJ - Migration of the journal

MIBJ - Introduction

Principle

The procedure for the journal transactions migration (MIBJ) applies to the
archived journal file of the repository. It formats files used by the migration
tools.

- It makes it possible to select transactions in the journal in a range of dates,
  sessions, libraries, etc.
- It makes it possible to extract, from the repository, the entities of the
  selected transactions.

The extraction is performed in the library and session of the transaction, and
in all its lower-level libraries where overrides of the definition or of an
element in the entity folder are detected.

For each entity, the highest-level library in the repository where the entity is detected (source library) is indicated.

The created or modified entities are extracted, the deleted entities are listed.

MIBJ - User input

A '*' line with user code and password.

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password

A 'J' line with the extraction criteria :

Pos.	Len.	Value	Meaning
2	1	'J'	Line code
24	4	ssss	Beginning session number
28	4	ssss	End session number
32	8	ccyymmdd	Beginning date
40	8	ccyymmdd	End date
48	1		Version of the selected transactions
		' '	All sessions
		'Z'	Current session only
		'T'	Frozen session only
49	3	bbb	Code of the selected library

'O'-line: Control cards in front/back of the generation commands

Pos.	Len.	Value	Meaning
2	1	'O'	Line code
3	3	bbb	Generation command
			'GCP': Program
			'GCO': Dialog
			'GGC': Client
			'GGS': Server
7	2	be	Control card in front
9	2	af	Control card in back

Principle of migration

For each journal transaction, definition or entity folder, the extraction is performed from the library and session of the transaction and from each library of each element of its folder, in the lower network.

First step: journal analysis

For each transaction, definition or folder, an RQ record is formatted with the entity type, entity code, the transaction library and session.

When a user entity is processed, its meta entity is extracted.

A deleted entity is noted in the RQ file.

The list of frozen sessions is specified in the RQ file.

For each entity, the procedure searches in the repository for its highest-level library and all the libraries higher and lower than the journal transaction library where the entity is overridden (the multiple presence of the definition or the existence or one or more parts of its folder in a library different from the definition library).

The highest-level library is the reference library. In each lower library found, the folder of the entity will be created (next step).

For each library, a command line in 'C' view of the extracted entity, and an appropriate assign card are formatted and sorted.

All these lines make up the input file of the third step.

Second step: take into account the entities not retrieved

This step allows not to transfer in output all the entities that are listed in the PAC7NR file.

Then, it requires the presence of the NRFILE and NTFILE files of the entities not retrieved. These files are provided by MIAM and by the user.

Third step: PACX extraction in 'C' view

The entities are extracted in the extraction library and in the higher-level libraries.

In each extraction library, an entity folder is created, inherited from its higher or equal level libraries.

Erroneous requests only are printed in the PAC7EZ report.

Split of libraries

The MIBR procedure saves the user requests of libraries split. They are taken into account in the MIBJ procedure. The OUTSPLT file, produced by MIBR, is used as input to MIBJ (SPLTFILE). It contains all the projects created by the libraries split and their hierarchy. Each entity extracted by MIBJ and present in the PAC7RQ file is processed to verify whether it must be moved to a new project, i.e. if its target library is a library to split. If so, the new project specific to its entity type is assigned to this entity.

MIBJ - Description of steps

Input recognition: PTU001

Initialization of the output file(s)

Loading the NR file: entities not retrieved: BVPACS9B

Code	Physical name	Type	Label
PAC7NT	&NTFILE	Input	Entities not retrieved, produced by user file
PAC7RN	&NRFILE	Input	Entities not retrieved, produced by MIAM
PAC7NR	&INDUV..MIAMNR. &USER	Output	Entities not retrieved, produced by MIAM, formatted
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Loading entities not migrated and not standard :BVPACS9C

Code	Physical name	Type	Label
PAC7NM	&NMFILE	Input	Entities with a non-standard migration mode
PAC7NS	&NSFILE	Input	Entities not migrated, produced by MIAM
PAC7NO	&INDUV..MIBXNO. &USER	Output	Entities not migrated and not standard, formatted
SORTWK01		Sort	

Code	Physical name	Type	Label
SORTWK02		Sort	
SORTWK03		Sort	

Journal extraction : BVPACSJR

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PAC7MB	&&MIBJMB	Input	User transactions
PAC7PJ	&INDUN..&BASE.PJ(0)	Output	Archived transactions
PAC7RQ	&&RQ	Output	Matching Entity/lowest Library
PAC7DD		Report	Error report
PAC7EE		Report	Extractions report

override detection : BVPACS93

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7SL	&SPLTFILE	Input	Splitting of Libraries
PAC7RQ	&&RQ	Input	Matching Entity/Library
PAC7QR	&&QR	Output	Matching Entity/Library after sort
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Processing of entities not retrieved: BVPACS9A

Code	Physical name	Type	Label
PAC7NR	&NRFILE	Input	Entities not retrieved, produced by MIAM
PAC7QR	&&QR	Input	Matching Entity / lowest level library
PAC7RQ	&&RQ	Output	Matching Entity / refined library
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Sort and formatting of command lines: BVPACS92

Code	Physical name	Type	Label
PAC7QR	&&RQ	Input	Matching Entity/Library
PAC7RQ	&&PACXRQ	Output	Matching Entity/Library after sort
PAC7MZ	&&PACXMB	Output	Command lines for PACX input
PAC7ER	DUMMY	Output	List of duplicated entities
PAC7EE	DUMMY	Output	Entities not retrieved, produced by MIBR
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Initialization of the KSDS work file: IDCAMS

Extraction: PACX2

This step extracts the transactions according to the user input generated by the BVPACS92 program.

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data

Code	Physical name	Type	Label
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7PJ	DUMMY	Input	Archived transactions
PAC7MB	&&PACXMB	Input	User input
PAC7MA	DUMMY	Input	Work file
PAC7ES	DUMMY	Input	Work file
PAC7BM	&&PACXBM	Input/Output	User input
PAC7MM	&&PACXMM	Input/Output	Work file
PAC7MJ	&&PACXMJ	Input/Output	Work file
PAC7TE	&&PACXTE	Input/Output	Work file
PAC7RE	&&PACXRE	Input/Output	Work file
PAC7RM	&&PACXRM	Input/Output	Work file
PAC7WD	&&PACXWD	Input/Output	Extracted transactions
SYSEXT	&INDUV..SYSEX2.&USER	Input/Output	Work file
PAC7MV	&&MV	Output	Work file
PAC7MR	&&MR	Output	Work file
PAC7MX	&&MX	Output	Entities not extracted (PACX)
PAC7CP	&&CP	Output	Work file
PAC7GY	&&GY	Output	Extracted transactions for UPDP
PAC7RQ	DUMMY	Output	Matching Entity/Library
PAC7TD	&&TD	Output	Work file
PAC7UE	&&UE	Output	Work file
PAC7IA		Report	General printout of the program stream
PAC7DD		Report	Errors on input transactions
PAC7ED		Report	Extractions report
PAC7EE		Report	Extractions report
PAC7EG		Report	Extractions report
PAC7EM		Report	Extractions report

Code	Physical name	Type	Label
PAC7EP		Report	Extractions report
PAC7EQ		Report	Extractions report
PAC7EU		Report	Extractions report
PAC7EZ		Report	Extractions report
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Return codes:

- 0: No error
- 4: Error in user input (detailed in PAC7EE) or in extractions (detailed in PAC7EZ)
- 8: Error in '*' line (detailed in PAC7DD)

Deletion of the KSDS work file: IDCAMS

Batch migration: BVPACS94

Code	Physical name	Type	Label
PAC7RQ	&&PACXRQ	Input	Matching Entity/lowest Library
PAC7CS	&INPUTSPE	Input	Special characters matching file
PAC7QR	&OUTSPLT	Output	Matching Entity/lowest Library

Batch migration : BVPACS96

Code	Physical name	Type	Label
PAC7NO	&INDUV..MIBXNO.&USER	Input	Entities with migration mode
PAC7MB	&&MIBJMB	Input	User input
PAC7GY	&&GY	Input	File resulting from PACX extraction
PAC7PM	&INPUTMIB	Input	File with the list of Pgms to be transformed into PMS
PAC7CS	&INPUTSPE	Input	Special characters matching file
PAC7TA	&&PAC7TA	Output	File containing transactions grouped by type
PAC7MM	&OUTMIMA	Output	File containing command MIMA

Code	Physical name	Type	Label
PAC7MI	&OUTGCP	Output	File containing GCP commands
PAC7MO	&OUTGCO	Output	File containing GCO commands
PAC7MC	&OUTGGC	Output	File containing GGC commands
PAC7MS	&OUTGGS	Output	File containing GGS commands

Reorganization of transactions : BVPACS97

Code	Physical name	Type	Label
PAC7TA	&&PAC7TA	Input	File containing transactions grouped by type
PAC7AT	&&PAC7AT	Output	File with transactions grouped by type, sorted again

Sort and formatting of import file: BVPACS91

Code	Physical name	Type	Label
PAC7AT	&&PAC7AT	Input	File containing transactions grouped by type
PAC7TI	&&PAC7TI	Output	File with transactions grouped by type, sorted again
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Global sort: BVPACS98

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Output	Development Database data
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7CP	&&CP	Input	Counter of extracted entities
PAC7RQ	&&PAC7QR	Input	Matching Entity/lowest Library
PAC7TI	&&PAC7TI	Input	File with transactions grouped by type, sorted again
PAC7TG	&OUTFILE	Output	Result file with global sort
SORTWK01		Sort	
SORTWK02		Sort	

Code	Physical name	Type	Label
SORTWK03		Sort	

MIBJ - Execution JCL

```
//* -------------------------------------------------------
//*          VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*              ARCHIVED JOURNAL MIGRATION
//*
//* -------------------------------------------------------
//*
//BVPMIBJ  PROC BASE=$BASE,                 CODE OF DEVPT DATABASE
//         INDSV='$INDSV',           INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',       INDEX OF SYSTEM NON VSAM FILES
//         INDUV='$INDUV',             INDEX OF USER VSAM FILES
//         INDUN='$INDUN',         INDEX OF USER NON VSAM FILES
//*:      VSAMCAT='$VCAT',                  USER VSAM CATALOG
//*:      SYSTCAT='$SCAT',                SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',   LIBRARY OF LOAD-MODULES
//         SORTLIB='$BIBT',                     SORT LIBRARY
//         USER=,                                  USER CODE
//         LSR='BLSR',                  LSR BATCH SYSTEM NAME
//         OUT=$OUT,          UTILITIES AND ERRORS OUTPUT CLASS
//         OUTL=$OUT,               OUTPUT CLASS OF REPORTS
//         UWK=$UWK,                               WORK UNIT
//         SPAMB='(TRK,(5,1),RLSE)',      REQUEST FILE SPACE
//         SPAMV='(CYL,(100,10),RLSE)',      UPDT FILE SPACE
//         SPAGY='(CYL,(100,10),RLSE)',      UPDP FILE SPACE
//         SPATD='(CYL,(100,10),RLSE)',      CPSN FILE SPACE
//         NRFILE=,              NOT RETRIEVED ENTITIES FILE
//         NSFILE=,                 NOT MIGRATED SCREEN FILE
//         NTFILE=,         NOT RETRIEVED ENTITIES USER FILE
//         NMFILE=,                 MIGRATED MODE USER FILE
//         SPLTFILE=,            SPLITTING LIBRARIES FILE
//         INPUTMIB=,                 PROGRAM/MACRO FILE
//         INPUTSPE=,                 SPECIAL CHAR FILE
//         OUTMIMA=,                 OUTPUT MIMA COMMAND
//         OUTFILE=,                 OUTPUT FILE MIGRATION
//         OUTGCP=,                  OUTPUT GCP COMMAND
//         OUTGCO=,                  OUTPUT GCO COMMAND
//         OUTGGC=,                  OUTPUT GGC COMMAND
//         OUTGGS=,                  OUTPUT GGS COMMAND
//         VOLS='SER=$VOLUN',               BACKUP VOLUME
//         UNITS=$UNITUN,                     BACKUP UNIT
//         SPAOT='(CYL,(100,10),RLSE)',   OUTPUT FILE SPACE
//         SRTSPC='(100,10)'             TEMPORARY SPACE
//************************************************************
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
```

```
//PAC7MB   DD DSN=&&MIBJMB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLFILE  EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
//            UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//            UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
//*-------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
//PRLMIMA  EXEC PGM=BVPRMSYS,PARM='&OUTMIMA'
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIMIMA,DISP=(,PASS),SPACE=(TRK,1),
//            UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISMIMA  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIMIMA,DISP=(OLD,DELETE)
//PRDMIMA  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISMIMA),PARM='&OUTMIMA'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLMIMA,DISP=(,PASS),SPACE=(TRK,1),
//            UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELMIMA  EXEC PGM=IDCAMS,COND=(4,EQ,LISMIMA)
```

```
//*-------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLMIMA,DISP=(OLD,DELETE)
//PRLGCP  EXEC PGM=BVPRMSYS,PARM='&OUTGCP'
//*-------------------------------------
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//        DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIGCP,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISGCP  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIGCP,DISP=(OLD,DELETE)
//PRDGCP  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISGCP),PARM='&OUTGCP'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLGCP,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELGCP  EXEC PGM=IDCAMS,COND=(4,EQ,LISGCP)
//*-------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLGCP,DISP=(OLD,DELETE)
//PRLGCO  EXEC PGM=BVPRMSYS,PARM='&OUTGCO'
//*-------------------------------------
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//        DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIGCO,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISGCO  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIGCO,DISP=(OLD,DELETE)
//PRDGCO  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISGCO),PARM='&OUTGCO'
//*-------------------------------------------------------
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//        DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLGCO,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
```

```
//DELGCO  EXEC PGM=IDCAMS,COND=(4,EQ,LISGCO)
//*--------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLGCO,DISP=(OLD,DELETE)
//PRLGGC  EXEC PGM=BVPRMSYS,PARM='&OUTGGC'
//*--------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIGGC,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISGGC  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIGGC,DISP=(OLD,DELETE)
//PRDGGC  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISGGC),PARM='&OUTGGC'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLGGC,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELGGC  EXEC PGM=IDCAMS,COND=(4,EQ,LISGGC)
//*--------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLGGC,DISP=(OLD,DELETE)
//PRLGGS  EXEC PGM=BVPRMSYS,PARM='&OUTGGS'
//*--------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIGGS,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISGGS  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIGGS,DISP=(OLD,DELETE)
//PRDGGS  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISGGS),PARM='&OUTGGS'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLGGS,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
```

```
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELGGS  EXEC PGM=IDCAMS,COND=(4,EQ,LISGGS)
//*-------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLGGS,DISP=(OLD,DELETE)
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DFMIAMNR),DISP=SHR
//PACROU DD DSN=&&DFMIAMNR,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFMIAMNR,DISP=(OLD,DELETE)
//MAXKEY  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF   DD DSN=&INDUV..MIAMNR.&USER,DISP=SHR
//MAXKEY   DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DFMIBXNO),DISP=SHR
//PACROU DD DSN=&&DFMIBXNO,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFMIBXNO,DISP=(OLD,DELETE)
//MAXKEY  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF   DD DSN=&INDUV..MIBXNO.&USER,DISP=SHR
//MAXKEY   DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//PACS9B EXEC PGM=BVPACS9B
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7RN   DD DSN=&NRFILE,DISP=SHR
//PAC7NT   DD DSN=&NTFILE,DISP=SHR
```

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//PAC7NR   DD DSN=&INDUV..MIAMNR.&USER,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS9C EXEC PGM=BVPACS9C
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7NS   DD DSN=&NSFILE,DISP=SHR
//PAC7NM   DD DSN=&NMFILE,DISP=SHR
//PAC7NO   DD DSN=&INDUV..MIBXNO.&USER,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACSJR EXEC PGM=BVPACSJR
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7MB   DD DSN=&&MIBJMB,DISP=(OLD,PASS)
//PAC7PJ   DD DSN=&INDUN..&BASE.PJ(0),DISP=SHR
//PAC7RQ   DD DSN=&&RQJR,DISP=(,PASS),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAMV,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7DD   DD SYSOUT=&OUT
//PAC7EE   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS93 EXEC PGM=BVPACS93,COND=(4,LT,PACSJR)
//*-----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
```

```
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7SL   DD DSN=&SPLTFILE,DISP=SHR
//PAC7RQ   DD DSN=&&RQJR,DISP=(OLD,PASS)
//PAC7QR   DD DSN=&&QR,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS9A EXEC PGM=BVPACS9A,COND=(4,LT,PACSJR)
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7NR   DD DSN=&INDUV..MIAMNR.&USER,DISP=SHR
//PAC7QR   DD DSN=&&QR,DISP=(OLD,PASS)
//PAC7RQ   DD DSN=&&RQ,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*----------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLMIAMNR),DISP=SHR
//PACROU DD DSN=&&DLMIAMNR,DISP=(,PASS),SPACE=(TRK,1),
//            UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*----------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLMIAMNR,DISP=(OLD,DELETE)
//PACS92 EXEC PGM=BVPACS92,COND=(4,LT,PACSJR)
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7ER   DD DUMMY
//PAC7EE   DD DUMMY
//PAC7QR   DD DSN=&&RQ,DISP=(OLD,PASS)
//PAC7RQ   DD DSN=&&PACXRQ,DISP=(,PASS),
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```
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAMV,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MZ   DD DSN=&&PACXMB,DISP=(,PASS),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAMV,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DFSYSEX2),DISP=SHR
//PACROU DD DSN=&&DFSYSEX2,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFSYSEX2,DISP=(OLD,DELETE)
//MAXKEY   EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF   DD DSN=&INDUV..SYSEX2.&USER,DISP=SHR
//MAXKEY   DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//*
//PACX2  EXEC PGM=BVPACX,REGION=0K,COND=(4,LT,PACSJR)
//*--------------------------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
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//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7PJ   DD DUMMY
//PAC7IA   DD SYSOUT=&OUTL
//PAC7DD   DD SYSOUT=&OUTL
//PAC7ED   DD SYSOUT=&OUTL
//PAC7EE   DD SYSOUT=&OUTL
//PAC7EG   DD SYSOUT=&OUTL
//PAC7EM   DD SYSOUT=&OUTL
//PAC7EP   DD SYSOUT=&OUTL
//PAC7EQ   DD SYSOUT=&OUTL
//PAC7EU   DD SYSOUT=&OUTL
//PAC7EZ   DD SYSOUT=&OUTL
//PAC7MA   DD DUMMY
//PAC7ES   DD DUMMY
//SYLSR    DD DSN=&INDUV..SYSEX2.&USER,DISP=SHR
//SYSEXT   DD SUBSYS=(&LSR,'DDNAME=SYLSR')
//PAC7MB   DD DSN=&&PACXMB,DISP=(OLD,DELETE,DELETE)
//PAC7BM   DD DSN=&&PACXBM,DISP=(,DELETE),UNIT=&UWK,
//            DCB=BLKSIZE=3440,SPACE=&SPAMV
//PAC7MM   DD DSN=&&PACXMM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=113,BLKSIZE=11300)
//PAC7MJ   DD DSN=&&PACXMJ,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=158,BLKSIZE=6320)
//PAC7TE   DD DSN=&&PACXTE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=323,BLKSIZE=6460)
//PAC7RE   DD DSN=&&PACXRE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=36,BLKSIZE=6012)
//PAC7RM   DD DSN=&&PACXRM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7RQ   DD DUMMY
//PAC7WD   DD DSN=&&PACXWD,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//PAC7MV   DD DSN=&&MV,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MR   DD DSN=&&MR,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MX   DD DSN=&&MX,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7TD   DD DSN=&&TD,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
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//PAC7CP   DD DSN=&&CP,DISP=(,PASS),UNIT=&UWK,
//           SPACE=&SPAMV,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7GY   DD DSN=&&GY,DISP=(,PASS),UNIT=&UWK,
//           SPACE=&SPAGY,
//           DCB=(RECFM=FB,LRECL=310,BLKSIZE=6200)
//PAC7UE   DD DSN=&&UE,DISP=(,PASS),UNIT=&UWK,
//           SPACE=&SPAMV,
//           DCB=(RECFM=FB,LRECL=230,BLKSIZE=6440)
//SYSUDUMP DD SYSOUT=&OUT
//*
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*----------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLSYSEX2),DISP=SHR
//PACROU DD DSN=&&DLSYSEX2,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*-----------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLSYSEX2,DISP=(OLD,DELETE)
//PACS94 EXEC PGM=BVPACS94,COND=((4,LT,PACSJR),
//      (4,LT,PACX2))
//*-------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7CS   DD DSN=&INPUTSPE,DISP=SHR
//PAC7RQ   DD DSN=&&PACXRQ,DISP=(OLD,PASS)
//PAC7QR   DD DSN=&&PAC7QR,DISP=(,PASS),UNIT=&UWK,
//           SPACE=&SPAMV,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS96 EXEC PGM=BVPACS96,COND=((4,LT,PACSJR),
//      (4,LT,PACX2),(4,LT,PACS94))
//*-------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7NO   DD DSN=&INDUV..MIBXNO.&USER,DISP=SHR
//PAC7GY   DD DSN=&&GY,DISP=(OLD,PASS)
//PAC7MB   DD DSN=&&MIBJMB,DISP=(OLD,PASS)
//PAC7CS   DD DSN=&INPUTSPE,DISP=SHR
//PAC7PM   DD DSN=&INPUTMIB,DISP=SHR
//PAC7TA   DD DSN=&&PAC7TA,DISP=(,PASS),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAOT,
//         DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//PAC7MM   DD DSN=&OUTMIMA,DISP=(,CATLG),UNIT=&UWK,
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//             SPACE=&SPAMB,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MI   DD DSN=&OUTGCP,DISP=(,CATLG),UNIT=&UWK,
//             SPACE=&SPAMB,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MO   DD DSN=&OUTGCO,DISP=(,CATLG),UNIT=&UWK,
//             SPACE=&SPAMB,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MC   DD DSN=&OUTGGC,DISP=(,CATLG),UNIT=&UWK,
//             SPACE=&SPAMB,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MS   DD DSN=&OUTGGS,DISP=(,CATLG),UNIT=&UWK,
//             SPACE=&SPAMB,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*----------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLMIBXNO),DISP=SHR
//PACROU DD DSN=&&DLMIBXNO,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLMIBXNO,DISP=(OLD,DELETE)
//PACS97 EXEC PGM=BVPACS97,COND=((4,LT,PACSJR),
//       (4,LT,PACX2),(4,LT,PACS94))
//*-------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7TA   DD DSN=&&PAC7TA,DISP=(OLD,PASS)
//PAC7AT   DD DSN=&&PAC7AT,DISP=(,PASS),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAOT,
//         DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS91 EXEC PGM=BVPACS91,COND=((4,LT,PACSJR),
//       (4,LT,PACX2),(4,LT,PACS94))
//*-------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7AT   DD DSN=&&PAC7AT,DISP=(OLD,PASS)
//PAC7TI   DD DSN=&&PAC7TI,DISP=(,PASS),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAOT,
```

```
//          DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS98 EXEC PGM=BVPACS98,COND=((4,LT,PACSJR),
//       (4,LT,PACX2),(4,LT,PACS94))
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7CP   DD DSN=&&CP,DISP=(OLD,PASS)
//PAC7RQ   DD DSN=&&PAC7QR,DISP=(OLD,PASS)
//PAC7TI   DD DSN=&&PAC7TI,DISP=(OLD,PASS)
//PAC7TG   DD DSN=&OUTFILE,DISP=(,CATLG),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAOT,
//         DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(30,1),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

MIBU - User migration

MIBU - Introduction

<u>Principle</u>

The user migration procedure (MIBU) opens the migration to your specific needs.

