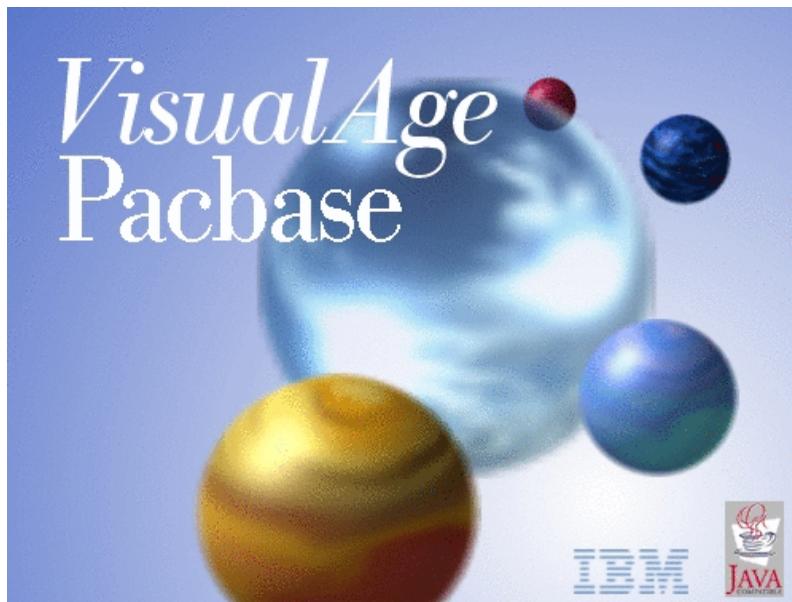


VisualAge Pacbase



# Installation Guide OS/390 CICS Server & Client Components

*Version 35*





VisualAge Pacbase



# Installation Guide OS/390 CICS Server & Client Components

*Version 3.5*

**Note**

Before using this document, read the general information under “Notices” on page vii.

You may consult or download the complete up-to-date collection of the VisualAge Pacbase documentation from the VisualAge Pacbase Support Center at:

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**Fourth Edition (December 2004)**

This edition applies to the following licensed programs:

- VisualAge Pacbase Version 3.5

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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,
- CD-Rom or cartridge, depending on the environment, to install the VA Pac server,
- Client Components CD-Rom,
- VA Pac Documentation CD-Rom.

---

## Bibliography

- 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'.
- 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.



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## Chapter 2. Prerequisites

---

### Prerequisites for Server Environment

#### Hardware and Software

Processor: IBM S/390 MVS/ESA

Installation media: DAT 4mm Drive or cartridge 3480

Monitor: CICS/ESA Version 4.1 or TS

COBOL: 'COBOL FOR OS/390 & VM 2.1.1'

#### 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 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): 256 Mb (512 Mb advised).
- Software: Microsoft Windows Script Host (version 5.1 and onwards).

## Disk Space

Required disk space:

- 38 Mb for Administrator & Developer workbench
- 30 Mb for eBusiness Tools
- 68 Mb for the JDK
- 15 Mb for the Middleware
- 6 Mb for WAM
- 16 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 required disk space is 121 Mb (38 Mb for AD workbench, 68 Mb for the JDK and 15 for the Middleware).

## Software

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

- Windows 98,
- Windows/NT version 4.0 with Service Pack 3,
- Windows 2000,
- Windows XP.

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

---

## Communication

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 Server Components

---

### Parameterization

#### Installation Preparation

The preparation to the installation process consists of three phases:

- Receiving the cartridge with the SMP/E (System Modification Program/Extended) utility in dedicated PDS.  
This stage must be performed by the system staff who are accustomed to installing IBM products with SMP/E.
- Allocation of a PDS file meant to save all the installation and operation JCL.
- Execution of the installation JCL from the PDS members created during the first phase.

#### Remark for a previous SMP/E installation

For the following phase, the SMP/E context is supposed to be virgin for the product. Either the product has never been installed with SMP/E, or the different files relating to SMP/E have been reinitialized for the previous version, or a new SMP/E environment will be created for this version.

In the contrary, to reuse the SMP/E files of the previous version, it is possible to execute, before the first phase, the SMP/E utility described in the appendix of this manual.

#### First phase

You will find details in the document 'Program Directory for VA Pac' specific to SMP/E.

This stage consists of the following steps:

- Downloading of JCL examples via IEBCOPY
- Setting up of the SMP/E environment if required
  - Definition of SMP/E cluster libraries (BVP1DCSI)
  - Initialization of SMP/E libraries (BVP2ICSI)
  - Allocation of SMP/E work files (BVP3ALLO)
  - FMID assignment (BVP4DEFZ)
  - Input creation: DDDEF technical files (BVP5DDEF)
- Cartridge receipt

- Definition of 'Target field' and 'distribution field' (BVP6DDEF) files
- Assignment of files 'Target field' and 'Distribution field' (BVP7ALLO)
- Execution of RECEIVE (BVPRECV)
- Execution of APPLY (BVPAPPLY)
- Execution of ACCEPT (BVPACCPT)

Once this phase has been executed, all components required at installation are to be found in the following PDS, 'hlq' indicating the common prefix of delivered elements (High-Level Qualifier):

- hlq.SBVPINST: all the files with a length of 80 including:
  - The error messages file,
  - The initial installation JCL,
  - A file including the installation and operation JCL's and procedures (BVPTOTAL),
- hlq.SBVPF2: PC and PE initialization files,
- hlq.SBVPMBR8: batch load-modules (BVPDS600 and BVPDS610 interface load-modules between VA Pacbase and DSMS 2.5 are provided in standard; for a DSMS use, the DEXP procedure must be adapted to use these new load-modules in place of PDS600 and PDS610 which are not compatible since VA Pacbase 3.0).
- hlq.SBVPMTR8: on-line load-modules,
- hlq.SBVPF5: SA SG SN SP SR SS skeletons,
- hlq.SBVPF6: SC skeleton
- hlq.SBVPF7: SF skeleton
- hlq.SBVPF8: administration model and development model update file,
- hlq.SBVPSRC: source files with a length of 80
- hlq.SBVPDIC: Dictionary complementary file

### Second phase

This phase is optional but it is recommended to execute it. It involves allocating a PDS file with the following characteristics:

- Lrecl=80
- Size: around 100 disc track 3,390, 30 pads directory.

### Third phase

The third phase involves copying the 'hlq.SBVPINST(BVPINIT)' JCL into the PDS mentioned in the second phase, modifying its parameters to match the constraints of the site and executing it so as to obtain a complete installation and operating JCL.

The BVPINIT JCL executes the BVPMMJCL program loaded in the hlq.SBVPMBR8 PDS.

It must be completed as follows:

- Fill in '&hlq' with the 'hlq' parameter value used in the first phase SMP/E.
- In the '//SYSUT2 DD DSN=' field, enter the name of the file in which the complete JCL is to be saved.  
This file can be either a PDS member initially created to save all the JCL's, 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.

### Warning

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

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

### Execution JCL

```
//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(BVPTOTAL),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 VOLS=SER         .SYSTEM NON VSAM FILES VOL=SER=
===PRM VOLS=SER         .SYSTEM VSAM FILES VOLUME
===PRM VOLUN=SER        .USER NON VSAM FILES VOL=SER
===PRM VOLUN=SER        .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.DFHEXC' .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 JCL skeleton file and produces a complete JCL. It allows you to:

- Select portions of the skeleton JCL, which are called 'JCL modules',
- Parameterize the skeleton in order to obtain a JCL requiring a minimum of modifications to make it operational,
- Add lines before/ or after the JCL modules to separate them.

This step can be executed as many times as necessary to generate a complete JCL.

### User input

| Command   | Parameters    | Comments                                      |
|-----------|---------------|---|
| ===PRM    | PPPP=pppp (1) | Parameter                                     |
| ===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 period and it should not exceed column 72.

The default values are only examples. You must therefore enter values matching with the choices on site.

Lines ===SELM

These lines can be used to select modules.

As the standard installation provides all the modules, no particular module is selected.