For example, in a Program, you can modify the selection of Segments in a Data Structure call.

A TA2 file is created from an external user file that contains the appropriate modifications or creations. The TA2 file contains a complete folder for each entity.

The TA2 file that is created by MIBU must be imported after a complete import with the MIBR procedure. The new folder will replace the existing folder. The import is run in batch mode with the 'importJournal' command lines.

MIBU - User input

<u>User file</u>

The user file must have a UPDP format. It can come from an EXTR or PAF extraction for example.

Constraints: The folder of each entity must be complete in a given context (definition, and folder elements (description, comments)). An assign line must be created for each context.

When a Segment is created, its Data Structure must be created too (if it does not already exist in RPP).

If a Segment is modified, only the Segment records must be supplied.

If a Screen is created, the Dialog, the common area and the help Screens must also be created (if they do not already exist in RPP).

If a Screen is modified, only the Screen records must be supplied.

If a Library is created, you must supply the LIBDEF (definition) and LIBNET (hierarchical order) records.

<u>Processing of the user file</u>

For each record, definition or folder, an RQ record is formatted with the entity type and code, the Library and session of the record. The RQ file and the UPDP-formatted user file (sorted and reformatted) will constitute the TA2 migration file.

<u>Libraries splitting</u>

The MIBR procedure saves the result of the Libraries splitting requested by the user in a file. This result is then taken into account by MIBU.

The file that is produced by MIBR will constitute an input to MIBU. It contains all the projects that are produced by the Libraries splitting, sorted according to their hierarchy. Each entity extracted by MIBU and present in the PAC7RQ file will be moved to another project if its target Library is a Library to be split. The new project that is specific to its entity type is then assigned to it.

MIBU - Description of steps

RQ file creation : BVPACS9D

Code	Physical name	Type	Label
PAC7GY	&GYFILE	Input	User File
PAC7QR	&&QR	Output	Matching Entity/Library

Sort of RQ file : BVPACS9E

Code	Physical name	Type	Label
PAC7SL	&SPLTFILE	Input	Splitting of Libraries
PAC7QR	&&QR	Input	Matching Entity/Library
PAC7RQ	&&RQ	Output	Matching Entity/Library after sort

Batch migration: BVPACS94

Code	Physical name	Type	Label
PAC7RQ	&&RQ	Input	Matching Entity/lowest Library
PAC7CS	&INPUTSPE	Input	Special characters matching file
PAC7QR	&&PAC7QR	Output	Matching Entity/lowest Library

Batch migration : BVPACS96

Code	Physical name	Type	Label
PAC7MB	DUMMY	Input	User input
PAC7GY	&GYFILE	Input	File resulting from PACX extraction
PAC7PM	DUMMY	Input	File with the list of Pgms to be transformed into PMS
PAC7CS	&INPUTSPE	Input	Special characters matching file
PAC7TA	&&PAC7TA	Output	File containing transactions grouped by type
PAC7MM	DUMMY	Output	File containing MIMA commands
PAC7MI	DUMMY	Output	File containing GCP commands
PAC7MO	DUMMY	Output	File containing GCO commands
PAC7MC	DUMMY	Output	File containing GGC commands
PAC7MS	DUMMY	Output	File containing GGS commands

Code	Physical name	Type	Label
PAC7NO	DUMMY	Input	Entities with migration mode

Reorganization of transactions : BVPACS97

Code	Physical name	Type	Label
PAC7TA	&&PAC7TA	Input	File containing transactions grouped by type
PAC7AT	&&PAC7AT	Output	File with transactions grouped by type, sorted again

Sort and formatting of import file: BVPACS91

Code	Physical name	Type	Label
PAC7AT	&&PAC7AT	Input	File containing transactions grouped by type
PAC7TI	&&PAC7TI	Output	File with transactions grouped by type, sorted again
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Global sort: BVPACS98

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Output	Development Database data
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7CP	&&CP	Input	Counter of extracted entities
PAC7RQ	&&PAC7QR	Input	Matching Entity/lowest Library
PAC7TI	&&PAC7TI	Input	File with transactions grouped by type, sorted again
PAC7TG	&OUTFILE	Output	Result file with global sort
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

MIBU - Execution JCL

```
//* -----------------------------------------------------
//*       VISUALAGE PACBASE
//*
//* -----------------------------------------------------
//*                  BATCH MIGRATION
//*
//* -----------------------------------------------------
//*
//BVPMIBU  PROC BASE=$BASE,                 CODE OF DEVPT DATABASE
//         INDSV='$INDSV',            INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',            INDEX OF SYSTEM NON VSAM FILE
//         INDUV='$INDUV',             INDEX OF USER VSAM FILES
//*:       VSAMCAT='$VCAT',                   USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',                 SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         SORTLIB='$BIBT',                        SORT LIBRARY
//         LSR='BLSR',                      LSR BATCH SYSTEM NAME
//         OUT=$OUT,            UTILITIES AND ERRORS OUTPUT CLASS
//         UWK=$UWK,                               WORK UNIT
//         GYFILE=,                             USER FILE GY
//         INPUTSPE=,                       SPECIAL CHAR FILE
//         OUTFILE=,                      OUTPUT FILE MIGRATION
//         VOLS='SER=$VOLUN',                     BACKUP VOLUME
//         UNITS=$UNITUN,                           BACKUP UNIT
//         SPAMV='(CYL,(50,10),RLSE)',         WORK FILE SPACE
//         SPAOT='(CYL,(50,10),RLSE)',       OUTPUT FILE SPACE
//         SRTSPC='(100,10)'                   TEMPORARY SPACE
//*************************************************************
//PRLFILE  EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*---------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
//*-------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
```

```
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
//PACS9D EXEC PGM=BVPACS9D
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7GY   DD DSN=&GYFILE,DISP=SHR
//PAC7QR   DD DSN=&&QR,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS9E EXEC PGM=BVPACS9E
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7QR   DD DSN=&&QR,DISP=(OLD,DELETE)
//PAC7SL   DD DSN=&SPLTFILE,DISP=SHR
//PAC7RQ   DD DSN=&&RQ,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS94 EXEC PGM=BVPACS94
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7CS   DD DSN=&INPUTSPE,DISP=SHR
//PAC7RQ   DD DSN=&&RQ,DISP=(OLD,DELETE)
//PAC7QR   DD DSN=&&PAC7QR,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS96 EXEC PGM=BVPACS96
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7GY   DD DSN=&GYFILE,DISP=SHR
//PAC7MB   DD DUMMY
//PAC7CS   DD DSN=&INPUTSPE,DISP=SHR
//PAC7PM   DD DUMMY
//PAC7TA   DD DSN=&&PAC7TA,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
```

```
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//PAC7MM   DD DUMMY
//PAC7MI   DD DUMMY
//PAC7MO   DD DUMMY
//PAC7MC   DD DUMMY
//PAC7MS   DD DUMMY
//PAC7NO   DD DUMMY,AMP=AMORG
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS97 EXEC PGM=BVPACS97
//*-----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7TA   DD DSN=&&PAC7TA,DISP=(OLD,PASS)
//PAC7AT   DD DSN=&&PAC7AT,DISP=(,PASS),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS91 EXEC PGM=BVPACS91
//*-----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7AT   DD DSN=&&PAC7AT,DISP=(OLD,PASS)
//PAC7TI   DD DSN=&&PAC7TI,DISP=(,PASS),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&SRTSPC,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACS98 EXEC PGM=BVPACS98
//*-----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7RQ   DD DSN=&&PAC7QR,DISP=(OLD,PASS)
//PAC7CP   DD DUMMY
//PAC7TI   DD DSN=&&PAC7TI,DISP=(OLD,PASS)
//PAC7TG   DD DSN=&OUTFILE,DISP=(,CATLG),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
```

```
//          DCB=(RECFM=FB,BLKSIZE=27600,LRECL=400)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(30,3),,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

MIMA - Migration of the Macros

MIMA - Introduction

This procedure allows to simultaneously generate and tag one or more Macrostructures at once.

You can indicate the input of this procedure in two ways:

- Either indicate a '*' line (user code, password, and Library) as input, as well as one or more GMC command lines for each Macrostructure to be generated.
- Or use the OUTMIMA file produced by the MIBA, MIBR or MIBJ procedures. This file contains one or more GCM command lines for each Macrostructure to be generated. It may also contain GMO command lines if high priority Macrostructures have been generated (1).

    Caution: You must not modify the command lines of the OUTMIMA file.

(1) These Macrostructures, which are on 6 characters (Screen code), will be generated on 8 characters with an 'SP' suffix (SCREENSP). They will contain only the N-type lines with the relative positions.

MIMA - User Input

A '*' line with the user code, password and Library code is required.

Pos.	Lon.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	3	bbb	Library code
22	4	nnnn	Session number (blank=current ses.)
26	1	'T'	Session status if frozen session

Then you must enter a line for the GCM command, and enter parameters (optional).

Pos.	Lon.	Value	Meaning
2	1	'Z'	Line code
3	2	'90'	Printing order criterion (1)
5	4	'GCM '	Command code (1)
9	6	cccccc	Macrostructure code (1)
15	1	'C'	Selection indicator (1)
16	1	'1'	Option to be printed (1)
28	1		Presence of a continuation line
		' '	No continuation line
		'*'	Continuation line
31	50		Command parameters

(1) Parameters to be entered on the first line only, not on the continuation lines.

This procedure also allows to replace unknown special characters in a Macrostructure code with other characters or to replace unauthorized words (Windows reserved words for example) with other codes. The matching table is the PAC7CS file used as input to the BVPACP87 program (optional file, created by the MIAM procedure and updated by the client if necessary).

MIMA - Description of Steps

Input recognition: PTU001

Initialization of the output file(s)

Generation/Print commands : BVPACA10

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension
PAC7AJ	DUMMY	Input	Development Database journal
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7ME	&&MIMAMB	Input	User transactions

Code	Physical name	Type	Label
PAC7MV	&&PAC7MV	Output	Update transactions
PAC7MG	&&PAC7MG	Output	Generation/Print commands
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

GCM specific preparation : BVPACA30

Code	Physical name	Type	Label
PAC7MG	&&PAC7MG	Input	Generation/Print commands
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7JG	&&PAC7KC	Output	Extractor command
PAC7KU	&&PAC7KU	Output	Report
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Macro generation: BVPACMM

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PAC7SC	&INDSV..BVPSC	Input	Generation skeleton
PAC7CS	&INPUTSPE	Input	Special characters matching file
PAC7EP		Output	Work file
PAC7GI	&&PAC7GI	Output	Work file

Code	Physical name	Type	Label
PAC7GP	&&PAC7GP	Output	Work file
PAC7JG	&&PAC7JG	Output	Work file
PAC7KC	&&PAC7KC	Output	Work file
PAC7KP		Output	Work file
PAC7RQ		Output	Work file
PAC7AT		Output	Work file
PAC7TA		Output	Work file
PAC7TT	&OUTFILE	Output	Generated Macros file
PAC7WA		Output	Work file
PAC7WC		Output	Work file
PAC7W1		Output	Work file
PAC7W2		Output	Work file
PAC7W3		Output	Work file
PAC7W4		Output	Work file
PAC7W5		Output	Work file
PAC7IA		Report	General printout of the program stream
SORTWK01		Sort	
SORTWK01		Sort	
SORTWK01		Sort	

MIMA - Execution JCL

```
//* -------------------------------------------------------
//*         VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*              MACRO-STRUCTURES MIGRATION
//*
//* -------------------------------------------------------
//*
//BVPMIMA PROC BASE=$BASE,              CODE OF VAPAC DATABASE
//        INDSV='$INDSV',          INDEX OF VSAM SYSTEM FILES
//        INDSN='$INDSN',      INDEX OF NON VSAM SYSTEM FILES
//        INDUV='$INDUV',           INDEX OF USER VSAM FILES
//*:      SYSTCAT='$SCAT',              SYSTEM VSAM CATALOG
//        STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//        INPUTSPE=,                      SPECIAL CHAR FILE
//        OUTFILE=,                     OUTPUT FILE MIGRATION
//        SPAOT='(CYL,(50,50))',         OUTPUT FILE SPACE
//        VOLS='SER=$VOLUN',                 BACKUP VOLUME
//        UNITS=$UNITUN,                       BACKUP UNIT
```

```
//         SPAWK='(CYL,(20,5),RLSE)',              WORK FILE SPACE
//         SORTLIB='$BIBT',                         SORT LIBRARY
//         LSR='BLSR',                        LSR BATCH SYSTEM NAME
//         UWK=$UWK,                                    WORK UNIT
//         OUT=$OUT                                  OUTPUT CLASS
//****************************************************************
//INPUT   EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&MIMAMB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLFILE EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
//*-------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
//PACA10 EXEC PGM=BVPACA10
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7AJ   DD DUMMY
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
```

```
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7ME   DD DSN=&&MIMAMB,DISP=(OLD,PASS)
//PAC7MG   DD DSN=&&PAC7MG,DISP=(,PASS),
//           UNIT=&UNITS,VOL=&VOLS,
//           SPACE=&SPAWK,
//           DCB=(RECFM=FB,LRECL=153,BLKSIZE=15300)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),
//           UNIT=&UNITS,VOL=&VOLS,
//           SPACE=&SPAWK,
//           DCB=(RECFM=FB,LRECL=170,BLKSIZE=17000)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACA30 EXEC PGM=BVPACA30,COND=(4,LT,PACA10)
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7MG   DD DSN=&&PAC7MG,DISP=(OLD,PASS)
//PAC7JG   DD DSN=&&PAC7KC,DISP=(,PASS),
//           UNIT=&UNITS,VOL=&VOLS,
//           SPACE=&SPAWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=1600)
//PAC7KU   DD DSN=&&PAC7KU,DISP=(,PASS),
//           UNIT=&UNITS,VOL=&VOLS,
//           SPACE=&SPAWK,
//           DCB=(RECFM=FB,LRECL=260,BLKSIZE=26000)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACMM  EXEC PGM=BVPACMM,COND=((4,LT,PACA10),
//       (4,LT,PACA30))
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
```

```
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7SC   DD DSN=&INDSV..BVPSC,DISP=SHR
//PAC7CS   DD DSN=&INPUTSPE,DISP=SHR
//PAC7EP   DD UNIT=&UWK,SPACE=(TRK,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7GI   DD DSN=&&PAC7GI,UNIT=&UWK,DCB=BLKSIZE=3440,
//            SPACE=(TRK,(10,5),RLSE),DISP=(,DELETE)
//PAC7GP   DD DSN=&&PAC7GP,UNIT=&UWK,DISP=(,PASS),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=12560),
//            SPACE=(TRK,(20,5),RLSE)
//PAC7JG   DD DSN=&&PAC7JG,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=3440),
//            SPACE=(TRK,(5,1),RLSE)
//PAC7KC   DD DSN=&&PAC7KC,DISP=(OLD,PASS)
//PAC7KP   DD UNIT=&UWK,SPACE=(TRK,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7RQ   DD UNIT=&UWK,SPACE=(TRK,(20,5),RLSE),DCB=BLKSIZE=27800
//PAC7AT   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27000
//PAC7TA   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27000
//PAC7TT   DD DSN=&OUTFILE,DISP=(,CATLG),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAOT,
//            DCB=(RECFM=FB,BLKSIZE=27000,LRECL=1000)
//PAC7WA   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=25200
//PAC7WC   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7W1   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7W2   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7W3   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7W4   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27180
//PAC7W5   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7IA   DD SYSOUT=&OUT
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
```

MITH - Migration of the Thesaurus

MITH - Introduction

Principle

This procedure is a utility program that is used to migrate the thesaurus in batch mode. After the extraction of entities in inter-library mode in the repository, an XML-formatted file, containing the thesaurus, will be exported to the SDP.

MITH - User Input

The user input of the MITH procedure is identical to that of the PACX procedure, with the following specific values:

One '*' line as follows:

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password
19	3	***	Extraction inter-library code
22	4	nnnn	Session number (Blank=current session
26	1	'T'	Session status if frozen session
29	4	EXLI	Extractor code
34	1	'1'	Formatting for UPDP (PAF)
55	1	'1'	Convergence plan flag

The EXLI extraction is executed in inter-library, because the thesaurus entities are created in inter-library within the repository.

The GY file resulting from PACX extraction is then filtered, the thesaurus records are selected and a new XML-formatted file is created.

MITH - Description of Steps

Input recognition: PTU001

Initialization of the output file(s)

Initialization of the KSDS work file: IDCAMS

Extraction: PACX

This step extracts transactions according to user input.

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages

Code	Physical name	Type	Label
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7PJ	DUMMY	Input	Archived transactions
PAC7MB	&&MITHMB	Input	User input
PAC7MA	DUMMY	Input	Work file
PAC7ES	DUMMY	Input	Work file
PAC7BM	&&PACXBM	Input/Output	User input
PAC7MM	&&PACXMM	Input/Output	Work file
PAC7MJ	&&PACXMJ	Input/Output	Work file
PAC7TE	&&PACXTE	Input/Output	Work file
PAC7RE	&&PACXRE	Input/Output	Work file
PAC7RM	&&PACXRM	Input/Output	Work file
PAC7WD	&&PACXWD	Input/Output	Extracted transactions
SYSEXT	&INDUV..SYSEXT.&USER	Input/Output	Work file
PAC7MV	&&MV	Output	Work file
PAC7MR	&&MR	Output	Work file
PAC7MX	&&MX	Output	Non extracted entities (PACX)
PAC7GY	&&GY	Output	Extracted transactions for UPDP
PAC7RQ	DUMMY	Output	Matching Entity/Library
PAC7TD	&&TD	Output	Work file
PAC7UE	&&UE	Output	Work file
PAC7CP	DUMMY	Output	Work file
PAC7IA		Report	General printout of the program stream
PAC7DD		Report	Errors on input transactions

Code	Physical name	Type	Label
PAC7ED		Report	Extractions report
PAC7EE		Report	Extractions report
PAC7EG		Report	Extractions report
PAC7EM		Report	Extractions report
PAC7EP		Report	Extractions report
PAC7EQ		Report	Extractions report
PAC7EU		Report	Extractions report
PAC7EZ		Report	Extractions report
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Return codes:

- 0: No error
- 4: Error in user input (detailed in PAC7EE) or in extractions (detailed in PAC7EZ)
- 8: Error in '*' line (detailed in PAC7DD)

Deletion of the KSDS work file: IDCAMS

Selection of thesaurus transactions and formatting of an XML file : BVPACTH1

Code	Physical name	Type	Label
PAC7GY	&&GY	Input	File resulting from PACX extraction
PAC7RQ	&OUTFILE	Output	Thesaurus file in XML format

MITH - Execution JCL

```
//* -------------------------------------------------------
//*      VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*              THESAURUS  MIGRATION
//*
//* -------------------------------------------------------
//*
//BVPMITH  PROC BASE=$BASE,               CODE OF DEVPT DATABASE
//         INDSV='$INDSV',                INDEX OF VSAM SYSTEM FILES
//         INDSN='$INDSN',            INDEX OF NON VSAM SYSTEM FILES
```

```
//         INDUV='$INDUV',              INDEX OF USER VSAM FILES
//*:       VSAMCAT='$VCAT',                    USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',                  SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         SORTLIB='$BIBT',                         SORT LIBRARY
//         USER=,                                      USER CODE
//         LSR='BLSR',                     LSR BATCH SYSTEM NAME
//         OUT=$OUT,         UTILITIES AND ERRORS OUTPUT CLASS
//         OUTL=$OUT,                    OUTPUT CLASS OF REPORTS
//         UWK=$UWK,                                   WORK UNIT
//         SPAMB='(TRK,(5,1),RLSE)',       REQUEST FILE SPACE
//         SPAMV='(TRK,(50,10),RLSE)',        UPDT FILE SPACE
//         SPAGY='(TRK,(50,10),RLSE)',        UPDP FILE SPACE
//         SPATD='(TRK,(50,10),RLSE)',        CPSN FILE SPACE
//         OUTFILE=,                     OUTPUT FILE MIGRATION
//         VOLS='SER=$VOLUN',                    BACKUP VOLUME
//         UNITS=$UNITUN,                          BACKUP UNIT
//         SPAOT='(TRK,(500,80),RLSE)'      OUTPUT FILE SPACE
//****************************************************************
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&MITHMB,DISP=(,PASS),
//           UNIT=&UWK,SPACE=&SPAMB,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLFILE  EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
//*-------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
```

```
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DFSYSEXT),DISP=SHR
//PACROU DD DSN=&&DFSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFSYSEXT,DISP=(OLD,DELETE)
//MAXKEY  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF   DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//MAXKEY   DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//*
//PACX    EXEC PGM=BVPACX,REGION=0K
//*-----------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7PJ   DD DUMMY
//PAC7IA   DD SYSOUT=&OUTL
//PAC7DD   DD SYSOUT=&OUTL
//PAC7ED   DD SYSOUT=&OUTL
//PAC7EE   DD SYSOUT=&OUTL
//PAC7EG   DD SYSOUT=&OUTL
//PAC7EM   DD SYSOUT=&OUTL
//PAC7EP   DD SYSOUT=&OUTL
//PAC7EQ   DD SYSOUT=&OUTL
//PAC7EU   DD SYSOUT=&OUTL
//PAC7EZ   DD SYSOUT=&OUTL
```

```
//PAC7CP   DD DUMMY
//PAC7MA   DD DUMMY
//PAC7ES   DD DUMMY
//SYLSR    DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//SYSEXT   DD SUBSYS=(&LSR,'DDNAME=SYLSR')
//PAC7MB   DD DSN=&&MITHMB,DISP=(OLD,DELETE,DELETE)
//PAC7BM   DD DSN=&&PACXBM,DISP=(,DELETE),UNIT=&UWK,
//            DCB=BLKSIZE=3440,SPACE=&SPAMB
//PAC7MM   DD DSN=&&PACXMM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=113,BLKSIZE=11300)
//PAC7MJ   DD DSN=&&PACXMJ,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=158,BLKSIZE=6320)
//PAC7TE   DD DSN=&&PACXTE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=323,BLKSIZE=6460)
//PAC7RE   DD DSN=&&PACXRE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=36,BLKSIZE=6012)
//PAC7RM   DD DSN=&&PACXRM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7RQ   DD DUMMY
//PAC7WD   DD DSN=&&PACXWD,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//PAC7MV   DD DSN=&&MV,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MR   DD DSN=&&MR,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MX   DD DSN=&&MX,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7TD   DD DSN=&&TD,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7GY   DD DSN=&&GY,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAGY,
//            DCB=(RECFM=FB,LRECL=310,BLKSIZE=6200)
//PAC7UE   DD DSN=&&UE,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=230,BLKSIZE=6440)
//SYSUDUMP DD SYSOUT=&OUT
//*
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*----------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
```

```
//SYSOUT   DD SYSOUT=&OUT
//PACRIN   DD DSN=&INDSN..BVPSY(DLSYSEXT),DISP=SHR
//PACROU   DD DSN=&&DLSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLSYSEXT,DISP=(OLD,DELETE)
//PACTH1 EXEC PGM=BVPACTH1,COND=(4,LT,PACX)
//*---------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7GY   DD DSN=&&GY,DISP=(OLD,PASS)
//PAC7RQ   DD DSN=&OUTFILE,DISP=(,CATLG),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=15000,LRECL=150)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

MIUS - Migration of the Users

MIUS - Introduction

Principle

Transformation of users into create user.

This procedure is a utility that transforms Users into Create users. After the extraction of the users declared in the administration, a file containing the characteristics of each user is created. This file contains a list of user IDs, email addresses, names, license IDs and administration level, separated by commas. This file is used as input to the RTC repotools tool.

MIUS - User Input

The user input is the one of the PACX procedure with the following specific values:

One '*' line as follows:

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password
19	3	***	Extraction inter-library code

Pos.	Len.	Value	Meaning
22	4		Session number (Blank=current)
26	1		Session status
29	4	EXTR	Extractor code
34	1	'1'	Formatting for UPDP (PAF)
55	1	'1'	Convergence plan flag

A command line:

Pos.	Len.	Value	Meaning
2	1	'W'	Line code
3	1	'1'	Line number
4	2	'EX'	
6	1		Library selection code
		'C'	Library and its upper-libraries
7	33	1USE	Users Meta-entity
40	4		Extraction type (1):
		'ALL '	Entity and used entities

The EXTR extraction is executed in inter-libraries, in the Administration Database.

The GY file resulting from PACX is then filtered, the users records are selected and a new file, used as input to the RTC repotools tool, is created.

Note:

The commas delimit the fields. When they are inside a text field, they are replaced with semi-colons in order to be compatible with RTC.

MIUS - Description of Steps

Input recognition: PTU001

Initialization of the output file(s)

Initialization of the KSDS work file: IDCAMS

Extraction : PACX

This step extracts transactions according to user input.

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7AN	&INDSV..BVPGN	Input	Administration Database index
PAC7AR	&INDSV..BVPGR	Input	Administration Database data
PAC7AY	&INDUV..BVPGY	Input	Administration Database extension data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7PJ	DUMMY	Input	Archived transactions
PAC7MB	&&MIUSMB	Input	User input
PAC7BM	&&PACXBM	Input/Output	User input
PAC7MM	DUMMY	Input/Output	
SYSEXT	&INDUV..SYSEXT. &USER	Input/Output	Work file
PAC7MJ	&&PACXMJ	Input/Output	
PAC7TE	&&PACXTE	Input/Output	
PAC7RE	&&PACXRE	Input/Output	
PAC7RM	&&PACXRM	Input/Output	
PAC7RQ	&&PACXRQ	Input/Output	Work file
PAC7WD	&&PACXWD	Input/Output	Extracted transactions
PAC7MV	&MV	Input/Output	
PAC7MR	&MR	Input/Output	
PAC7TD	&TD	Input/Output	
PAC7MX	&MX	Input/Output	
PAC7GY	&&GY	Output	Extracted transactions for UPGP
PAC7UE	&UE	Input/Output	
PAC7IA		Report	General printout of the program stream
PAC7DD		Report	Errors on input transactions
PAC7ED		Report	Extraction report

Code	Physical name	Type	Label
PAC7EE		Report	Extraction report
PAC7EG		Report	Extraction report
PAC7EM		Report	Extraction report
PAC7EP		Report	Extraction report
PAC7EQ		Report	Extraction report
PAC7ES	DUMMY		
PAC7EU		Report	Extraction report
PAC7EZ		Report	Extraction report
PAC7MA	DUMMY		
PAC7CP	DUMMY		
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Return codes:

- 0 : No error
- 4 : Error in user input (detained in PAC7EE) or in the extraction
- 8 : Error in '*' line (detailed in PAC7DD)

Deletion of the KSDS work file: IDCAMS

Transformation of users into create user : BVPLTYAU

Code	Physical name	Type	Label
PAC7GY	&&GY	Input	File resulting from PACX extraction
PAC7US	&OUTFILE	Output	Users file: input of repotools tool

MIUS - Execution JCL

```
//* ------------------------------------------------------
//*       VISUALAGE PACBASE
//*
//* ------------------------------------------------------
//*                USERS  MIGRATION
//*
//* ------------------------------------------------------
//*
//BVPMIUS  PROC  INDSV='$INDSV',      INDEX OF SYSTEM VSAM FILES
//         INDUV='$INDUV',            INDEX OF USER VSAM FILES
```

```
//         INDSN='$INDSN',         INDEX OF NON VSAM FOR MIGRATION
//*:        VSAMCAT='$VCAT',                     USER VSAM CATALOG
//*:        SYSTCAT='$SCAT',                   SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',     LIBRARY OF LOAD-MODULES
//         SORTLIB='$BIBT',                        SORT LIBRARY
//         USER=,                                     USER CODE
//         LSR='BLSR',               LSR BATCH SYSTEM NAME
//         OUT=$OUT,             UTILITIES AND ERRORS OUTPUT CLASS
//         OUTL=$OUT,                 OUTPUT CLASS OF REPORTS
//         UWK=$UWK,                                 WORK UNIT
//         SPAMB='(TRK,(5,1),RLSE)',         REQUEST FILE SPACE
//         SPAMV='(TRK,(50,10),RLSE)',          UPDT FILE SPACE
//         SPAGY='(TRK,(50,10),RLSE)',          UPDP FILE SPACE
//         SPATD='(TRK,(50,10),RLSE)',          CPSN FILE SPACE
//         OUTFILE=,                  OUTPUT FILE MIGRATION
//         VOLS='SER=$VOLUN',                    BACKUP VOLUME
//         UNITS=$UNITUN,                          BACKUP UNIT
//         SPAOT='(TRK,(500,80),RLSE)'      OUTPUT FILE SPACE
//****************************************************************
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&MIUSMB,DISP=(,PASS),
//           UNIT=&UWK,SPACE=&SPAMB,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLFILE  EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
//*--------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
```

```
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DFSYSEXT),DISP=SHR
//PACROU DD DSN=&&DFSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFSYSEXT,DISP=(OLD,DELETE)
//MAXKEY   EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF   DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//MAXKEY   DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//*
//PACX    EXEC PGM=BVPACX,REGION=0K
//*------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7PJ   DD DUMMY
//PAC7IA   DD SYSOUT=&OUTL
//PAC7DD   DD SYSOUT=&OUTL
//PAC7ED   DD SYSOUT=&OUTL
//PAC7EE   DD SYSOUT=&OUTL
//PAC7EG   DD SYSOUT=&OUTL
//PAC7EM   DD SYSOUT=&OUTL
//PAC7EP   DD SYSOUT=&OUTL
//PAC7EQ   DD SYSOUT=&OUTL
//PAC7EU   DD SYSOUT=&OUTL
//PAC7EZ   DD SYSOUT=&OUTL
```

```
//PAC7CP   DD DUMMY
//PAC7MA   DD DUMMY
//PAC7ES   DD DUMMY
//SYLSR    DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//SYSEXT   DD SUBSYS=(&LSR,'DDNAME=SYLSR')
//PAC7MB   DD DSN=&&MIUSMB,DISP=(OLD,DELETE,DELETE)
//PAC7BM   DD DSN=&&PACXBM,DISP=(,DELETE),UNIT=&UWK,
//            DCB=BLKSIZE=3440,SPACE=&SPAMB
//PAC7MM   DD DSN=&&PACXMM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=113,BLKSIZE=11300)
//PAC7MJ   DD DSN=&&PACXMJ,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=158,BLKSIZE=6320)
//PAC7TE   DD DSN=&&PACXTE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=323,BLKSIZE=6460)
//PAC7RE   DD DSN=&&PACXRE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=36,BLKSIZE=6012)
//PAC7RM   DD DSN=&&PACXRM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7RQ   DD DSN=&&PAC7RQ,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7WD   DD DSN=&&PACXWD,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//PAC7MV   DD DSN=&&MV,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MR   DD DSN=&&MR,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MX   DD DSN=&&MX,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7TD   DD DSN=&&TD,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7GY   DD DSN=&&GY,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAGY,
//            DCB=(RECFM=FB,LRECL=310,BLKSIZE=6200)
//PAC7UE   DD DSN=&&UE,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=230,BLKSIZE=6440)
//SYSUDUMP DD SYSOUT=&OUT
//*
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*--------------------------------------------------
```

```
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLSYSEXT),DISP=SHR
//PACROU DD DSN=&&DLSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*----------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLSYSEXT,DISP=(OLD,DELETE)
//PLTYAU EXEC PGM=BVPLTYAU,COND=(4,LT,PACX)
//*--------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7GY   DD DSN=&&GY,DISP=(OLD,PASS)
//PAC7US   DD DSN=&OUTFILE,DISP=(,CATLG),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=12000,LRECL=120)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

MILA - Migration of Administration Error Messages

MILA - Introduction

Principle

Extraction of the customized error messages of the administration.

This procedure is a utility that formats an error messages file. This file contains all the standard error messages. An extraction of customized error messages in the Administration Database allows to override the corresponding standard error messages. The output file contains all the error messages for all languages, each set is separated by a comment line indicating the language.

MILA - User Input

The user input is the one of the PACX procedure with the following specific values:

One '*' line as follows:

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code

Pos.	Len.	Value	Meaning
11	8	pppppppp	User password
19	3	***	Extraction inter-library code
22	4		Session number (Blank=current)
26	1		Session status
29	4	EXTR	Extractor code
34	1	'1'	Formatting for UPDP (PAF)
55	1	'1'	Convergence plan flag

A command line:

Pos.	Len.	Value	Meaning
2	1	'W'	Line code
3	1	'1'	Line number
4	2	'EX'	
6	1		Library selection code
		'C'	Library and its upper-libraries
7	33	YATTABLES	User entity of administration tables

The EXTR extraction is executed in inter-library mode, in the Administration Database.

The GY file resulting from PACX is then filtered, the error messages records are selected (-D02 description) and formatted again in a PAC7LI file.

MILA - Description of Steps

Input recognition: PTU001

Initialization of the output file(s)

Initialization of the KSDS work file: IDCAMS

Extraction : PACX

This step extracts transactions according to user input.

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages

Code	Physical name	Type	Label
PAC7AN	&INDSV..BVPGN	Input	Administration Database index
PAC7AR	&INDSV..BVPGR	Input	Administration Database data
PAC7AY	&INDUV..BVPGY	Input	Administration Database extension data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7PJ	DUMMY	Input	Archived transactions
PAC7MB	&&MILAMB	Input	User input
PAC7BM	&&PACXBM	Input/Output	User input
PAC7MM	&&PACXMM	Input/Output	
SYSEXT	&INDUV..SYSEXT.&USER	Input/Output	Work file
PAC7MJ	&&PACXMJ	Input/Output	
PAC7TE	&&PACXTE	Input/Output	
PAC7RE	&&PACXRE	Input/Output	
PAC7RM	&&PACXRM	Input/Output	
PAC7RQ	&&PACXRQ	Input/Output	Work file
PAC7WD	&&PACXWD	Input/Output	Extracted transactions
PAC7MV	&MV	Input/Output	
PAC7MR	&MR	Input/Output	
PAC7TD	&TD	Input/Output	
PAC7MX	&MX	Input/Output	
PAC7GY	&&GY	Output	Extracted transactions for UPGP
PAC7UE	&UE	Input/Output	
PAC7IA		Report	General printout of the program stream
PAC7DD		Report	Errors on input transactions
PAC7ED		Report	Extraction report
PAC7EE		Report	Extraction report

Code	Physical name	Type	Label
PAC7EG		Report	Extraction report
PAC7EM		Report	Extraction report
PAC7EP		Report	Extraction report
PAC7EQ		Report	Extraction report
PAC7ES	DUMMY		
PAC7EU		Report	Extraction report
PAC7EZ		Report	Extraction report
PAC7MA	DUMMY		
PAC7CP	DUMMY		
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Return codes:

- 0 : No error
- 4 : Error in user input (detained in PAC7EE) or in the extraction
- 8 : Error in '*' line (detailed in PAC7DD)

Deletion of the KSDS work file: IDCAMS

Formatting of error messages: BVPLTYAT

Code	Physical name	Type	Label
PAC7GY	&&GY	Input	File resulting from PACX extraction
PAC7LI	&OUTFILE	Output	Users file: input of repotools tool

MILA - Execution JCL

```
//* -------------------------------------------------------
//*         VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*            ERROR LABEL MIGRATION
//*
//* -------------------------------------------------------
//*
//BVPMILA  PROC  INDSV='$INDSV',        INDEX OF SYSTEM VSAM FILES
//         INDUV='$INDUV',              INDEX OF USER VSAM FILES
//         INDSN='$INDSN',        INDEX OF NON VSAM SYSTEM FILE
//*:       VSAMCAT='$VCAT',                 USER VSAM CATALOG
```

```
//*:       SYSTCAT='$SCAT',                    SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',      LIBRARY OF LOAD-MODULES
//         SORTLIB='$BIBT',                        SORT LIBRARY
//         USER=,                                    USER CODE
//         LSR='BLSR',                       LSR BATCH SYSTEM NAME
//         OUT=$OUT,            UTILITIES AND ERRORS OUTPUT CLASS
//         OUTL=$OUT,                     OUTPUT CLASS OF REPORTS
//         UWK=$UWK,                                 WORK UNIT
//         SPAMB='(TRK,(5,1),RLSE)',         REQUEST FILE SPACE
//         SPAMV='(TRK,(50,10),RLSE)',          UPDT FILE SPACE
//         SPAGY='(TRK,(50,10),RLSE)',          UPDP FILE SPACE
//         SPATD='(TRK,(50,10),RLSE)',          CPSN FILE SPACE
//         OUTFILE=,                         OUTPUT FILE MIGRATION
//         VOLS='SER=$VOLUN',                    BACKUP VOLUME
//         UNITS=$UNITUN,                          BACKUP UNIT
//         SPAOT='(TRK,(500,80),RLSE)'       OUTPUT FILE SPACE
//****************************************************************
//INPUT   EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&MILAMB,DISP=(,PASS),
//           UNIT=&UWK,SPACE=&SPAMB,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLFILE  EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*--------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
//*--------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*-----------------------------------------
```

```
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DFSYSEXT),DISP=SHR
//PACROU DD DSN=&&DFSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN     DD DSN=&&DFSYSEXT,DISP=(OLD,DELETE)
//MAXKEY   EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF    DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//MAXKEY    DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN     DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//*
//PACX    EXEC PGM=BVPACX,REGION=0K
//*------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT    DD SYSOUT=&OUT
//SYSOUX    DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE    DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR     DD DSN=&INDSV..BVPGN,DISP=SHR
//PAC7AN    DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR     DD DSN=&INDSV..BVPGR,DISP=SHR
//PAC7AR    DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR     DD DSN=&INDSV..BVPGY,DISP=SHR
//PAC7AY    DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR     DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN    DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR     DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR    DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR     DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU    DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7PJ    DD DUMMY
//PAC7IA    DD SYSOUT=&OUTL
//PAC7DD    DD SYSOUT=&OUTL
//PAC7ED    DD SYSOUT=&OUTL
//PAC7EE    DD SYSOUT=&OUTL
//PAC7EG    DD SYSOUT=&OUTL
//PAC7EM    DD SYSOUT=&OUTL
//PAC7EP    DD SYSOUT=&OUTL
//PAC7EQ    DD SYSOUT=&OUTL
//PAC7EU    DD SYSOUT=&OUTL
//PAC7EZ    DD SYSOUT=&OUTL
//PAC7CP    DD DUMMY
//PAC7MA    DD DUMMY
```

```
//PAC7ES   DD DUMMY
//SYLSR    DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//SYSEXT   DD SUBSYS=(&LSR,'DDNAME=SYLSR')
//PAC7MB   DD DSN=&&MILAMB,DISP=(OLD,DELETE,DELETE)
//PAC7BM   DD DSN=&&PACXBM,DISP=(,DELETE),UNIT=&UWK,
//            DCB=BLKSIZE=3440,SPACE=&SPAMB
//PAC7MM   DD DSN=&&PACXMM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=113,BLKSIZE=11300)
//PAC7MJ   DD DSN=&&PACXMJ,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=158,BLKSIZE=6320)
//PAC7TE   DD DSN=&&PACXTE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=323,BLKSIZE=6460)
//PAC7RE   DD DSN=&&PACXRE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=36,BLKSIZE=6012)
//PAC7RM   DD DSN=&&PACXRM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7RQ   DD DSN=&&PAC7RQ,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7WD   DD DSN=&&PACXWD,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//PAC7MV   DD DSN=&&MV,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MR   DD DSN=&&MR,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MX   DD DSN=&&MX,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7TD   DD DSN=&&TD,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7GY   DD DSN=&&GY,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAGY,
//            DCB=(RECFM=FB,LRECL=310,BLKSIZE=6200)
//PAC7UE   DD DSN=&&UE,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=230,BLKSIZE=6440)
//SYSUDUMP DD SYSOUT=&OUT
//*
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*----------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
```

```
//SYSOUT  DD SYSOUT=&OUT
//PACRIN  DD DSN=&INDSN..BVPSY(DLSYSEXT),DISP=SHR
//PACROU  DD DSN=&&DLSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLSYSEXT,DISP=(OLD,DELETE)
//PLTYAT EXEC PGM=BVPLTYAT,COND=(4,LT,PACX)
//*---------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7GY   DD DSN=&&GY,DISP=(OLD,PASS)
//PAC7LI   DD DSN=&OUTFILE,DISP=(,CATLG),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=3500,LRECL=35)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

MERT - Transformation of Model entities

MERT - Introduction

Principle

The Model entities (M entities with an Object-, Relation- or Functional
Integrity Constraint-type) are not retrieved into RPP. These entities are used in
the Pacdesign module only. They may be used to store other information that
is not managed with Pacbase.