```
Lines ===BEGMOD
```

```
./ ADD NAME=$MODULE
```

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

```
./ ADD NAME=<JCL-module>
```

Result: complete JCL

The file resulting in SYSUT2 contains all the installation and operation JCL. This file must be run in an editor to enable the installation process.

Two operations must be performed on the complete JCL:

1. Global modifications (if necessary)

Adaptations can be performed on all the JCLs.

VSAM catalogues are entered as comments in the installation JCL:

- In the DELETE/DEFINE\*/
- In the JCL STEPCAT's
- In the procedure 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, affected lines should be changed into command lines. This is accomplished by:

- Transforming all '//\*:' into '//',
- Substituting blanks for '/\*:' and '\*//'.

Caution: SMS

- If the SMS product is installed, you should delete IDCAMS definition DD //GDGMOD lines in the installation JCLs with GenerationDataGroup allocation.
- If the UNIT and VOL parameters cannot be used on the site, you can delete them in the whole JCL through an exclusion (EXCLUDE command of TSO/EDIT).

In most cases, it is recommended to perform general modifications on JCL's before the JCL splitting operation.

## 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 that is found (see the following table of JCL modules).

This allows for the complete JCL to be split in as many members as there are JCL modules in a PDS. The completed JCL file is to be used as `SYSIN` for 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 done the other way round before executing jobs which contain `IEBUPDTE`.

## Report

`BVPMMJCL` produces a list for each JCL module created, including parameters taken into account and according to required variants.

Note:

Since the JCL skeleton parameters are in the `$xxxx` format, during execution, if `BVPMMJCL` encounters a `$` character that 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 the `'$'` character in the flow processed by `BVPMMJCL` and which is NOT a parameter.

## **JCL List**

Table of installation JCLs

| Member   | Contents  | Procedure |
|----------|---|-----------|
|          | System and Administration Database installation |           |
| D00CSD   | CICS update: components                         |           |
| D01ALLOC | Allocation of parameter PDS's                   |           |
| D02CPAR  | Loading of common parameters                    |           |
| D03DEFIN | VSAM common file definition                     |           |

| <b>Member</b> | <b>Contents</b>  | <b>Procedure</b> |
|---------------|--|------------------|
| D03GDG        | Definition of GDG for parameter backup                         |                  |
| D03INI        | Initialization of system files                                 |                  |
| 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       | Backup of Administration Database                              | RSAD             |
| D08TINQJ      | Initialization of archival journal file VA Pacbase interface   | INQJ             |
| D08XMET       | Installation of administration Model                           | VING             |
| D11ZXIT       | Installation of Endeavor exit-users                            |                  |
| D12SY         | Loading of Endeavor parameters                                 |                  |
| D13PREP       | Allocation of VSAM working file and table Endeavor             |                  |
| D14EXIT       | Link-edit in authorized library for Endeavor                   |                  |
| D15MSGs       | Loading of Endeavor messages                                   |                  |
| D162530       | Retrieval of 2.5 files   |                  |
| D99INSL       | List of components' dates                                      | INSL             |
|               |  |                  |
|               | CICS complement for EXCI                                       |                  |
| E00CSD        | 'Session/Connection' CSD definition                            |                  |
|               |  |                  |
|               | Installation of Development Database                           |                  |
| I00CSD        | CICS update: components  |                  |
| I01SY         | Allocation of parameter PDS's                                  |                  |
| 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             |
| I20GDGI       | Initialization of Pac/Impact GDG                               |                  |

Table of operation tests JCL

| Member  | Contents  | Procedure |
|---------|---|-----------|
|         | ADMINISTRATION DATABASE PROCEDURES  |           |
| JCLARAD | Archival of the Database journal  | ARAD      |
| JCLPAGX | Extraction of Administration Database                                       | PAGX      |
| JCLROAD | Reorganization of Administration Database                                   | ROAD      |
| JCLRSAD | Backup 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 | Archival 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      |
| JCLGPRC | Generation-print (COBOL API)  | GPRC      |
| JCLGPRP | Generation-print + PPAF   | GPRP      |
| JCLGPRT | Generation-print  | GPRT      |
| JCLGPRU | Generation-print source + loading in source library                         | GPRU      |
| JCLMLIB | Library management  | PACS      |
| JCLPQCA | Quality control   | PQCA      |
| JCLPQCE | Quality control extraction  | PQCE      |

| <b>Member</b> | <b>Contents</b>                        | <b>Procedure</b> |
|---------------|--|------------------|
| JCLPRGS       | Master outline file                    | PRGS             |
| JCLREOR       | Reorganization of Development Database | REOR             |
| JCLREST       | Backup of Development Database         | REST             |