This procedure extracts the Model entities and transforms them into User
entities that can be exported to the SDP.

This procedure produces a file that contains the update transactions to be
used as input to the UPDP procedure.

This procedure is not required.

MERT - User input

A '*' with the following information:

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code

Pos.	Len.	Value	Meaning
11	8	pppppppp	Password
19	3	***	Inter-Library extraction
22	4	nnnn	Session number (blank=current)
26	1	'T'	Session status if frozen session

This procedures processes the following lines only:
- Definition of the Merise entities (Object, Relationship, and FIC).
- Comment lines: -GC.
- Properties call lines: -CE.
- Comment lines: -GC under -CE.
- Merise objects call lines: -CM.
- Comment lines: -GC under -CM.

The following lines are not processed:
- Input Aid call lines in -GC.
- Merise entities cross-reference lines.

Transformation of the Model entities into User Entities
- Merise objects are transformed into User Entities with a $9O call type.
- Merise relationships are transformed into User Entities with a $9R call type.
- Merise FICs are transformed into User Entities with a $9C call type.

MERT - Description of steps

Definition of the new Meta Entities
- Create the new Meta Entities by running the VINS procedure with the BVPMETHOD file.
- Run the MERT procedure.
- Run the UPDP procedure to update the Pacbase database with the new User Entities created by the MERT procedure.
- Apply the new format to the Pacdesign User Entities associated with the model used by running the VINS procedure with the BVPMERF2 file, if the model used is MERISE.
- Reorganize the database with the REOR procedure to take the index file into account.

    CAUTION: After this update, the modified entities cannot be used anymore by Pacdesign.

You can obtain the BVPMETHOD and BVPMERF2 file from the VisualAge Pacbase support.

Extraction of entities: PAFMER

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7MB	&&MERTMB	Input	User input
SYSPAF	&INDUV..SYSPAF.&USER	Input/Output	PAF indexed file
PAC7UR	&&PAC7UR	Input/Output	Work file
PAC7EJ		Report	Check lists
PAC7EI		Report	PAF access report
PAC7DD		Report	Error list
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Writing of entities: BVPTUMER

Code	Physical name	Type	Label
PAC7UR	&&PAC7UR	Input	Work file
PAC7GY	&OUTFILE	Output	Merise entities file
PAC7EJ		Report	Integrity check lists
PAC7ET		Report	PAF access file
PAC7DD		Report	Error list
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

MERT - Execution JCL

```
//* ------------------------------------------------------
//*        VISUALAGE PACBASE
//*
//* ------------------------------------------------------
//*            - MERISE ENTITY TRANSFORMATION   -
//* ------------------------------------------------------
//*
//BVPMERT PROC BASE=$BASE,               CODE OF VAPAC DATABASE
//         INDSV='$INDSV',         INDEX OF VSAM SYSTEM FILES
//         INDSN='$INDSN',     INDEX OF NON VSAM SYSTEM FILES
//         INDUV='$INDUV',        INDEX OF USER VSAM FILES
//*:       SYSTCAT='$SCAT',           SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',   LIBRARY OF LOAD-MODULES
//         SPAOT='(CYL,(10,10),RLSE)',       OUTPUT FILE SPACE
//         VOLS='SER=$VOLUN',              BACKUP VOLUME
//         UWK=$UWK,                          WORK UNIT
//         USER=,                             USER CODE
//         SPAMB='(TRK,(5,1),RLSE)',      REQUEST FILE SPACE
//         SORTLIB='$BIBT',                SORT LIBRARY
//         LSR='BLSR',                LSR BATCH SYSTEM NAME
//         OUT=$OUT                        OUTPUT CLASS
//****************************************************************
//INPUT   EXEC PGM=BVPTU001
//*----------------------
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//        DD DSN=$BCOB,DISP=SHR
//CARTE     DD DDNAME=SYSIN
//PAC7MB  DD DSN=&&MERTMB,DISP=(,PASS),
//          UNIT=&UWK,SPACE=&SPAMB,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLFILE  EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*-------------------------------------------------------
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//        DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
```

```
//*----------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DFSYSPAF),DISP=SHR
//PACROU DD DSN=&&DFSYSPAF,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFSYSPAF,DISP=(OLD,DELETE)
//MAXKEY   EXEC PGM=IDCAMS
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF    DD DSN=&INDUV..SYSPAF.&USER,DISP=SHR
//MAXKEY    DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//*
//PAFMER EXEC PGM=BVPAFMER
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7MB   DD DSN=&&MERTMB,DISP=(OLD,PASS)
//SYSPAF   DD DSN=&INDUV..SYSPAF.&USER,DISP=SHR
//PAC7UR   DD DSN=&&PAC7UR,DISP=(,PASS),
//           UNIT=SYSDA,SPACE=(TRK,(5,1),RLSE),
//           DCB=(RECFM=FB,LRECL=350)
//PAC7EJ   DD SYSOUT=&OUT
//PAC7ET   DD SYSOUT=&OUT
//PAC7DD   DD SYSOUT=&OUT
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
```

```
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTUMER EXEC PGM=BVPTUMER
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//PAC7UR   DD DSN=&&PAC7UR,DISP=(OLD,PASS)
//PAC7EJ   DD SYSOUT=&OUT
//PAC7ET   DD SYSOUT=&OUT
//PAC7DD   DD SYSOUT=&OUT
//PAC7GY   DD DSN=&OUTFILE,DISP=(,CATLG),
//            UNIT=&UWK,VOL=&VOLS,
//            SPACE=&SPAOT,
//            DCB=(RECFM=FB,BLKSIZE=31000,LRECL=310)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*----------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLSYSPAF),DISP=SHR
//PACROU DD DSN=&&DLSYSPAF,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*-----------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLSYSPAF,DISP=(OLD,DELETE)
```

MIAx - Optional control cards

You must define commands in the Generation Manager to split the generated
Programs, Screens, Servers, or "COPY" clauses into separate files and into
directories that you specify.

Definition of the command lines IN FRONT.

These lines contain the character strings specific to these lines, but also
information on the file to be produced: its name, extension, and the directory
in which it is expected.

The first command line IN FRONT must contain:

Value	Meaning
+++++	Delimiter, always in columns 1 to 7
PGMCOD	Name of the file to be produced
ext	Extension, on 3 characters maximum

The values are separated by a blank.

Example:

```
*++++++ MYPROGR cbl
```

The second command line IN FRONT must contain:

Value	Meaning
&&&&&	Delimiter, always in columns 1 to 7
path	Path for the writing of files

The values are separated by a blank.

Example:

```
*&&&&&* /vapac/cobol
```

MIA1 - Program Generation

MIA1 - Introduction

This procedure enables you to generate the programs in two files: a file that contains the generated COBOL code and another file that contains the control COBOL code.

It generates the micropatterns which do not come from Macros.

The generation is carried out without line numbers.

MIA1 - User Input

A '*' line with the user code, password and Library code is required.

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	3	bbb	Library code

You must then specify a GCP command line as described in the input of the
GPRT procedure for each program to be generated.

In this migration procedure, errors on user input line are not printed.

MIA1 - Description of Steps

Input recognition: PTU001

Initialization of the output file(s)

Generation/Print commands : BVPACA10

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension
PAC7AJ	DUMMY	Input	Development Database journal
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7ME	&&MIA1MB	Input	User transactions
PAC7MV	&&PAC7MV	Output	Update transactions
PAC7MG	&&PAC7MG	Output	Generation/Print commands
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Dispatch of command lines : BVPACA20

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users

Code	Physical name	Type	Label
PACGGK	&INDSV..BVPGK	Input/ Output	Generation rights
PAC7JG	&&PAC7KC	Output	Extractor command
PAC7KF	&UWK	Output	Work file
PAC7MG	&&PAC7MG	Input	Generation/Print commands
PAC7W1	DUMMY	Input/ Output	Work file
PAC7KU	&&PAC7KU	Output	Output report
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Program generation : BVPACMM1

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PAC7SC	&INDSV..BVPSC	Input	Generation skeleton
PAC7EP		Output	Work file
PAC7GI		Output	Work file
PAC7GP	&&PAC7GP	Output	Work file
PAC7JG	&&PAC7JG	Output	Work file
PAC7KC	&&PAC7KC	Output	Work file
PAC7KP		Output	Work file
PAC7G1	&&PAC7G1	Output	Work file
PAC7G2	&OUTFIL2	Output	C9 COBOL file
PAC7G3	&OUTFILE	Output	Control COBOL file
PAC7WB		Output	Work file
PAC7WC		Output	Work file

Code	Physical name	Type	Label
PAC7WM		Output	Work file
PAC7WP		Output	Work file
PAC7W1		Output	Work file
PAC7W2		Output	Work file
PAC7W3		Output	Work file
PAC7W4		Output	Work file
PAC7W5		Output	Work file
PAC7W6		Output	Work file
PAC7CA		Output	Work file
PAC7CM		Output	Work file
PAC7IA		Report	General printout of the program stream
SORTWK01		Sort	
SORTWK01		Sort	
SORTWK01		Sort	

MIA1 - Execution JCL

```
//* -------------------------------------------------------
//*       VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*       PROGRAM GENERATION
//*
//* -------------------------------------------------------
//*
//BVPMIA1 PROC BASE=$BASE,                 CODE OF VAPAC DATABASE
//         INDSV='$INDSV',          INDEX OF VSAM SYSTEM FILES
//         INDSN='$INDSN',      INDEX OF NON VSAM SYSTEM FILES
//         INDUV='$INDUV',           INDEX OF USER VSAM FILES
//*:       SYSTCAT='$SCAT',             SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',  LIBRARY OF LOAD-MODULES
//         OUTFILE=,                OUTPUT CONTROL COBOL FILE
//         OUTFIL2=,                    OUTPUT COBOL C9 FILE
//         SPAOT='(CYL,(100,100))',      OUTPUT FILE SPACE
//         SPAOU='(CYL,(200,200))',      OUTPUT FIL2 SPACE
//         VOLS='SER=$VOLUN',                BACKUP VOLUME
//         UNITS=$UNITUN,                      BACKUP UNIT
//         SPAWK='(CYL,(50,10),RLSE)',     WORK FILE SPACE
//         SORTLIB='$BIBT',                   SORT LIBRARY
//         LSR='BLSR',               LSR BATCH SYSTEM NAME
//         UWK=$UWK,                             WORK UNIT
//         OUT=$OUT                           OUTPUT CLASS
//****************************************************************
//INPUT   EXEC PGM=BVPTU001
```

```
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&MIA1MB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(CYL,(10,10),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLFILE  EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
//*------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
//PRLFIL2  EXEC PGM=BVPRMSYS,PARM='&OUTFIL2'
//*------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFIL2,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFIL2  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFIL2,DISP=(OLD,DELETE)
//PRDFIL2  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFIL2),PARM='&OUTFIL2'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
```

```
//PACROU DD DSN=&&DLFIL2,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFIL2  EXEC PGM=IDCAMS,COND=(4,EQ,LISFIL2)
//*-------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFIL2,DISP=(OLD,DELETE)
//PACA10 EXEC PGM=BVPACA10
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7AJ   DD DUMMY
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7ME   DD DSN=&&MIA1MB,DISP=(OLD,PASS)
//PAC7MG   DD DSN=&&PAC7MG,DISP=(,PASS),
//           UNIT=&UNITS,VOL=&VOLS,
//           SPACE=&SPAWK,
//           DCB=(RECFM=FB,LRECL=153,BLKSIZE=15300)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),
//           UNIT=&UNITS,VOL=&VOLS,
//           SPACE=&SPAWK,
//           DCB=(RECFM=FB,LRECL=170,BLKSIZE=17000)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACA20 EXEC PGM=BVPACA20,COND=(4,LT,PACA10)
//*-----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
```

```
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PACGGK   DD DSN=&INDSV..BVPGK,DISP=SHR
//PAC7JG   DD DSN=&&PAC7KC,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=1600)
//PAC7KF   DD UNIT=&UWK,SPACE=(CYL,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7MG   DD DSN=&&PAC7MG,DISP=(OLD,PASS)
//PAC7W1   DD DUMMY
//PAC7KU   DD DSN=&&PAC7KU,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=260,BLKSIZE=26000)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACM1  EXEC PGM=BVPACMM1,COND=((4,LT,PACA10),
//      (4,LT,PACA20))
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7SC   DD DSN=&INDSV..BVPSC,DISP=SHR
//PAC7EP   DD UNIT=&UWK,SPACE=(CYL,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7GI   DD DUMMY,DCB=BLKSIZE=80
//PAC7GP   DD DSN=&&PAC7GP,UNIT=&UWK,DISP=(,PASS),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=12560),
//            SPACE=(CYL,(20,5),RLSE)
//PAC7JG   DD DSN=&&PAC7JG,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=3440),
//            SPACE=(CYL,(5,1),RLSE)
//PAC7KC   DD DSN=&&PAC7KC,DISP=(OLD,PASS)
//PAC7KP   DD UNIT=&UWK,SPACE=(CYL,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7G1   DD DSN=&&PAC7G1,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
```

```
//              SPACE=&SPAOT,
//              DCB=(RECFM=FB,BLKSIZE=23550,LRECL=150)
//PAC7G2   DD DSN=&OUTFIL2,DISP=(,CATLG),
//              UNIT=&UNITS,VOL=&VOLS,
//              SPACE=&SPAOU,
//              DCB=(RECFM=FB,BLKSIZE=12560,LRECL=80)
//PAC7G3   DD DSN=&OUTFILE,DISP=(,CATLG),
//              UNIT=&UNITS,VOL=&VOLS,
//              SPACE=&SPAOT,
//              DCB=(RECFM=FB,BLKSIZE=23550,LRECL=150)
//PAC7WB   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7WC   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7WM   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7WP   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7W1   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7W2   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7W3   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7W4   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27180
//PAC7W5   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7W6   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7CA   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=23550
//PAC7CM   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=23550
//PAC7IA   DD SYSOUT=&OUT
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,3,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,3,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,3,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
```

MIA2 - Screen Generation

MIA2 - Introduction

This procedure enables you to generate the Screens in two files: a file that contains the generated COBOL code and another file that contains the control COBOL code.

It generates the micropatterns which do not come from Macros.

The generation is carried out without line numbers.

MIA2 - User Input

A '*' line with the user code, password and Library code is required.

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password

Pos.	Len.	Value	Meaning
19	3	bbb	Library code

You must then specify a GCO command line as described in the input of the GPRT procedure for each screen to be generated.

In this migration procedure, errors on user input line are not printed.

MIA2 - Description of Steps

Input recognition: PTU001

Initialization of the output file(s)

Generation/Print commands : BVPACA10

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension
PAC7AJ	DUMMY	Input	Development Database journal
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7ME	&&MIA2MB	Input	User transactions
PAC7MV	&&PAC7MV	Output	Update transactions
PAC7MG	&&PAC7MG	Output	Generation/Print commands
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Dispatch of command lines : BVPACA20

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index

Code	Physical name	Type	Label
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PACGGK	&INDSV..BVPGK	Input/Output	Generation rights
PAC7JG	&&PAC7KC	Output	Extractor command
PAC7KF	&UWK	Output	Work file
PAC7MG	&&PAC7MG	Input	Generation/Print commands
PAC7W1	DUMMY	Input/Output	Work file
PAC7KU	&&PAC7KU	Output	Output report
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Screen generation : BVPACMM2

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PAC7SG	&INDSV..BVPSG	Input	Generation skeleton
PAC7EE		Input	Work file
PAC7GE	&&PAC7GE	Output	Work file
PAC7JG	&&PAC7JG	Output	Work file
PAC7KC	&&PAC7KC	Output	Work file
PAC7KE		Output	Work file
PAC7G1	&&PAC7G1	Output	Work file
PAC7G2	&OUTFIL2	Output	C9 COBOL file
PAC7G3	&OUTFILE	Output	Control COBOL file
PAC7W1		Output	Work file

Code	Physical name	Type	Label
PAC7W2		Output	Work file
PAC7EZ		Output	Work file
PACM2W		Output	Work file
PACM2P		Output	Work file
PAC2GW		Output	Work file
PAC2GP		Output	Work file
PAC780		Output	Work file
PAC7IA		Report	General printout of the program stream
SORTWK01		Sort	
SORTWK01		Sort	
SORTWK01		Sort	

MIA2 - Execution JCL

```
//* -------------------------------------------------------
//*       VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*         SCREEN GENERATION
//*
//* -------------------------------------------------------
//*
//BVPMIA2 PROC BASE=$BASE,               CODE OF VAPAC DATABASE
//         INDSV='$INDSV',          INDEX OF VSAM SYSTEM FILES
//         INDSN='$INDSN',      INDEX OF NON VSAM SYSTEM FILES
//         INDUV='$INDUV',           INDEX OF USER VSAM FILES
//*:       SYSTCAT='$SCAT',             SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',   LIBRARY OF LOAD-MODULES
//         OUTFILE=,                OUTPUT CONTROL COBOL FILE
//         OUTFIL2=,                   OUTPUT COBOL C9 FILE
//         SPAOT='(CYL,(100,100))',        OUTPUT FILE SPACE
//         SPAOU='(CYL,(200,200))',        OUTPUT FIL2 SPACE
//         VOLS='SER=$VOLUN',                 BACKUP VOLUME
//         UNITS=$UNITUN,                       BACKUP UNIT
//         SPAWK='(CYL,(50,10),RLSE)',     WORK FILE SPACE
//         SORTLIB='$BIBT',                    SORT LIBRARY
//         LSR='BLSR',                 LSR BATCH SYSTEM NAME
//         UWK=$UWK,                               WORK UNIT
//         OUT=$OUT                             OUTPUT CLASS
//*****************************************************************
//INPUT   EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&MIA2MB,DISP=(,PASS),
```

```
//              UNIT=&UWK,SPACE=(CYL,(10,10),RLSE),
//              DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLFILE  EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*------------------------------------
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//        DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*--------------------------------------------------
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//        DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
//*------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
//PRLFIL2  EXEC PGM=BVPRMSYS,PARM='&OUTFIL2'
//*------------------------------------
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//        DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFIL2,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFIL2  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFIL2,DISP=(OLD,DELETE)
//PRDFIL2  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFIL2),PARM='&OUTFIL2'
//*--------------------------------------------------
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//        DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFIL2,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFIL2  EXEC PGM=IDCAMS,COND=(4,EQ,LISFIL2)
//*------------------------------------
```

```
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFIL2,DISP=(OLD,DELETE)
//PACA10 EXEC PGM=BVPACA10
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7AJ   DD DUMMY
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7ME   DD DSN=&&MIA2MB,DISP=(OLD,PASS)
//PAC7MG   DD DSN=&&PAC7MG,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=153,BLKSIZE=15300)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=17000)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACA20 EXEC PGM=BVPACA20,COND=(4,LT,PACA10)
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PACGGK   DD DSN=&INDSV..BVPGK,DISP=SHR
```

```
//PAC7JG   DD DSN=&&PAC7KC,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=1600)
//PAC7KF   DD UNIT=&UWK,SPACE=(CYL,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7MG   DD DSN=&&PAC7MG,DISP=(OLD,PASS)
//PAC7W1   DD DUMMY
//PAC7KU   DD DSN=&&PAC7KU,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=260,BLKSIZE=26000)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACM2  EXEC PGM=BVPACMM2,COND=((4,LT,PACA10),
//       (4,LT,PACA20))
//*-----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7SG   DD DSN=&INDSV..BVPSG,DISP=SHR
//PAC7EE   DD UNIT=&UWK,SPACE=(CYL,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7GE   DD UNIT=&UWK,SPACE=(CYL,(20,5),RLSE),DCB=BLKSIZE=16000

//PAC7JG   DD DSN=&&PAC7JG,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=3440),
//            SPACE=(CYL,(5,1),RLSE)
//PAC7KC   DD DSN=&&PAC7KC,DISP=(OLD,PASS)
//PAC7KE   DD UNIT=&UWK,SPACE=(CYL,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7G1   DD DSN=&&PAC7G1,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAOT,
//            DCB=(RECFM=FB,BLKSIZE=16000,LRECL=160)
//PAC7G2   DD DSN=&OUTFIL2,DISP=(,CATLG),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAOU,
//            DCB=(RECFM=FB,BLKSIZE=12560,LRECL=80)
//PAC7G3   DD DSN=&OUTFILE,DISP=(,CATLG),
```

```
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAOT,
//            DCB=(RECFM=FB,BLKSIZE=16000,LRECL=160)
//PAC7W1   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=26000
//PAC7W2   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7EZ   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=17120
//PAC7IA   DD SYSOUT=&OUT
//PACM2W   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PACM2P   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PAC2GW   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PAC2GP   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PAC780   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,3,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,3,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,3,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
```

MIA3 - Client Generation

MIA3 - Introduction

This procedure enables you to generate the Clients in two files: a file that contains the generated COBOL code and another file that contains the control COBOL code.

It generates the micropatterns which do not come from Macros.

The generation is carried out without line numbers.

MIA3 - User Input

A '*' line with the user code, password and Library code is required.

Pos.	Lon.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	3	bbb	Library code

You must then specify a GGC command line as described in the input of the GPRT procedure for each client to be generated.

In this migration procedure, errors on user input line are not printed.

MIA3 - Description of Steps

Input recognition: PTU001

Initialization of the output file(s)

Generation/Print commands : BVPACA10

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension
PAC7AJ	DUMMY	Input	Development Database journal
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7ME	&&MIA3MB	Input	User transactions
PAC7MV	&&PAC7MV	Output	Update transactions
PAC7MG	&&PAC7MG	Output	Generation/Print commands
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Dispatch of command lines : BVPACA20

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PACGGK	&INDSV..BVPGK	Input/Output	Generation rights
PAC7JG	&&PAC7KC	Output	Extractor command
PAC7KF	&UWK	Output	Work file
PAC7MG	&&PAC7MG	Input	Generation/Print commands

Code	Physical name	Type	Label
PAC7W1	DUMMY	Input/Output	Work file
PAC7KU	&&PAC7KU	Output	Output report
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Client generation : BVPACMM3

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PAC7SS	&INDSV..BVPSS	Input	Generation skeleton
PAC7EG		Input	Work file
PAC7GG	&&PAC7GG	Output	Work file
PAC7JG	&&PAC7JG	Output	Work file
PAC7KC	&&PAC7KC	Output	Work file
PAC7KG		Output	Work file
PAC7G1	&&PAC7G1	Output	Work file
PAC7G2	&OUTFIL2	Output	C9 COBOL file
PAC7G3	&OUTFILE	Output	Control COBOL file
PAC7W1		Output	Work file
PAC7W2		Output	Work file
PAC7EZ		Output	Work file
PACM2W		Output	Work file
PACM2P		Output	Work file
PAC2GW		Output	Work file
PAC2GP		Output	Work file

Code	Physical name	Type	Label
PAC780		Output	Work file
PAC7IA		Report	General printout of the program stream
SORTWK01		Sort	
SORTWK01		Sort	
SORTWK01		Sort	

MIA3 - Execution JCL

```
//* -------------------------------------------------------
//*        VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*        CLIENT GENERATION
//*
//* -------------------------------------------------------
//*
//BVPMIA3 PROC BASE=$BASE,               CODE OF VAPAC DATABASE
//         INDSV='$INDSV',               INDEX OF VSAM SYSTEM FILES
//         INDSN='$INDSN',           INDEX OF NON VSAM SYSTEM FILES
//         INDUV='$INDUV',               INDEX OF USER VSAM FILES
//*:       SYSTCAT='$SCAT',              SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',     LIBRARY OF LOAD-MODULES
//         OUTFILE=,                  OUTPUT CONTROL COBOL FILE
//         OUTFIL2=,                     OUTPUT COBOL C9 FILE
//         SPAOT='(CYL,(50,50))',            OUTPUT FILE SPACE
//         SPAOU='(CYL,(100,100))',          OUTPUT FIL2 SPACE
//         VOLS='SER=$VOLUN',                   BACKUP VOLUME
//         UNITS=$UNITUN,                         BACKUP UNIT
//         SPAWK='(CYL,(50,10),RLSE)',        WORK FILE SPACE
//         SORTLIB='$BIBT',                      SORT LIBRARY
//         LSR='BLSR',                   LSR BATCH SYSTEM NAME
//         UWK=$UWK,                                WORK UNIT
//         OUT=$OUT                               OUTPUT CLASS
//****************************************************************
//INPUT   EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&MIA3MB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(CYL,(10,10),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLFILE  EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
```

```
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
//*-------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
//PRLFIL2  EXEC PGM=BVPRMSYS,PARM='&OUTFIL2'
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFIL2,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFIL2  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFIL2,DISP=(OLD,DELETE)
//PRDFIL2  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFIL2),PARM='&OUTFIL2'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFIL2,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFIL2  EXEC PGM=IDCAMS,COND=(4,EQ,LISFIL2)
//*-------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFIL2,DISP=(OLD,DELETE)
//PACA10 EXEC PGM=BVPACA10
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
```

```
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7AJ   DD DUMMY
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7ME   DD DSN=&&MIA3MB,DISP=(OLD,PASS)
//PAC7MG   DD DSN=&&PAC7MG,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=153,BLKSIZE=15300)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=17000)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACA20 EXEC PGM=BVPACA20,COND=(4,LT,PACA10)
//*---------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PACGGK   DD DSN=&INDSV..BVPGK,DISP=SHR
//PAC7JG   DD DSN=&&PAC7KC,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=1600)
//PAC7KF   DD UNIT=&UWK,SPACE=(CYL,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7MG   DD DSN=&&PAC7MG,DISP=(OLD,PASS)
//PAC7W1   DD DUMMY
//PAC7KU   DD DSN=&&PAC7KU,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
```

```
//          SPACE=&SPAWK,
//          DCB=(RECFM=FB,LRECL=260,BLKSIZE=26000)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACM3  EXEC PGM=BVPACMM3,COND=((4,LT,PACA10),
//       (4,LT,PACA20))
//*-------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7SS   DD DSN=&INDSV..BVPSS,DISP=SHR
//PAC7EG   DD UNIT=&UWK,SPACE=(CYL,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7EZ   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=17120
//PAC7GG   DD DSN=&&PAC7GG,UNIT=&UWK,DISP=(,PASS),
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=12560),
//          SPACE=(CYL,(20,5),RLSE)
//PAC7JG   DD DSN=&&PAC7JG,DISP=(,PASS),UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=3440),
//          SPACE=(CYL,(5,1),RLSE)
//PAC7KC   DD DSN=&&PAC7KC,DISP=(OLD,PASS)
//PAC7KG   DD UNIT=&UWK,SPACE=(CYL,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7G1   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PAC7G2   DD DSN=&OUTFIL2,DISP=(,CATLG),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOU,
//          DCB=(RECFM=FB,BLKSIZE=12560,LRECL=80)
//PAC7G3   DD DSN=&OUTFILE,DISP=(,CATLG),
//          UNIT=&UNITS,VOL=&VOLS,
//          SPACE=&SPAOT,
//          DCB=(RECFM=FB,BLKSIZE=24000,LRECL=160)
//PACM2W   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PACM2P   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PAC2GW   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PAC2GP   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PAC780   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PAC7W1   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7W2   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
```

```
//PAC7IA   DD SYSOUT=&OUT
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,3,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,3,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,3,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
```

MIA4 - Server Generation

MIA4 - Introduction

This procedure enables you to generate the Servers in two files: a file that contains the generated COBOL code and another file that contains the control COBOL code.

It generates the micropatterns which do not come from Macros.

The generation is carried out without line numbers.

MIA4 - User Input

A '*' line with the user code, password and Library code is required.

Pos.	Lon.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	3	bbb	Library code

You must then specify a GGS command line as described in the input of the GPRT procedure for each server to be generated.

In this migration procedure, errors on user input line are not printed.

MIA4 - Description of Steps

Input recognition: PTU001

Initialization of the output file(s)

Generation/Print commands : BVPACA10

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index

Code	Physical name	Type	Label
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension
PAC7AJ	DUMMY	Input	Development Database journal
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7ME	&&MIA4MB	Input	User transactions
PAC7MV	&&PAC7MV	Output	Update transactions
PAC7MG	&&PAC7MG	Output	Generation/Print commands
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Dispatch of command lines : BVPACA20

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PACGGK	&INDSV..BVPGK	Input/Output	Generation rights
PAC7JG	&&PAC7KC	Output	Extractor command
PAC7KF	&UWK	Output	Work file
PAC7MG	&&PAC7MG	Input	Generation/Print commands
PAC7W1	DUMMY	Input/Output	Work file
PAC7KU	&&PAC7KU	Output	Output report
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Server generation : BVPACMM4

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PAC7SS	&INDSV..BVPSS	Input	Generation skeleton
PAC7EV		Input	Work file
PAC7GV	&&PAC7GV	Output	Work file
PAC7JG	&&PAC7JG	Output	Work file
PAC7KC	&&PAC7KC	Output	Work file
PAC7KV		Output	Work file
PAC7G1	&&PAC7G1	Output	Work file
PAC7G2	&OUTFIL2	Output	C9 COBOL file
PAC7G3	&OUTFILE	Output	Control COBOL file
PAC7W1		Output	Work file
PAC7W2		Output	Work file
PAC7EZ		Output	Work file
PACM2W		Output	Work file
PACM2P		Output	Work file
PAC2GW		Output	Work file
PAC2GP		Output	Work file
PAC780		Output	Work file
PAC7IA		Report	General printout of the program stream
SORTWK01		Sort	
SORTWK01		Sort	
SORTWK01		Sort	

MIA4 - Execution JCL

```
//* ------------------------------------------------------
//*         VISUALAGE PACBASE
//*
//* ------------------------------------------------------
//*         SERVER GENERATION
//*
//* ------------------------------------------------------
//*
//BVPMIA4 PROC BASE=$BASE,                CODE OF VAPAC DATABASE
//          INDSV='$INDSV',           INDEX OF VSAM SYSTEM FILES
//          INDSN='$INDSN',       INDEX OF NON VSAM SYSTEM FILES
//          INDUV='$INDUV',           INDEX OF USER VSAM FILES
//*:        SYSTCAT='$SCAT',              SYSTEM VSAM CATALOG
//          STEPLIB='$HLQ..SBVPMBR8',   LIBRARY OF LOAD-MODULES
//          OUTFILE=,                 OUTPUT CONTROL COBOL FILE
//          OUTFIL2=,                    OUTPUT COBOL C9 FILE
//          SPAOT='(CYL,(50,50))',        OUTPUT FILE SPACE
//          SPAOU='(CYL,(100,100))',      OUTPUT FIL2 SPACE
//          VOLS='SER=$VOLUN',              BACKUP VOLUME
//          UNITS=$UNITUN,                    BACKUP UNIT
//          SPAWK='(CYL,(50,10),RLSE)',     WORK FILE SPACE
//          SORTLIB='$BIBT',                 SORT LIBRARY
//          LSR='BLSR',              LSR BATCH SYSTEM NAME
//          UWK=$UWK,                          WORK UNIT
//          OUT=$OUT                          OUTPUT CLASS
//*****************************************************************
//INPUT   EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&MIA4MB,DISP=(,PASS),
//           UNIT=&UWK,SPACE=(CYL,(10,10),RLSE),
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLFILE  EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*-------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
```

```
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
//*---------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
//PRLFIL2  EXEC PGM=BVPRMSYS,PARM='&OUTFIL2'
//*---------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFIL2,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFIL2  EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFIL2,DISP=(OLD,DELETE)
//PRDFIL2  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFIL2),PARM='&OUTFIL2'
//*-------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFIL2,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFIL2  EXEC PGM=IDCAMS,COND=(4,EQ,LISFIL2)
//*---------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFIL2,DISP=(OLD,DELETE)
//PACA10 EXEC PGM=BVPACA10
//*-----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7AJ   DD DUMMY
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
```

```
//PAC7ME   DD DSN=&&MIA4MB,DISP=(OLD,PASS)
//PAC7MG   DD DSN=&&PAC7MG,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=153,BLKSIZE=15300)
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=17000)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACA20 EXEC PGM=BVPACA20,COND=(4,LT,PACA10)
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PACGGK   DD DSN=&INDSV..BVPGK,DISP=SHR
//PAC7JG   DD DSN=&&PAC7KC,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=1600)
//PAC7KF   DD UNIT=&UWK,SPACE=(CYL,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7MG   DD DSN=&&PAC7MG,DISP=(OLD,PASS)
//PAC7W1   DD DUMMY
//PAC7KU   DD DSN=&&PAC7KU,DISP=(,PASS),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=260,BLKSIZE=26000)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,2,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PACM4  EXEC PGM=BVPACMM4,COND=((4,LT,PACA10),
//       (4,LT,PACA20))
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
```

```
//         DD DSN=$BCOB,DISP=SHR
//*        DD DSN=$DFHEXC,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7SS   DD DSN=&INDSV..BVPSS,DISP=SHR
//PAC7EV   DD UNIT=&UWK,SPACE=(CYL,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7EZ   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=17120
//PAC7GV   DD DSN=&&PAC7GV,UNIT=&UWK,DISP=(,PASS),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=12560),
//            SPACE=(CYL,(20,5),RLSE)
//PAC7JG   DD DSN=&&PAC7JG,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=3440),
//            SPACE=(CYL,(5,1),RLSE)
//PAC7KC   DD DSN=&&PAC7KC,DISP=(OLD,PASS)
//PAC7KV   DD UNIT=&UWK,SPACE=(CYL,(20,5),RLSE),DCB=BLKSIZE=27820
//PAC7G1   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PAC7G2   DD DSN=&OUTFIL2,DISP=(,CATLG),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAOU,
//            DCB=(RECFM=FB,BLKSIZE=12560,LRECL=80)
//PAC7G3   DD DSN=&OUTFILE,DISP=(,CATLG),
//            UNIT=&UNITS,VOL=&VOLS,
//            SPACE=&SPAOT,
//            DCB=(RECFM=FB,BLKSIZE=24000,LRECL=160)
//PACM2W   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PACM2P   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PAC2GW   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PAC2GP   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PAC780   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=16000
//PAC7W1   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7W2   DD UNIT=&UWK,SPACE=&SPAWK,DCB=BLKSIZE=27820
//PAC7IA   DD SYSOUT=&OUT
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,3,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,3,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,3,,CONTIG)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
```

TRDQ - Conversion of DBD Blocks into SQL Blocks

TRDQ - Introduction

Principle

The TRDQ utility transforms DB2 Database Blocks (DB type) into SQL DBD Blocks (Q2 type).

First step

From the command lines, input lines of RMEN are formatted with the RENAME option (RN).

Second step

RMEN renames the DB-type Block codes into new Block codes that are specified in the command line.

RMEN creates a sequential file that contains:
- Creation and modification transactions with the new Block code, sorted by:
  - ascending library hierarchical level,
  - library,
  - record type (definitions, descriptions, uses).
- Deletion transactions with the old Block code, sorted by:
  - descending library hierarchical level,
  - library,
  - record type (uses, descriptions, definitions).

Third step

Transformation of DB-type Blocks into Q2-type Blocks.

From the output file of RMEN and the command lines, transformation of records:
- Definition of new Blocks: the DB-type is transformed into Q2-type. The external name and the label can be modified.
- Description of Codasyl-DB2 Database Blocks (-DC): it is transformed into the description of relational Blocks (-DR).
- Documentation of Codasyl-DB2 Database Blocks description (-DC...GG; -DC...GC): it is transformed into the documentation of relational Blocks description (-DR...GG; -DR...GC).

The other records produced by RMEN are copied without transformation in the output transactions file.

Execution conditions

None, since the database is not directly updated.

Batch procedure access authorization option: the use of the RMEN procedure is subject to a separate purchase agreement.

Printed output

This procedure prints, in the PACX (RMEN) step, a selection report with the errors, if any.

Result

The output file is a sequential file that contains the transformed Q2 Block transactions. These transactions will be used as input to the Database Update (UPDT) procedure.

Note

It is possible to keep the original Block code by running RMEN to rename the new Q2-type code.

TRDQ - User Input

One '*' line containing the DB-type DBD Block(s) to be transformed:

This constraint is imposed by RMEN.

The procedure must be executed for each new extraction context:

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password
19	3	bbb	Library code to extract
22	4	ssss	Session number (default=current)
26	1	'T'	Test version of frozen session
29	4	RMEN	Code of extractor
33	1	'1'	Formatting for UPDT
50	1	' '	Password not transferred into the output file

Pos.	Len.	Value	Meaning
		'1'	The password is transferred

One command line per DB-type DBD Block to be transformed into Q2-type SQL Block:

Pos.	Len.	Value	Meaning
2	2	'W1'	Line code
4	6	bbbbbb	Pacbase code of the DB-type Block to be transformed
10	6	qqqqqq	Pacbase code of the resulting Q2-type Block. This new code must be different from any existing Block code.
			Optional modifications for the resulting Q2-type Block:
16	8	eeeeeeee	External name of the Q2-type Block
24	1	x	Control card in front of the Q2 Block
25	1	y	Control card in back of the Q2 Block
26	36	nn....	Q2 Block name
62	2	Q2	Q2 Block type

TRDQ - Description of Steps

Input recognition: PTU001

Check of VSAM files: IDCAMS

RMEN input formatting: BVPTUDQ1

Code	Physical name	Type	Label
PAC7MB	&&TRDQMB	Input	User input
PAC7ME	&&PACXMB	Output	Input file for RMEN

Initialization of the KSDS work file: IDCAMS

Extraction: PACX

This step extracts transactions according to user input.

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AY	&INDUV..&BASE.AY	Input	Development Database extension data
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7PJ	DUMMY	Input	Archived transactions
PAC7MB	&&MIBAMB	Input	User input
PAC7MA	DUMMY	Input	Work file
PAC7ES	DUMMY	Input	Work file
PAC7BM	&&PACXBM	Input/Output	User input
PAC7MM	&&PACXMM	Input/Output	Work file
PAC7MJ	&&PACXMJ	Input/Output	Work file
PAC7TE	&&PACXTE	Input/Output	Work file
PAC7RE	&&PACXRE	Input/Output	Work file
PAC7RM	&&PACXRM	Input/Output	Work file
PAC7WD	&&PACXWD	Input/Output	Extracted transactions
SYSEXT	&INDUV..SYSEXT.&USER	Input/Output	Work file
PAC7MV	&&MV	Output	Work file
PAC7CP	DUMMY	Output	Work file
PAC7MR	&&MR	Output	Work file
PAC7MX	&&MX	Output	Entities not extracted (PACX)
PAC7GY	DUMMY	Output	Extracted transactions for UPDP
PAC7RQ	&&QR	Output	Matching Entity/Library
PAC7TD	&&TD	Output	Work file
PAC7UE	&&UE	Output	Work file
PAC7IA		Report	General printout of the program stream
PAC7DD		Report	Errors on input transactions
PAC7ED		Report	Extractions report

Code	Physical name	Type	Label
PAC7EE		Report	Extractions report
PAC7EG		Report	Extractions report
PAC7EM		Report	Extractions report
PAC7EP		Report	Extractions report
PAC7EQ		Report	Extractions report
PAC7EU		Report	Extractions report
PAC7EZ		Report	Extractions report
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Deletion of the KSDS work file: IDCAMS

Transformation of DB Blocks into SQL Blocks: BVPTUDQ3

Code	Physical name	Type	Label
PAC7MB	&&TRDQMB	Input	User input
PAC7MX	&&MV	Input	File produced by RMEN
PAC7MV	&OUTFILE	Output	Update transactions