| JCLRESY       | Complement system backup               | RESY             |
| JCLSDADM      | 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       | Update of batch                        | 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       | Archival 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                     |                  |
| 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             |

| <b>Member</b> | <b>Contents</b>                          | <b>Procedure</b> |
|---------------|--|------------------|
| 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 inputs                      | ISEP             |
| JCLISOS       | Selection of strings, operators          | ISOS             |
|               | Retrieval of former releases             |                  |
| RGY250        | Exchange of GY transactions from the 2.n | GY25             |
| RMB250        | Exchange of MB transactions from the 2.n | MB25             |
| RGY300        | Exchange of GY transactions to the 2.n   | GY30             |
| RMB300        | Exchange of MB transactions to the 2.n   | MB30             |
| RMP250        | Retrieval of passwords from the 2.5      | UTMP             |
| RPC250        | Retrieval of PC file from the 2.n        | PC25             |
| RPE250        | Retrieval of PE file from the 2.n        | PE25             |
| RPG200        | Retrieval of PG file from the 2.0        | PG20             |
| RPG250        | Retrieval of PG file from the 2.5        | PG25             |
| RPJ250        | Retrieval of PJ file from the 2.n        | PG25             |
| RPP250        | PEI retrieval from 2.n on                | PP25             |
| RUV250        | Retrieval of UV file from Pac/Transfer   | UV25             |
|               | UTILITIES                                |                  |
| JCLPURGE      | Purge of LB PA WS work files             |                  |
| JCLSTAT       | Generation statistics file on base       | STAT             |
|               | '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             |

| Member | Contents                                   | Procedure |
|--------|--|-----------|
|        | Recognition of Endeavor 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 Endeavor   | UPND      |

## JCL Parameters

### Syntax

===PRM PPPP=pppp .Comments

- Parameter values which contain special characters must be entered with simple quotes.
- Comments on ===PRM lines must not exceed column 72  
They must be preceded by a period ('.').

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

### Table of parameters

| 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    | Endeavor VSAM system (maximum: 24 characters) | 'EXP.BVP3VE' |

| Parameter | Meaning  | Default            |
|-----------|--|--------------------|
| INDSN     | VA Pac Non-VSAM system (SAM,PDS)<br>(maximum: 24 characters)   | 'EXP.BVP3N'        |
| INDSNE    | Endevor Non-VSAM system (SAM,PDS)<br>(maximum: 24 characters)  | 'EXP.BVP3NE'       |
| INDUV     | VSAM user (maximum: 24 characters)   | 'UTI.BVP3V'        |
| INDUN     | Non VSAM user (SAM) (Maximum: 24<br>characters)  | 'UTI.BVP3N'        |
| BASE      | Development Database code (it is<br>automatically loaded in the development<br>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  |                    |
| VOLSV     | VOL=SER of VSAM system files   |                    |
| VOLUN     | VOL=SER of NON-VSAM user file  |                    |
| VOLUV     | VOL=SER of VSAM user files   |                    |
| VCAT      | VSAM catalog of the Development Database<br>(user files)   |                    |
| SCAT      | VSAM system catalog (System files)   |                    |
| LSK       | Skeleton language (1)  | A                  |
| DSCB      | DSNAME of DSCB model file used for files at<br>generation  | 'BVP.DSCB'         |
| BIBP      | DSNAME of the procedure library  | 'SYS1.PROCLIB'     |
| HLQ       | Common prefix of elements delivered with<br>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' |

| Parameter | Meaning                                    | Default       |
|-----------|--|---------------|
| DFHCSD    | CSD name for update                        | 'BVP.DFHCSD'  |
| DFHEXC    | EXCI modules PDS (4)                       | '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)                                   |               |
| 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) The files DSN should be replaced by those that are installed on site only if the Tables or DSMS modules are installed or if the default name does not fit.

(3) These transaction codes are to be used only for the Development and Administration Databases. One of them is used to access to the communication monitor for a TCP-IP Sockets protocol, the other is used to access to 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 by those that are installed on site if the SCM module is used.

### JCL Before/After Lines

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 in the BVPMMJCL if the default option is not appropriate (see Subchapter 'Installation default options' above).

The purpose of these lines is to execute the separation of the JCL file created by the BVPMLCL utility into as many members as there are 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, random data      |
| BVPLB | Job follow-up file                        |
| BVPPA | PAF working file                          |
| BVPQJ | SCM working file                          |
| BVPTR | A&D workbench working 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 (JNLSYNCSave and RECOVERY) is required for GN, GR, GJ, and GY files.

## Addition of programs under CICS

It is required to add on "DFHRPL" the DD line of VA Pac on-line program library.

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

## Execution JCL