TRDQ - Execution JCL

```
//* -------------------------------------------------------
//*       VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*
//*        CONVERSION OF DBD BLOCKS INTO SQL BLOCKS
//*
//* -------------------------------------------------------
//*
//BVPTRDQ  PROC BASE=$BASE,              CODE OF DEVPT DATABASE
//         INDSV='$INDSV',            INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',        INDEX OF SYSTEM NON-VSAM FILES
//         INDUV='$INDUV',              INDEX OF USER VSAM FILES
//*:       VSAMCAT='$VCAT',                  USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',                SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         SORTLIB='$BIBT',                      SORT LIBRARY
//         OUTFILE=,                     OUTPUT MV BLOC FILE
//         USER=,                                  USER CODE
//         LSR='BLSR',                   LSR BATCH SYSTEM NAME
//         OUT=$OUT,          UTILITIES AND ERRORS OUTPUT CLASS
//         OUTL=$OUT,                    OUTPUT CLASS OF REPORTS
```

```
//        UWK=$UWK,                              WORK UNIT
//        SPAMB='(TRK,(5,1),RLSE)',        REQUEST FILE SPACE
//        SPAMV='(TRK,(50,10),RLSE)',          UPDT FILE SPACE
//        SPATD='(TRK,(50,10),RLSE)'          CPSN FILE SPACE
//**************************************************************
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//        DD DSN=$BCOB,DISP=SHR
//CARTE   DD DDNAME=SYSIN
//PAC7MB  DD DSN=&&TRDQMB,DISP=(,PASS),
//           UNIT=&UWK,SPACE=&SPAMB,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRLFILE EXEC PGM=BVPRMSYS,PARM='&OUTFILE'
//*-------------------------------------
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//        DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(LIOUTFIL),DISP=SHR
//PACROU DD DSN=&&LIFILE,DISP=(,PASS),SPACE=(TRK,1),
//        UNIT=&UWK,
//        DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//LISFILE EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&LIFILE,DISP=(OLD,DELETE)
//PRDFILE  EXEC PGM=BVPRMSYS,COND=(4,EQ,LISFILE),PARM='&OUTFILE'
//*------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//        DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLOUTFIL),DISP=SHR
//PACROU DD DSN=&&DLFILE,DISP=(,PASS),SPACE=(TRK,1),
//        UNIT=&UWK,
//        DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELFILE  EXEC PGM=IDCAMS,COND=(4,EQ,LISFILE)
//*-------------------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLFILE,DISP=(OLD,DELETE)
//VERIFY EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AN  DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AR  DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AY  DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PACGGN  DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGR  DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGU  DD DSN=&INDSV..BVPGU,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAN),DISP=SHR
//        DD DSN=&INDSN..BVPSY(VERIFAR),DISP=SHR
//        DD DSN=&INDSN..BVPSY(VERIFAY),DISP=SHR
```

```
//         DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DFSYSEXT),DISP=SHR
//PACROU DD DSN=&&DFSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFSYSEXT,DISP=(OLD,DELETE)
//MAXKEY  EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF   DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//MAXKEY   DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//PTUDQ1 EXEC PGM=BVPTUDQ1
//*--------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//PAC7MB   DD DSN=&&TRDQMB,DISP=(OLD,PASS)
//PAC7ME   DD DSN=&&PACXMB,DISP=(,PASS),
//         UNIT=&UWK,
//         SPACE=&SPAMB,
//         DCB=(RECFM=FB,BLKSIZE=6160,LRECL=80)
//SYSPRINT DD SYSOUT=&OUT

//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PACX   EXEC PGM=BVPACX,REGION=0K
//*------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
```

```
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7PJ   DD DUMMY
//PAC7IA   DD SYSOUT=&OUTL
//PAC7DD   DD SYSOUT=&OUTL
//PAC7ED   DD SYSOUT=&OUTL
//PAC7EE   DD SYSOUT=&OUTL
//PAC7EG   DD SYSOUT=&OUTL
//PAC7EM   DD SYSOUT=&OUTL
//PAC7EP   DD SYSOUT=&OUTL
//PAC7EQ   DD SYSOUT=&OUTL
//PAC7EU   DD SYSOUT=&OUTL
//PAC7EZ   DD SYSOUT=&OUTL
//PAC7MA   DD DUMMY
//PAC7ES   DD DUMMY
//SYLSR    DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//SYSEXT   DD SUBSYS=(&LSR,'DDNAME=SYLSR')
//PAC7MB   DD DSN=&&PACXMB,DISP=(OLD,DELETE,DELETE)
//PAC7BM   DD DSN=&&PACXBM,DISP=(,DELETE),UNIT=&UWK,
//            DCB=BLKSIZE=3440,SPACE=&SPAMB
//PAC7MM   DD DSN=&&PACXMM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=113,BLKSIZE=11300)
//PAC7MJ   DD DSN=&&PACXMJ,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=158,BLKSIZE=6320)
//PAC7TE   DD DSN=&&PACXTE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=323,BLKSIZE=6460)
//PAC7RE   DD DSN=&&PACXRE,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=36,BLKSIZE=6012)
//PAC7RM   DD DSN=&&PACXRM,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7CP   DD DUMMY
//PAC7RQ   DD DUMMY
//PAC7WD   DD DSN=&&PACXWD,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7MV   DD DSN=&&MV,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MR   DD DSN=&&MR,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MX   DD DSN=&&MX,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7TD   DD DSN=&&TD,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPATD,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7GY   DD DUMMY
```

```
//PAC7UE   DD DSN=&&UE,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMV,
//            DCB=(RECFM=FB,LRECL=230,BLKSIZE=6440)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*----------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLSYSEXT),DISP=SHR
//PACROU DD DSN=&&DLSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*-----------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLSYSEXT,DISP=(OLD,DELETE)
//PTUDQ3 EXEC PGM=BVPTUDQ3,COND=(4,LT,PACX)
//*--------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//PAC7MB   DD DSN=&&TRDQMB,DISP=(OLD,DELETE)
//PAC7MX   DD DSN=&&MV,DISP=(OLD,DELETE)
//PAC7MV   DD DSN=&OUTFILE,DISP=(,CATLG),
//         UNIT=&UWK,
//         SPACE=&SPAMV,
//         DCB=(RECFM=FB,BLKSIZE=6160,LRECL=80)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

Chapter 9. Components

Server Environment Components

Introduction

One of the purposes of the product is to manage permanent data in either batch or on-line mode, by using two types of resources:

- Libraries in which the programs which make up the system, and the parameters required to run the system, are stored:
  - One On-Line Program library,
  - One Batch Program library,
  - One library for the common parameters and the Administration Database,
  - One parameter library for each Development Database,
  - One library for the batch procedures' JCLs.
- Permanent files, containing the data handled by the programs defined previously. These files can be classified into two categories:
  - System files, which are not linked to a particular Development Database and remain relatively unchanged,
  - Evolving files which are associated to a Development Database and whose volumes vary according to the updates performed.

Security Systems Interface Extension

Sub-programs are used as interface between VA Pac and the site's security system.

For RACF, the sub-program coded BVPSECRA must be installed in an authorized library by copying the module found in the batch load-modules library (SBVPMBR8) under the name BVPSECUR.

Program	Security system
BVPSECRA	RACF
BVPTSS	TOPSECRET Batch
BVPTSSC	TOPSECRET CICS

For more information on the operation of this extension, refer to chapter 'Installation of Server Environment', Subchapter 'Other Installations', 'Security Systems Interface'.

On-Line Documentation

Besides the libraries described in the preceding subchapters, the VA PAC system includes the AE file which contains the error messages and on-line documentation.

Characteristics	Value
Size	approximately 50,000 records per language
Organization	VSAM-KSDS
Recsize	80
CI Size	4,096 (data) 1,024 (index)
Key	12 (position 0)
Use	batch and TP
Dsname	&INDSV..BVPAE

Generation Skeletons

The product also includes the following files:

- A generation skeleton file (SA file) used by the Batch generator function for COBOL API.

Characteristics	Value
Size	Approx. 69 records
Organization	VSAM-KSDS
Recsize	4,605
CI Size	5,120 (data) 1,536 (index)
Key	5 (position 0)
Utilization	Batch only
Dsname	&INDSV..BVPSA

- A generation skeleton file (SC file) used by the Batch generator function.

Characteristics	Value
Size	Approximately 45 records
Organization	VSAM-KSDS
Recsize	3,204
CI Size	3,584 (data) 1,024 (index)
Key	4 (position 0)
Dsname	&INDSV..BVPSC

- A generation skeleton file (SG file) used by the On-Line Systems Development and Database generator functions.

Characteristics	Value
Size	Approx. 450 records
Organization	VSAM-KSDS
Recsize	4,605
CI Size	5,120 (data) 1,536 (index)
Key	5 (position 0)
Utilization	Batch only
Dsname	&INDSV..BVPSG

- A generation skeleton file (SN file) used by the eBusiness generator function.

Characteristics	Value
Size	Approx. 350 records
Organization	VSAM-KSDS
Recsize	4,605
CI Size	5,120 (data) 1,536 (index)
Key	5 (position 0)
Utilization	Batch only
Dsname	&INDSV..BVPSN

- A generation skeleton file (SR file), used by the Reverse generator function.

Characteristics	Value
Size	Approx. 25 records
Organization	VSAM-KSDS
Recsize	4,605
CI Size	5,120 (data) 512 (index)
Key	5 (position 0)
Utilization	Batch only
Dsname	&INDSV..BVPSR

- A generation skeleton file (SP file) used by the PAF function for the generation of extractors.

Characteristics	Value
Size	Approx. 5 records
Organization	VSAM-KSDS
Recsize	4,605
CI Size	5,120 (data) 512 (index)
Key	5 (position 0)
Utilization	Batch only
Dsname	&INDSV..BVPSP

- A skeleton file (SF file) used by the PAF function for the generation of extractors.

Characteristics	Value
Size	Approx. 3,000 records
Organization	Sequential
Lrecl	119
Utilization	Batch only
Dsname	&INDSN..BVPSF

- A generation skeleton file (SS file), used by the eBusiness generator function.

Characteristics	Value
Size	Approx. 600 records
Organization	VSAM-KSDS
Recsize	4,605
CI Size	5,120 (data) 1,536 (index)
Key	5 (position 0)
Utilization	Batch only
Dsname	&INDSV..BVPSS

Parameters

System Parameters Library

The VA Pac system parameters library contains all the system utility programs parameters used in the batch procedures for the installation and operation of the Administration and Development Databases, and in the user standard PAF procedures.

Characteristics	Value
Size	Approx. 20 blocks of 6,080 bytes
Organization	PDS
DCB	Recfm=FB, Lrecl=80, Blksize=6,080
Dsname	&INDSN..BVPSY

The information on names and disks (catalog) is initialized according to the parameters entered upon installation.

Caution

This information should not be modified except in particular cases.

Member	Contents or format	Special indication
BLBVPQU	GENERATION DATA GROUP	
DFBVPAE	DELETE/DEFINE AE	
DFBVPGJ	DELETE/DEFINE GJ	
DFBVPGN	DELETE/DEFINE GN	
DFBVPGR	DELETE/DEFINE GR	
DFBVPGS	DELETE/DEFINE GS	
DFBVPGU	DELETE/DEFINE GU	
DFBVPGY	DELETE/DEFINE GY	
DFBVPLB	DELETE/DEFINE LB	Modifiable (5)
DFBVPPA	DELETE/DEFINE PA	Updatable (1)
DFBVPQJ	DELETE/DEFINE QJ	
DFBVPSA	DELETE/DEFINE SA	
DFBVPSC	DELETE/DEFINE SC	
DFBVPSG	DELETE/DEFINE SG	
DFBVPSN	DELETE/DEFINE SN	
DFBVPSP	DELETE/DEFINE SP	
DFBVPSR	DELETE/DEFINE SR	
DFBVPSS	DELETE/DEFINE SS	
DFBVPTR	DELETE/DEFINE TR	
DFBVPTY	DELETE/DEFINE TY	
DFBVPUP	DELETE/DEFINE UP	

Member	Contents or format	Special indication
DFBVPUQ	DELETE/DEFINE UQ	
DFBVPUU	DELETE/DEFINE UU	
DLBVPUU	DELETE	
DFBVPWS	DELETE/DEFINE WS	Modifiable (6)
DFBVPGK	DELETE/DEFINE GK	
DFDSMSDC	DELETE/DEFINE DC	DSMS: Development Database element (2)
DFSYIANA	DEFINE	Updatable
DLSYIANA	DELETE	
DFSYSEXT	DEFINE	Updatable (3)
DLSYSEXT	DELETE	
DFSYSPAF	DEFINE	Updatable (4)
DLSYSPAF	DELETE	
DFSYTRDU	DEFINE	
DLSYTRDU	DELETE	
DFSYTRPF	DEFINE	
DFWKREOR	DEFINE	
DLWKREOR	DELETE	
DFWYREOR	DEFINE	
DLWYREOR	DELETE	
DFWKROAD	DEFINE	
DLWKROAD	DELETE	
DFWYROAD	DEFINE	
DLWYROAD	DELETE	
DFTABTDF	DELETE/DEFINE TD	TABLES: Description
DLPQCE	DELETE	
KEY01	00000001	
LIBVPGJ	LISTCAT - GJ	
VERIFAE	VERIFY (PAC7AE)	
VERIFAJ	VERIFY (PAC7AJ)	
VERIFAN	VERIFY (PAC7AN)	
VERIFAR	VERIFY (PAC7AR)	
VERIFAY	VERIFY (PAC7AY)	

Member	Contents or format	Special indication
VERIFEM	VERIFY (PAC7EM)	
VERIFGJ	VERIFY (PAC7GJ)	
VERIFGN	VERIFY (PAC7GN)	
VERIFGR	VERIFY (PAC7GR)	
VERIFGU	VERIFY (PAC7GU)	
VERIFGY	VERIFY (PAC7GY)	
VERIFLB	VERIFY (PAC7LB)	
VERIFQJ	VERIFY (PAC7QJ)	
VERIFSA	VERIFY (PAC7SA)	
VERIFSC	VERIFY (PAC7SC)	
VERIFSG	VERIFY (PAC7SG)	
VERIFSN	VERIFY (PAC7SN)	
VERIFSP	VERIFY (PAC7SP)	
VERIFSR	VERIFY (PAC7SR)	
VERIFSS	VERIFY (PAC7SS)	
VERIFTD	VERIFY (PAC7TD)	
SRTPC25	SORT FIELDS	
SRTREO1	SORT FIELDS	
SRTREO2	SORT FIELDS	
MAXKEY	maxi. records	
REPRO	IDCAMS input	
REPRO999	IDCAMS input	

- (1) The size depends on the number of PAF requests sent when using the file in on-line mode.
- (2) must be used if DSMS is to be installed.
- (3) Size depending on the number of requests sent by the deep extractor.
- (4) Size depending on the PAF requests sent in the batch mode when using the file.
- (5) Size depending on the GPRT executions. This file contains the execution reports.
- (6) Size depending on the workstation requests. This work file must contain all the A&D workbench requests for each user.

Batch Procedure JCL Libraries

The procedures must be loaded in a special library called PROCLIB.

This library can be an existing library or one specially created for the purpose.

In some cases, its characteristics must be the following ones:

Characteristics	Value
Size	Approx.150 blocks of 6,080 bytes
Organization	PDS
DCB	Recfm=FB, Lrecl=80, Blksize=6,080
Dsname	user defined.

Administration Database

Administration Database Files
- Data file, GR.

Characteristics	Value
Organization	VSAM-RRDS
Recsize	144
CI size	4,096
Utilization	Batch and on-line
Dsname	&INDSV..BVPGR
Size	27 records per C.I. of 4,096

- Extension data file, GY.

Characteristics	Value
Organization	VSAM-RRDS
Recsize	1,018
CI size	4,096
Utilization	Batch and on-line
Dsname	&INDSV..BVPGY
Size	4 records per C.I. of 4,096

- Index file, GN.

Characteristics	Value
Organization	VSAM-KSDS
Recsize	59
CI size	4,096 (for index and data)
Key	49 (position 0)
Utilization	Batch and TP
Dsname	&INDSV..BVPGN
Size	62 records per C.I. of 4,096

- Journal file, GJ.

Characteristics	Value
Organization	VSAM-RRDS
Recsize	170
CI size	4,096
Utilization	Batch and TP
Dsname	&INDSV..BVPGJ
Size	23 records per C.I. of 4,096

- User file, GU.

Characteristics	Value
Organization	VSAM-KSDS
Recsize	80
CI size	4,096
Utilization	Batch and on-line
Dsname	&INDSV..BVPGU
Size	50 records per C.I. of 4,096

This file is sensitive and its backup must be executed in a secure environment of the installation site.

- Journal file of SCM Tools Interface, QJ

Characteristics	Value
Organization	VSAM-KSDS
Recsize	1,105
CI size	1,105

Characteristics	Value
Utilization	Batch and on-line
Dsname	&INDSV..BVPQJ
Size	4 records per C.I. of 4,096

Administration Database Backup

The Administration Database backup consists of two sequential generation files.

- Database backup (PE).

This is a backup file of the Administration Database components: index (GN), Data (GR) and extension (GY) in a sequential format.

Characteristics	Value
Organization	Sequential, generation
Dsname	&INDSN..BVPPE(n)
DCB	Recfm=VB, Lrecl=1,023, Blksize=27,998
Utilization	batch
Size	144 bytes per data item
	1,023 bytes per extension data item
	59 bytes per index

- Journal backup (PK).

The purpose of this file is to store all the update transactions that have affected the Administration Database since its installation and that have passed through the transactions file (GJ).

When the size of this file becomes incompatible with operation requirements, the ARAD procedure enables you to split it into several files, among which only the most recent one is used on a regular basis.

Characteristics	Value
Organization	Sequential, generation
Dsname	&INDSN..BVPPK(n)
DCB	Recfm=FB, Lrecl=170, Blksize=6,800
Utilization	batch

- Backup of SCM module QJ journal

The backup of QJ is the JQ file.

The purpose of this file is to archive the valid transactions already processed by different updates and stored in the QJ journal file.

Characteristics	Value
Organization	Sequential, generation
DSNAME	&INDSN..BVPJQ(n)
DCB	Recfm=FB, Lrecl=1,119, Blksize=1,119
Utilization	batch

Development Database

Development Database Files

These files contain all the data related to development of applications.

- The Data file (AR).

Characteristics	Value
Organization	VSAM-RRDS
Recsize	144
CI size	4,096
Utilization	Batch and TP
Dsname	&INDUV..&BASE.AR
Size	27 records per C.I. of 4,096

- The extension data file (AY).

Characteristics	Value
Organization	VSAM-RRDS
Recsize	1,018
CI size	4,096
Utilization	Batch and On-line
Dsname	&INDUV..&BASE.AY
Size	4 records per C.I. of 4,096

- The index file (AN).

Characteristics	Value
Organization	VSAM-KSDS

Characteristics	Value
Recsize	59
CI size	4,096 (for index and data)
Key	49 (position 0)
Utilization	Batch and On-line
Dsname	&INDUV..&BASE.AN
Size	62 records per C.I. of 4,096

- The journal file (AJ).

All the transactions performed on the Database in batch or on-line mode are saved for two reasons:
- To allow Database restoration if the system standard securities were to fail.
- This information may be used for statistical purposes.

These transactions are usually stored in the transactions backup file (PJ). The transactions file is used temporarily, between the moment transactions are processed by the system and the moment they are saved on their final storage medium by the ARCH procedure.

Characteristics	Value
Organization	VSAM-RRDS
Recsize	170
CI size	4,096
Utilization	Batch and on-line
Dsname	&INDUV..&BASE.AJ
Size	23 records per C.I. of 4,096

Development Database Parameters Library

Characteristics	Value
Size	Approx. 10 blocks of 6,080
Organization	PDS
DCB	Recfm=FB, Lrecl=80, Blksize=6,080
Dsname	&INDUN..&BASE.SY

This library contains the SYSINs of the IDCAMS utility implemented in the batch procedures used for the operations of a Development Database.

The information related to file names and disks (catalog), is initialized according to the initial installation parameters.

- DELETE/DEFINEs of the Database files:

Their names have the DFxxnnff format (xx=ROOT, nn=FILE, and ff=suffix of the relevant file.)

Important note: In these members, the VA Pac Database Administrator can modify the size of the files that make up the Database, according to the evolution of this Database.

- LISTCAT of VSAM file AJ (Development Database Journal):

Its name has the LIxxnnAJ format.

Development Database Backup Files

According to the 'Dispatch' option taken into account upon restoration, the Database backup is either made of two sequential generation files (PC and PJ) or of four sequential generation files (PC, PD, PY and PJ).

- Database or Data backup (PC).

This is a sequential backup file of the Development Database components (Data (AR), Index (AN), and extension (AY) if 'Dispatch' option) or of Data only (AR).

Characteristics	Value
Organization	Sequential, generation
Dsname	&INDUN..&BASE.PC(n)
DCB	Recfm=VB, Lrecl=1,023, Blksize=27,998
Utilization	Batch
Size	144 bytes per data item
	1,018 per extension data item
	59 bytes per index

- The backup of the Development Database index (PD) if 'Dispatch' option.

Characteristics	Value
Organization	Sequential, generation
Dsname	&INDUN..&BASE.PD(n)
DCB	Recfm=VB, Lrecl=1,023, Blksize=27,998
Utilization	Batch

Characteristics	Value
Size	59 bytes per index

- The backup of the Development Database bulk data (PY) if 'Dispatch' option.

Characteristics	Value
Organization	Sequential, generation
Dsname	&INDUN..&BASE.PY(n)
DCB	Recfm=VB, Lrecl=1,023, Blksize=27,998
Utilization	Batch
Size	1,018 bytes per index

- Journal backup (PJ)

The purpose of this file is to store all the update transactions performed in the Development Database since its installation, and that have passed through the transactions file (AJ).

When the size of this file becomes incompatible with operation requirements, the ARCH procedure enables you to split it into several files, among which only the most recent one is used on a regular basis.

Characteristics	Value
Organization	Sequential, generation
Dsname	&INDUN..&BASE.PJ(n)
DCB	Recfm=FB, Lrecl=170, Blksize=27,880
Utilization	batch

Modules - Specific Files

Pac/Impact:
- File of already-impacted criteria (FQ).

Characteristics	Value
Organization	Sequential with generation
DCB	Recfm=FB, Lrecl=100, Blksize=21,600
Dsname	&INDUN..&USER..&BASE.FQ(n)
Utilization	Memorize the impact search criteria that have already been processed

- Search criteria or entry points file (FH).

Characteristics	Value
Organization	Sequential with generation
DCB	Recfm=FB, Lrecl=160, Blksize=24,000
Dsname	&INDUN..&USER..&BASE.FH(n)
Utilization	Memorize impact search criteria for the next IANA execution

- Reduced file of criteria for purge (FR).

Characteristics	Value
Organization	Sequential with generation
DCB	Recfm=FB, Lrecl=72, Blksize=21,600
Dsname	&INDUN..&USER..&BASE.FR(n)
Utilization	Purge the impact search criteria in a text editor.

- Impact result file (FO).

Characteristics	Value
Organization	Sequential with generation
DCB	Recfm=FB, Lrecl=260, Blksize=26,000
Dsname	&INDUN..&USER..&BASE.FO(n)
Utilization	Memorize all the results of the impact analysis.

- File of entities to be analyzed (FP).

Characteristics	Value
Organization	VSAM-KSDS
Recsize	33
CI size	4,096
key	33 (position 0)
Dsname	&INDUV..&USER..&BASE.FP
Utilization	Restrict the impact analysis to the entities specified in the file

DSMS:

When the DSMS function (refer to the 'DSMS' manual) is available on site, a DSMS file is accessed for each Development Database, in batch and on-line modes.

This file contains the list of the entities concerned by each change. The change number is entered by the user on the Database sign-on screen.

- The DSMS file of the Development Database elements (DC)

Characteristics	Value
Organization	VSAM-KSDS
Recsize	mini 50, maxi 168
CI size	4,096
Key	31 (position 2)
Utilization	Accessed by batch and on-line updates
Ddname batch	PAC7DC (Proc. UPDT, REST, RESY)
Ddname CICS	ddy0DC (dd=ROOTD, y=ROOT2 of DSMS installation)

This file is allocated and initialized at the time of the installation of the DSMS Function.

The definition supplied when installing VA Pac must be used if the DSMS has not been installed on the site yet.

PAF:
- PAF work file (PA) for PAF-TP and PUF-TP.

All the user on-line programs which access Databases with the same root need an indexed work file to use the PAF and PUF functions.

Characteristics	Value
Organization	VSAM-KSDS
Recsize	average: 200, maxi: 539
CI size	4,096
Key	37 (position 2)
Utilization	Updated by the BVPTPST and/or BVPTPWS sub-programs, which are called by On-line user programs
Dsname	&INDSV..BVPPA
Ddname	BVPPA

- Work file for PAF in batch mode

All the user batch programs need an indexed work file to use the PAF function. This file is allocated for the job duration and is destroyed at the end of the job.

Characteristics	Value
Organization	VSAM-KSDS
Recsize	average: 170, maxi: 1,031
CI size	4,096
Key	12 (position 0)
Utilization	Updated by the BVPBBT98 sub- program which is called by BVPBBTST/BVPBBTWS (PAF sub- programs called by the user programs).
Dsname	&INDUV..SYSPAF.&USER

PAF extension

Extraction master path file (GS), containing the user's extractors and macro-commands.

Characteristics	Value
Organization	VSAM-KSDS
Recsize	230
CI size	4,096
Key	49 (position 0)
Utilization	Batch and On-line
Dsname	&INDUV..BVPGS

Complementary Libraries and Files

Complementary Dictionary files are automatically downloaded via SMP/E in the hlq.SBVPDIC PDS.

PQC function

The BVPQCRA and BVPQCRF members contain the standard quality rules.

- Specific members of Pacbench Quality Control function

Member	Contents of format	Comments
BVPQCRA	Sequential file in English	Standard rules

Member	Contents of format	Comments
BVPQCRF	Sequential file in French	Standard rules

MIAM procedure.

The parameters file for the MIAM procedure is automatically supplied by SMP/E in the hlq.SBVPINST PDS.

Member	Content or format	Remarks
BVPAMIAM	Sequential file	Standard parameters for the procedure MIAM

Chapter 10. Appendix

Installation of the Administration Database Model

VING - Introduction

The VING procedure performs the batch update of the Administration Database using transactions provided by IBM. Another file may sometimes be used. For example when the Pacdesign/Pacbench methodology changes.

Execution conditions

The Database must be closed to on-line processing.

Abnormal execution

Refer to the Administrator's Procedures manual, sub-chapter 'Abnormal Ending'.

When an abend occurs during the execution of the BVPACI30 or BVPACI40 program, the Database is no longer consistent.

Once the problem has been solved, the Database must be reloaded with a retrieval of archived transactions and the VING procedure must be executed again.

VING - Input / Processing / Results

This procedure requires two types of user input:

- A line which contains the User ID as well as the operation to perform,
- The transactions which enable the creation of IBM Meta Entities and the retrieval of client User Entities with the 'extension' format: the user should never modify the content of these transactions.

The structure of the line is the following:

Position	Length	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	3	'***'	Library code
29	4	'VINS'	

Position	Length	Value	Meaning
33	1	'I'	Installation of IBM Meta Entities

<u>Printed output</u>

The procedure outputs:
- a report listing the executed programs,
- the list of requests with the errors detected if any,
- a report of the updates performed by the installation.

<u>Result</u>

Once the update is performed, the network is ready for either on line or batch use.

<u>Note</u>

The extracted transactions to be used by the ROAD procedure are to be written in a file. To do so, take the following line into account (this line is a comment otherwise):

`'//*VINS.PAC7MR  DD DSN=ROADFILE'.`

VING - Description of Steps

<u>Input recognition: PTU001</u>

<u>Initialization of the KSDS work file: IDCAMS</u>

<u>Check of VSAM files: IDCAMS</u>

<u>Update of the Administration Database: VING</u>

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error labels
PACGGN	&INDSV..BVPGN	Input	Administration Database Index
PACGGR	&INDSV..BVPGR	Input	Administration Database Data
PACGGY	&INDSV..BVPGY	Input	Administration Database Extension
PACGGU	&INDSV..BVPGU	Input	Administration Database Users
PAC7AJ	&INDSV..BVPGJ	Output	Administration Database Journal
PAC7AN	&INDSV..BVPGN	Output	Administration Database Index
PAC7AR	&INDSV..BVPGR	Output	Administration Database Data

Code	Physical name	Type	Label
PAC7AY	&INDSV..BVPGY	Output	Administration Database Extension
PAC7MA	&FDIC	Input	IBM Meta Entities Transactions
PAC7MB	&&VINGMB	Input	User Input
PAC7BM	&&PACXBM	Input/ Output	Work file
PAC7WD	&&PACXWD	Input/ Output	Extracted Transactions
PAC7ES	&&PACXES	Input/ Output	Extracted Transactions
PAC7TD	&&TD	Input/ Output	Extracted Transactions
PAC7MR	&&MR	Output	Extracted Transactions for ROAD
PAC7MX	DUMMY	Output	Non extracted entities
PAC7RQ	DUMMY	Output	Work file
PAC7IA		Report	Complete printing of programs sequence
PAC7CP	DUMMY		
PAC7EE		Report	Report
PAC7EQ		Report	Report
PAC7EU	DUMMY	Report	Report
PAC7ER		Report	Report
PAC7EZ		Report	Report
PAC7DD		Report	Report
PAC7IE		Report	Report
PAC7IF		Report	Report
PAC7IG		Report	Report
PAC7IH		Report	Report
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Return codes:

- 0 : No error detected on files
- 4 : Correct the errors and restart the procedure

- 8 : No access authorization for batch procedure
- 12: Input-output error on a file

Deletion of the KSDS work file: IDCAMS

VING - Execution JCL

```
//* -------------------------------------------------------
//*       VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*         - DATABASE ADMINISTRATOR
//*         - DICTIONARY UPDATING WITH IBM MODEL ADMIN   -
//* -------------------------------------------------------
//*
//* THE VING PROCEDURE PERFORMS A BATCH UPDATE OF THE DATA
//* BASE ADMIN. , BASED ON TRANSACTIONS PROVIDED.
//*
//* INPUT :
//*  - USER IDENTIFICATION LINE (REQUIRED)
//*     COL  2 : "*"
//*     COL  3 : USERIDXX
//*     COL 11 : PASSWORD
//*     COL 29 : "VINS"
//*     COL 33 : "I" - INSTALLATION OF IBM META-ENTITIES
//* -------------------------------------------------------
//BVPVING  PROC INDSV='$INDSV',        INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',          INDEX OF SYSTEM NON VSAM FILES
//         INDUV='$INDUV',            INDEX OF USER VSAM FILES
//*:       VSAMCAT='$VCAT',               USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',             SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         SORTLIB='$BIBT',                      SORT LIBRARY
//         OUT=$OUT,                             OUTPUT CLASS
//         OUTL=$OUT,                   OUTPUT CLASS OF REPORTS
//         FDIC=,             DSN USER'S ADMINISTRATION MODEL
//         USER=,                                   USER CODE
//         LSR='BLSR',                   LSR BATCH SYSTEM NAME
//         UWK=$UWK,                                WORK UNIT
//         SPAMB='(TRK,(5,1),RLSE)',      WORK FILE SPACE
//         SPAWK='(TRK,(50,10))'          WORK FILE SPACE
//*************************************************************
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&VINGMB,DISP=(,PASS),
//           UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*-----------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
```

```
//PACRIN DD DSN=&INDSN..BVPSY(DFSYSEXT),DISP=SHR
//PACROU DD DSN=&&DFSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//         UNIT=&UWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFSYSEXT,DISP=(OLD,DELETE)
//MAXKEY   EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF   DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//MAXKEY   DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//VERIFY EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGY   DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGJ   DD DSN=&INDSV..BVPGJ,DISP=SHR
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGY),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGJ),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//*
//VINS   EXEC PGM=BVPVINS,REGION=0K
//*-------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDSV..BVPGJ,DISP=SHR
//ANLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=40','BUFNI=30')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=40')
//GYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGY   DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=40')
```

```
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=40')
//SYSEXT   DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//PAC7IA   DD SYSOUT=&OUTL
//PAC7CP   DD DUMMY
//PAC7DD   DD SYSOUT=&OUTL
//PAC7EE   DD SYSOUT=&OUTL
//PAC7EQ   DD SYSOUT=&OUTL
//PAC7ER   DD SYSOUT=&OUTL
//PAC7EU   DD DUMMY
//PAC7EZ   DD SYSOUT=&OUTL
//PAC7IE   DD SYSOUT=&OUTL
//PAC7IF   DD SYSOUT=&OUTL
//PAC7IG   DD SYSOUT=&OUTL
//PAC7IH   DD SYSOUT=&OUTL
//PAC7MA   DD DSN=&FDIC,DISP=SHR
//PAC7MB   DD DSN=&&VINGMB,DISP=(OLD,DELETE,DELETE)
//PAC7BM   DD DSN=&&PACXBM,DISP=(,DELETE),UNIT=&UWK,
//            DCB=BLKSIZE=3440,SPACE=&SPAMB
//PAC7ES   DD DSN=&&PACXES,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7WD   DD DSN=&&PACXWD,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//PAC7MR   DD DSN=&&MR,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MX   DD DUMMY
//PAC7RQ   DD DUMMY
//PAC7TD   DD DSN=&&TD,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//SYSUDUMP DD SYSOUT=&OUT
//*
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*----------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLSYSEXT),DISP=SHR
//PACROU DD DSN=&&DLSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//            UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*-----------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLSYSEXT,DISP=(OLD,DELETE)
```

Installation of the Development Database Model

VINS - Introduction

The VINS procedure performs the batch update of the Development Database using transactions provided by IBM. Another file may sometimes be used (for example when the Pacdesign/Pacbench methodology changes).

Entities are created in inter-Library mode and in the 0001Z session. They can thus be accessed from any Library of the Development Database and from any session.

Execution conditions

The Database must be closed to on-line processing.

Abnormal execution

Refer to the 'Administrator's Procedures' manual, sub-chapter 'Abnormal Ending'.

When an abend occurs during the execution of the BVPACI30 or BVPACI40 programs, the Database is no longer consistent.

Once the problem has been solved, the Database must be reloaded with a retrieval of archived transactions and the VINS procedure must be executed again.

VINS - Input / Processing / Results

This procedure requires two types of user input:
- a line which contains the User ID as well as the operation to perform,
- the transactions which enable the creation of IBM Meta Entities and the retrieval of client User Entities with the 'extension' format: the user should never modify the content of these transactions.

The structure of the line is the following:

Position	Length	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	3	'***'	Library code
29	4	'VINS'	
33	1	'I'	Installation of IBM Meta Entities

Position	Length	Value	Meaning
		'R'	Retrieval of User Entities with the 'extension' format
		' '	'T' + 'R'

Printed output

The procedure prints
- a report listing the executed programs,
- the list of requests with the errors detected if any,
- a report of the updates performed by the installation,
- a report of the updates performed by the retrieval,

Result

Once the update is performed, the Development Database is ready for either on-line or batch use.

For the retrieval of User Entities with an extension format, a sequential file of purge transactions can be generated (if 'R' in column 33 in the user input). You then have to reorganize the Database with this file as input. The reorganization of the Database with the PC file, saved after the retrieval, is also required if the client user entities of the .PPTEX and .QPAQC meta entities exist in more than one session.

Note

Extracted transactions to be used as input to the REOR procedure must be copied in a file by taking the following - otherwise comment - line into account:

`'//*VINS.PAC7MR  DD DSN=REORFILE'.`

VINS - Description of Steps

Input recognition: PTU001

Initialization of the KSDS work file: IDCAMS

Check of VSAM files: IDCAMS

Update of the Development Database : VINS

Code	Physical name	Type	Label
PAC7AE	&INDSV..BVPAE	Input	Error Labels

Code	Physical name	Type	Label
PACGGN	&INDSV..BVPGN	Input	Administration Database Index
PACGGR	&INDSV..BVPGR	Input	Administration Database Data
PACGGY	&INDSV..BVPGY	Input	Administration Database Extension
PACGGU	&INDSV..BVPGU	Input	Administration Database Users
PAC7AJ	&INDUV..&BASE.AJ	Output	Development Database Journal
PAC7AN	&INDUV.. &BASE.AN	Output	Development Database Index
PAC7AR	&INDUV..&BASE.AR	Output	Development Database Data
PAC7AY	&INDUV..&BASE.AY	Output	Development Database Extension
PAC7MA	&FDIC	Input	IBM Meta Entities Transactions
PAC7MB	&&VINSMB	Input	User Input
PAC7BM	&&PACXBM	Input/ Output	Work File
PAC7WD	&&PACXWD	Input/ Output	Extracted Transactions
PAC7ES	&&PACXES	Input/ Output	Extracted Transactions
PAC7TD	&&TD	Input/ Output	Extracted Transactions
PAC7MR	&&MR	Output	Extracted Transactions for REOR
PAC7MX	DUMMY	Output	Non extracted entities
PAC7RQ	DUMMY	Output	Work file
PAC7IA		Report	Complete printing of programs sequence
PAC7CP	DUMMY		
PAC7EE		Report	Report
PAC7EQ		Report	Report
PAC7EU	DUMMY	Report	Report
PAC7ER		Report	Report
PAC7EZ		Report	Report
PAC7DD		Report	Report
PAC7IE		Report	Report
PAC7IF		Report	Report
PAC7IG		Report	Report

Code	Physical name	Type	Label
PAC7IH		Report	Report
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Return codes:

- 0 : No error detected on files
- 4 : Correct the errors and restart the procedure
- 8 : No access authorization for batch procedure
- 12: Input-output error on a file

Deletion of the KSDS work file: IDCAMS

VINS - Execution JCL

```
//* -------------------------------------------------------
//*        VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*          - DICTIONARY UPDATING WITH IBM MODEL DEVPT  -
//*
//* -------------------------------------------------------
//*
//* THE VINS PROCEDURE PERFORMS A BATCH UPDATE OF THE
//* DATABASE, BASED ON TRANSACTIONS PROVIDED.
//*
//* INPUT :
//*  - USER IDENTIFICATION LINE (REQUIRED)
//*     COL  2 : "*"
//*     COL  3 : USERIDXX
//*     COL 11 : PASSWORD
//*     COL 29 : "VINS"
//*     COL 33 : "I" - INSTALLATION OF IBM META-ENTITIES
//*              "R" - RETRIEVAL OF USER ENTITIES WITH THE
//*                    "EXTENSION" FORMAT
//*              " "   "I" + "R"
//* -------------------------------------------------------
//*
//BVPVINS  PROC BASE=$BASE,              CODE OF DEVPT DATABASE
//         INDSV='$INDSV',             INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',         INDEX OF SYSTEM NON VSAM FILES
//         INDUV='$INDUV',             INDEX OF USER VSAM FILES
//*:       VSAMCAT='$VCAT',                 USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',               SYSTEM VSAM CATALOG
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         SORTLIB='$BIBT',                     SORT LIBRARY
//         OUT=$OUT,                            OUTPUT CLASS
//         OUTL=$OUT,                 OUTPUT CLASS OF REPORTS
```

```
//         FDIC=,                    DSN USER'S DEVELOPMENT MODEL
//         USER=,                                       USER CODE
//         LSR='BLSR',                      LSR BATCH SYSTEM NAME
//         UWK=$UWK,                                    WORK UNIT
//         SPAMB='(TRK,(5,1),RLSE)',           WORK FILE SPACE
//         SPAWK='(TRK,(50,10))'               WORK FILE SPACE
//****************************************************************
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&VINSMB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV'
//*------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DFSYSEXT),DISP=SHR
//PACROU DD DSN=&&DFSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//          UNIT=&UWK,
//          DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DEFINE EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DFSYSEXT,DISP=(OLD,DELETE)
//MAXKEY   EXEC PGM=IDCAMS
//*----------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF   DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//MAXKEY   DD DSN=&INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(REPRO999),DISP=SHR
//VERIFY EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGY   DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//PAC7AJ   DD DSN=&INDUV..&BASE.AJ,DISP=SHR
//PAC7AN   DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AY   DD DSN=&INDUV..&BASE.AY,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGY),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAJ),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAN),DISP=SHR
```

```
//          DD DSN=&INDSN..BVPSY(VERIFAR),DISP=SHR
//          DD DSN=&INDSN..BVPSY(VERIFAY),DISP=SHR
//*
//VINS   EXEC PGM=BVPVINS,REGION=0K
//*------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7AJ   DD DSN=&INDUV..&BASE.AJ,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR')
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=40','BUFNI=30')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=40')
//GYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGY   DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=40')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=40')
//SYLSR    DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//SYSEXT   DD SUBSYS=(&LSR,'DDNAME=SYLSR')
//PAC7IA   DD SYSOUT=&OUTL
//PAC7CP   DD DUMMY
//PAC7DD   DD SYSOUT=&OUTL
//PAC7EE   DD SYSOUT=&OUTL
//PAC7EQ   DD SYSOUT=&OUTL
//PAC7ER   DD SYSOUT=&OUTL
//PAC7EU   DD DUMMY
//PAC7EZ   DD SYSOUT=&OUTL
//PAC7IE   DD SYSOUT=&OUTL
//PAC7IF   DD SYSOUT=&OUTL
//PAC7IG   DD SYSOUT=&OUTL
//PAC7IH   DD SYSOUT=&OUTL
//PAC7MA   DD DSN=&FDIC,DISP=SHR
//PAC7MB   DD DSN=&&VINSMB,DISP=(OLD,DELETE,DELETE)
//PAC7BM   DD DSN=&&PACXBM,DISP=(,DELETE),UNIT=&UWK,
//            DCB=BLKSIZE=3440,SPACE=&SPAMB
//PAC7ES   DD DSN=&&PACXES,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//PAC7WD   DD DSN=&&PACXWD,DISP=(,DELETE),UNIT=&UWK,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
```

```
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,(3,1),,CONTIG)
//PAC7MR   DD DSN=&&MR,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAMB,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PAC7MX   DD DUMMY
//PAC7RQ   DD DUMMY
//PAC7TD   DD DSN=&&TD,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAWK,
//            DCB=(RECFM=FB,LRECL=286,BLKSIZE=6292)
//SYSUDUMP DD SYSOUT=&OUT
//*
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&INDUV',COND=EVEN
//*----------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PACRIN DD DSN=&INDSN..BVPSY(DLSYSEXT),DISP=SHR
//PACROU DD DSN=&&DLSYSEXT,DISP=(,PASS),SPACE=(TRK,1),
//           UNIT=&UWK,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//DELETE EXEC PGM=IDCAMS,COND=EVEN
//*----------------------------
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&&DLSYSEXT,DISP=(OLD,DELETE)
```

Retrieval utilities

UTU1 UTU2 - Adaptation of 'UNS' operators

UTU1 - Extraction of 'P' lines with 'UNS'

Principle

This tool is used to extract the programs' 'P' lines which contain the 'UNS' operator and do not contain anything in the 'Level-Condition type' field. The user will have to check the output file and delete, in this file, all the lines he/she wants to keep as they are. For the other lines, the 'Level-Condition type' field will have to be forced to '99BL' before the execution of the UTU2 procedure.

Execution conditions

Enter the name of the result file of the lines to be checked in the startup JCL: NOMUT='... '

Result

A 'NOMUT' file which contains UNS 'P' lines to be checked.

UTU1 - Input / Processing / Results

No user input.

UTU1 - Description of Steps

Extracting 'P' lines with 'UNS' operator: UTIUN1

Code	Physical name	Type	Label
PAC7PC	&INDUN..&BASE.PC(0)	Input	Sequential image of the Development Database
UTUTO	&NOMUT	Output	'P' lines with 'UNS' to be updated

UTU1 - Execution JCL

```
//* ------------------------------------------------------
//*         VISUALAGE PACBASE
//*
//* ------------------------------------------------------
//*          EXTRACTION OF LINES "P"
//*            WITH OPERATOR "UNS"
//*            WITHOUT LEVEL-CONDITION TYPE
//* ------------------------------------------------------
//*
//BVPUTU1  PROC BASE=$BASE,                CODE OF DEVPT DATABASE
//         INDUN='$INDUN',          INDEX OF USER NOT VSAM FILES
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         OUT=$OUT,                               OUTPUT CLASS
//         VOLS='SER=$VOLUN',            VOLUME FILE &&NOMUT
//         UWK=$UWK,                     WORK UNIT FILE &&NOMUT
//         SPAUT='(TRK,(10,05),RLSE)'       SPACE FILE &&NOMUT
//**********************************************************
//UTIUN1 EXEC PGM=BVPTUNS1
//*--------------------------------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7PC   DD DSN=&INDUN..&BASE.PC(0),DISP=SHR
//UTUTO    DD DSN=&NOMUT,DISP=(,CATLG,DELETE),
//            UNIT=&UWK,VOL=&VOLS,SPACE=&SPAUT,
//            DCB=(RECFM=FB,LRECL=50,BLKSIZE=5000)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

UTU2 - Update of 'P' lines with 'UNS'

Principle

This tool is used to update the transactions extracted with the UTU1 procedure.

For all the lines in the input file, the 'Level- Condition type' area is forced to '99BL'.

Execution conditions

Specify the result file name of the UTU1 procedure in the startup JCL: NOMUT='... '

Result

A new sequential image of the Development Database.

UTU2 - Input / Processing / Results

No user input.

UTU2 - Description of Steps

Extracting 'P' lines with 'UNS' operator: UTIUN2

Code	Physical name	Type	Label
PAC7PC	&INDUN..&BASE.PC(0)	Input	Sequential image of the Development Database
UTUTI	&NOMUT	Input	'P' lines with 'UNS' to be updated
PAC7CP	&INDUN..&BASE.PC(+1)	Output	New sequential image of the Development Database

UTU2 - Execution JCL

```
//* -------------------------------------------------------
//*       VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*           UPDATE LINES "P"
//*           WITH OPERATOR "UNS"
//* -------------------------------------------------------
//*
//BVPUTU2  PROC BASE=$BASE,              CODE OF DEVPT DATABASE
//         INDUN='$INDUN',        INDEX OF USER NOT VSAM FILES
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         OUT=$OUT,                             OUTPUT CLASS
//         DSCB='$DSCB',                      DSCB MODEL FILE
//         VOLS='SER=$VOLUN',               VOLUME FILE PC
//         UNITS=$UNITUN,                          SAVE UNIT
```

```
//          SPAPC='(TRK,(300,10),RLSE)'          SPACE PACBASE BASE
//**************************************************************
//UTIUN2 EXEC PGM=BVPTUNS2
//*--------------------------------------------------------
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:        DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7PC   DD DSN=&INDUN..&BASE.PC(0),DISP=SHR
//UTUTI    DD DSN=&NOMUT,DISP=SHR
//PAC7CP   DD DSN=&INDUN..&BASE.PC(+1),
//            DISP=(,CATLG,DELETE),
//            UNIT=&UNITS,VOL=&VOLS,SPACE=&SPAPC,
//            DCB=(&DSCB,RECFM=VB,LRECL=1023,BLKSIZE=27998)
//SYSPRINT DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

UTM1 UTM2 - Conversion of 'old' Meta Entities

Principle

This procedure is a utility whose purpose is to convert the 'old' meta entities into 'formatted' meta entities.

The PC25 procedure retrieves the 2.n user entities into 3.n 'old'-type meta entities. These meta entities cannot be modified.

Once converted, the 'formatted' meta entities can be modified and enriched.

You will have to operate manually during this conversion, which consists of several steps.

Migration process

Step 1: Analysis of the Database relations (UTM1)

In the 3.n version, a relation is associated with one entity type and not with several types as in the 2.n version.

Any 'old'-type relation must be converted into as many relations as the number of entities they are associated with.

This first step consists in searching, in the VA Pacbase Database, the calls to 'old' relations in the description lines of the meta entities and in all the entities.

The list of calls is printed in the output file.

In this file, the '&&' characters separate the printed information from the information in transaction format.

You will have to specify the new relation code.

The old code can be kept if the relation is associated with one entity type only.

Example of transformation:

```
RELAT1  P    220  P   PGMXCR  CR   VAO  2243   &&    ...
```

modified as:

```
RELATE  P    220  P   PGMXCR  CR   VAO  2243   &&    ...
```

The RELATE relation will then be dedicated to the 'P'-type entity (Program), whereas RELAT1 was dedicated to several entity types.

Note: Only the Relation name, located before the && characters, is to be modified. The continuation of the line must remain as is.

If the same relation code is linked to UEs, but in libraries which belong to different branches, you must rename the relation for each new library.

Step 2: Conversion of meta entities, relations and impacted entities and update (UTM2)

- Prior to this conversion, all the relations of the PAC7ME file are checked to ensure that they all point to only one entity type. If they do not, you are requested, via a display, to make them point to only one type and to re-run the UTM2 procedure. The procedure is then stopped.

  When the ME file is consistent, the 'old'-type meta entities are converted into 'formatted' meta entities.

- The relations you have selected are modified or created.

  If the relation already exists in the Database, it can be kept if it is defined in a convenient context for the calling entity, if it is 'constrained' and if the associated entity type is the same as the chosen type.

  If the relation is 'old', it will be changed into 'constrained' and the chosen entity type will be associated with it.

  If the existing relation is not suitable, an error message is printed and you will have to choose a new relation code.

  All the relations are created in the library and the 'H' session which is the closest to their use.

- Relations calls are updated in the concerned entities (description lines of meta entities and others).

- If errors are detected (return code 8), you will have to modify the input file PAC7ME and start again the UTM2 procedure before the update. Caution, the &UTM2MV permanent file must first be deleted or renamed.

Update

The update is performed by the BVPACA15 program.

A backup of the Database is recommended before the update.

Only transactions where an error is detected are printed. There may be many rejects because these entities created in the 2.n version are much more controlled in the 3.n version. Manual interventions in the Database are then required.

The transactions are not journalized.

The &UTM2MV transaction file is declared as a permanent file to enable the user to view all the transactions impacted by the update.

Step 3: Inventory of fixtures

It is recommended to re-execute the first step to make sure that the Database no longer contains calls to 'old'-type relations.

Otherwise, you will have to operate again and re-execute the next steps.

Step 4: Reorganization

When the conversion is acceptable, you must reorganize the Database.

Execution conditions

None during step 1 (UTM1).

For step 2 (update), the AR, AN, AJ and AY files must be closed to online use (except for platforms which allow a Batch/Online concurrency).

Printed output

At the end of step 1, a report is printed. It contains the list of the calls to 'old'-type relations.

At the end of step 2 before the update, error messages are printed in display format.

At the end of the update, a report lists the errors encountered.

Result

Once the reorganization is performed, the result is a Database free from 'old'-type meta entities and calls to 'old'-type relations.

UTM1 - Description of Steps

Analysis of the Database relations: PTUME1

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database Index
PAC7ME	&UTM1FILE	Output	List of relations calls in all the entities (length = 221)
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7EQ		Report	Report

UTM1 - Execution JCL

```
//* -------------------------------------------------------
//*         VISUALAGE PACBASE
//*
//* -------------------------------------------------------
//*              CONVERSION OF OLD META-ENTITIES
//*              ANALYSIS OF THE DATABASE RELATIONS
//* -------------------------------------------------------
//*
//BVPUTM1  PROC BASE=$BASE,              CODE OF DEVPT DATABASE
//         INDUV='$INDUV',            INDEX OF DEVPT VSAM FILES
//         INDSV='$INDSV',           INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',       INDEX OF SYSTEM NON VSAM FILES
//         STEPLIB='$HLQ..SBVPMBR8',    LIBRARY OF LOAD-MODULES
//         LSR='BLSR',                 LSR BATCH SYSTEM NAME
//*:       VSAMCAT='$VCAT',                USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',              SYSTEM VSAM CATALOG
//         OUT=$OUT,                            OUTPUT CLASS
//         UTM1FILE=,                  OUTPUT FILE FOR UTM2
//         VOLS='SER=$VOLUN',                 BACKUP VOLUME
//         UNITS=$UNITUN,                        BACKUP UNIT
//         SPAME='(TRK,(300,10),RLSE)'       PC FILE SPACE
//*************************************************************
//VERIFY EXEC PGM=IDCAMS
//*--------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AN   DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AY   DD DSN=&INDUV..&BASE.AY,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAY),DISP=SHR
//PTUME1  EXEC PGM=BVPTUME1
//*-----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
```

```
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//PAC7ME   DD DSN=&UTM1FILE,DISP=(,CATLG),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAME,
//         DCB=(RECFM=FB,BLKSIZE=22100,LRECL=221)
//PAC7EQ   DD SYSOUT=&OUT
```

UTM2 - Input / Processing / Results

A '*' line as input to the second step of the conversion (UTM2) with a user code and its password.

If the user code and password are not indicated, an error message is displayed and the procedure cannot be run.

UTM2 - Description of Steps

Consistency check of the relations file : PTUME3

Code	Physical name	Type	Label
PAC7ME	&UTM1FILE	Input	List of relation calls in all the entities
SORTWK01		Sort	
SORTWK02		Sort	
SORTWK03		Sort	

Conversion of the meta entities, the relations and their calls: PTUME2

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Input	Development Database data
PAC7AN	&INDUV..&BASE.AN	Input	Development Database index
PAC7ME	&UTM1FILE	Input	List of relations calls in all the entities
PAC7AE	&INDSV..BVPAE	Input	Error messages
PAC7MV	&UTM2MV	Output	Update transactions (length = 170)
PAC7ET		Output	Report

Code	Physical name	Type	Label
PAC7MB	&&UTM2MB	Input	user input

Update of the Administration Database: PACA15

Code	Physical name	Type	Label
PAC7AR	&INDUV..&BASE.AR	Output	Development Database data
PAC7AN	&INDUV.. &BASE.AN	Output	Development Database index
PAC7AY	&INDUV..&BASE.AY	Output	Development Database extension
PAC7AJ	DUMMY		Development Database Journal
PAC7AE	&INDSV..BVPAE	Input	Error messages
PACGGN	&INDSV..BVPGN	Input	Administration Database index
PACGGR	&INDSV..BVPGR	Input	Administration Database data
PACGGY	&INDSV..BVPGY	Input	Administration Database extension
PACGGU	&INDSV..BVPGU	Input	Administration Database users
PAC7DC	DUMMY	Input	DSMS elements file of the Development Database
PAC7ME	DUMMY		Work file
PAC7MV	&UTM2MV	Input	Update transactions
PAC7RB	DUMMY		UPDT erroneous transactions (length=80)
PAC7RY	DUMMY		UPDP erroneous transactions (length=310)
PAC7IE	DUMMY	Report	Update report (length=132)
PAC7IF		Report	List of erroneous transactions (length=132)

The list of transactions belonging to a user is preceded by a banner specifying the user code.

Return codes:
- 0: OK, no error
- 2: Warning
- 4: Error

UTM2 - Execution JCL

```
//* --------------------------------------------------------
//*        VISUALAGE PACBASE
//*
//* --------------------------------------------------------
//*              CONVERSION OF OLD META-ENTITIES
//*              THE RELATIONS AND THEIR CALLS
//* --------------------------------------------------------
//*
//BVPUTM2  PROC BASE=$BASE,                CODE OF DEVPT DATABASE
//         INDUV='$INDUV',            INDEX OF DEVPT VSAM FILES
//         INDSV='$INDSV',           INDEX OF SYSTEM VSAM FILES
//         INDSN='$INDSN',       INDEX OF SYSTEM NON VSAM FILES
//         STEPLIB='$HLQ..SBVPMBR8',   LIBRARY OF LOAD-MODULES
//         LSR='BLSR',                  LSR BATCH SYSTEM NAME
//*:       VSAMCAT='$VCAT',                 USER VSAM CATALOG
//*:       SYSTCAT='$SCAT',               SYSTEM VSAM CATALOG
//         OUT=$OUT,                             OUTPUT CLASS
//         UTM1FILE=,                      INPUT FILE FROM UTM1
//         UTM2MV=,                       OUTPUT FILE FROM UTM2
//         VOLS='SER=$VOLUN',                  BACKUP VOLUME
//         UNITS=$UNITUN,                        BACKUP UNIT
//         UWK=$UWK,                               WORK UNIT
//         SPAMV='(TRK,(300,10),RLSE)',       PC FILE SPACE
//         CYL='(10,1)'                    TEMPORARY SPACE
//****************************************************************
//INPUT  EXEC PGM=BVPTU001
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//CARTE    DD DDNAME=SYSIN
//PAC7MB   DD DSN=&&UTM2MB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//VERIFY EXEC PGM=IDCAMS
//*---------------------
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//PAC7AN   DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AY   DD DSN=&INDUV..&BASE.AY,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAN),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAR),DISP=SHR
//         DD DSN=&INDSN..BVPSY(VERIFAY),DISP=SHR
//PTUME3  EXEC PGM=BVPTUME3
//*----------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
```

```
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7ME   DD DSN=&UTM1FILE,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//PTUME2  EXEC PGM=BVPTUME2,COND=(0,NE,PTUME3)
//*------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//PAC7MB   DD DSN=&&UTM2MB,DISP=(OLD,PASS)
//PAC7ME   DD DSN=&UTM1FILE,DISP=SHR
//PAC7MV   DD DSN=&UTM2MV,DISP=(,CATLG),
//         UNIT=&UNITS,VOL=&VOLS,
//         SPACE=&SPAMV,
//         DCB=(RECFM=FB,BLKSIZE=17000,LRECL=170)
//PAC7ET   DD SYSOUT=&OUT
//PACA15 EXEC PGM=BVPACA15,COND=((0,NE,PTUME2),(0,NE,PTUME3))
//*---------------------------------------------------------
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=$BCOB,DISP=SHR
//*:STEPCAT DD DSN=&SYSTCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//GNLSR    DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGN   DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR    DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGR   DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GYLSR    DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGY   DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=10')
//GULSR    DD DSN=&INDSV..BVPGU,DISP=SHR
//PACGGU   DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7AJ   DD DUMMY
//ANLSR    DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN   DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR    DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR   DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR    DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY   DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=10')
//PAC7DC   DD DUMMY
//PAC7ME   DD DUMMY
//PAC7MV   DD DSN=&UTM2MV,DISP=SHR
```

```
//PAC7RB   DD DUMMY
//PAC7RY   DD DUMMY
//PAC7IE   DD DUMMY
//PAC7IF   DD SYSOUT=&OUT
```

SMP/E : Delete a prior version

Introduction

This utility (not provided) is used to delete a VA Pacbase, DSMS or Pactables version in SMP/E.

The PDS of the 'Target zones' (hlq.SBVPxxx) and 'Distribution zones' (hlq.ABVPxxx) files are purged from the components of the previous version and are available for the new installation.

Implementation:

- Define an MCS (see below), replacing JBVPxxx with the FMID of the version to be deleted.
- Create and execute the JCL presented below, after valorizing its parameters. This JCL calls the MCS defined just before.

Examples

```
MCS TO BE DEFINED :
----------------

++FUNCTION(DELFUNC)
DESCRIPTION(VISUALAGE PACBASE - CICS)
/*    (C) COPYRIGHT IBM CORP 1983, 2007  */.
++VER(Z038)
     DELETE(JBVPXXX) .


JCL TO BE EXECUTED :
-----------------

//$$$$DDEF JOB ($$$$$$),'DDEF',CLASS=$,MSGCLASS=$
//*-------------------------------------------------------------
//*    PERFORM SMP/E DELETING SYSMOD
//*
//*    BEFORE USING THIS JOB STEP, YOU WILL HAVE TO MAKE THE
//*    FOLLOWING MODIFIFICATIONS.
//*
//* - CHANGE THE JOB CARD TO MEET THE INSTALLATION REQUIREMENT
//* - CHANGE &SMPE   BY THE NAME OF SMPE HLQ ON YOUR SYSTEM
//* - CHANGE &TGT    BY THE NAME YOU CHOOSE FOR TARGET ZONE
//* - CHANGE &DLIB   BY THE NAME YOU CHOOSE FOR DISTRIBUTION ZONE
//* - CHANGE &USER   BY THE PREFIX YOU CHOOSE FOR MCS
//* - CHANGE JBVPXXX BY THE FMID YOU WANT TO DELETE
//*
//*-------------------------------------------------------------
```

```
//COPT     EXEC PGM=GIMSMP,COND=(4000,LT),REGION=0M
//SMPCSI   DD   DSN=&SMPE.GLOBAL.CSI,DISP=OLD
//SMPPTFIN DD DSN=&USER.SMPMCS,DISP=SHR
//SMPHOLD  DD DUMMY
//SYSPRINT DD SYSOUT=*
//SMPCNTL DD *
  SET BDY(GLOBAL)          /* SET TO GLOBAL ZONE.       */.
    RECEIVE S(DELFUNC)     /* RECEIVE THE FUNCTION.     */.
  SET BDY(&TGT)           /* SET TO APPLICABLE TARGET. */.
    APPLY S(DELFUNC)      /* APPLY TO DELETE OLD FCT.  */.
  SET BDY(&DLIB)          /* SET TO APPLICABLE DLIB.   */.
    ACCEPT S(DELFUNC)     /* ACCEPT TO DELETE OLD      */.
  SET BDY(&TGT)           /* SET TO APPLICABLE TARGET. */.
  UCLIN.
    DEL SYSMOD(DELFUNC)   /* DELETE SYSMOD ENTRIES FOR */.
    DEL SYSMOD(JBVPXXX)   /* DUMMY AND OLD FUNCTION.   */.
  ENDUCL.
    SET BDY(&DLIB)        /* SET TO APPLICABLE DLIB.   */.
  UCLIN.
    DEL SYSMOD(DELFUNC)   /* DELETE SYSMOD ENTRIES FOR */.
    DEL SYSMOD(JBVPXXX)   /* DUMMY AND OLD FUNCTION.   */.
  ENDUCL.
  SET BDY(GLOBAL)          /* SET TO GLOBAL ZONE.       */.
    REJECT HOLDDATA NOFMID /* REJECT SYSMODS, HOLDDATA  */
    DELETEFMID             /* FOR THE DELETED FUNCTIONS.*/
    (DELFUNC JBVPXXX)      /* DELETE THE FMIDS FROM THE */
                           /* GLOBALZONE ENTRY.         */.
```

Efficiency enhancement

The performance of the VisualAge Pacbase system may be improved in batch or on-line mode in several ways, depending on the environment and on the size of the managed VA Pac Databases.

This chapter provides information necessary for efficiency enhancement.

The file, program and JCL installation default options may be modified according to the suggestions described below. It is also possible to enhance efficiency by modifying the system environment, which is not described in this chapter since it depends on the specifications of each site.

Moreover, it is recommended not to modify too many chosen default options, so that the VA Pac Database Manager can retrieve these modifications easily when reinstalling the system.

Installation of the Database files

Where possible, the AN, AR and AY files should be copied onto separate volumes.

For large VA Pac Databases (more than one million data items), it may also be appropriate to allocate the files onto several volumes.

Since the AN file is used in its entirety by the system, it is possible to carry out a multi-volume installation simply by modifying the file's DEFINE in the DFbaseAN member of the VA Pac Database parameter PDS.

Resources required under CICS

In order to improve the VA Pac system efficiency under CICS, two objectives should be pursued:
- reduce program loading time,
- make VSAM buffer management more efficient.

Program management

The first solution is fairly easy to implement: it requires a frequency survey on program runs. As a result, the programs that are most often used are said to be resident in the CICS partition (RESIDENT(YES) in CSD).

For example, here are the programs most commonly used by the system:
- BVPRADM : Administration Database access subprogram,
- BVPFCHK : read/write of PUF communication area,
- BVPF000 : distributor for PUF folder,
- BVPFCTL : authorizations control,
- BVPFANM : VA Pacbase choice,
- BVPSERR : errors server,
- BVPSFF0 : meta entities folder,
- BVPR980 : 3270 messages formatting,
- BVPSFIN : meta entities folder initialization,
- BVPR000 : COMM.3270,PUF-TP,V.LOG server.

Buffer management

Three parameters associated with the files must be entered in CSD: STRINGS, DATABUFFERS, and INDEXBUFFERS.
- STRINGS:

  It specifies the number of strings or requests which can be executed n parallel by VSAM on the same file: usually, a string is used during an input/output on disk.

  Certain commands, however, do not follow this rule:

READ UPDATE and STARTBR or RESETBR reserve a string up to the REWRITE or UNLOCK and ENDBR commands, respectively.

- DATABUFFERS:

  It specifies the number of DATA buffers to be allocated by VSAM upon the file opening. A minimum of two buffers is required: one for the reading of the 'control interval DATA', and one for the 'split' of the 'control interval'.

  Default: DATABUFFERS = STRINGS + 1

- INDEXBUFFERS:

  It specifies the number of INDEX buffers to be allocated by VSAM upon the file opening. The minimum number of buffers per request is one.

  It is preferable, however, to increase this number because for a file with three INDEX levels, three EXCP's are required to point to the searched CI DATA for each on-line request.

  It is recommended to allocate:

  – at least: one buffer per index level, plus one buffer per string (STRING value).

  – no more than: one buffer per CI of INDEX SET, plus one buffer per string.

Conclusion

A sufficient number of buffers should be provided for, according to the number of strings.

However, too many buffers may lead to an excessive pagination, and therefore EXCP's.

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