```
//$PRFJ.DO JOB ($CPT),'SYSTEM DFHCSDUP',CLASS=$CLASSJ,
//      MSGCLASS=$MSGCL
//*****
//* VISUALAGE PACBASE *
//* *
//*          INSTALLATION - CICS *
//*          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(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($GROUP)
DEFINE PROGRAM(BVPFECD) GROUP($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(BVPQR00) GROUP($GROUP)
DEFINE PROGRAM(BVPQR00) GROUP($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($GROUP)
DEFINE PROGRAM(BVPQZ00) GROUP($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($GROUP)
DEFINE PROGRAM(BVPSB10) GROUP($GROUP)
DEFINE PROGRAM(BVPSB30) GROUP($GROUP)
DEFINE PROGRAM(BVPS CPI) GROUP($GROUP)
DEFINE PROGRAM(BVPS C00) GROUP($GROUP)
DEFINE PROGRAM(BVPS C10) GROUP($GROUP)
DEFINE PROGRAM(BVPS D00) GROUP($GROUP)
DEFINE PROGRAM(BVPS D05) GROUP($GROUP)
DEFINE PROGRAM(BVPS D07) GROUP($GROUP)
DEFINE PROGRAM(BVPS D10) GROUP($GROUP)
DEFINE PROGRAM(BVPS D15) GROUP($GROUP)
DEFINE PROGRAM(BVPS D16) GROUP($GROUP)
DEFINE PROGRAM(BVPS D17) GROUP($GROUP)
DEFINE PROGRAM(BVPS D20) GROUP($GROUP)
DEFINE PROGRAM(BVPS D25) GROUP($GROUP)
DEFINE PROGRAM(BVPS ECT) GROUP($GROUP)
DEFINE PROGRAM(BVPS ERR) GROUP($GROUP)
DEFINE PROGRAM(BVPS E00) GROUP($GROUP)
DEFINE PROGRAM(BVPS E10) GROUP($GROUP)
DEFINE PROGRAM(BVPS E20) GROUP($GROUP)
DEFINE PROGRAM(BVPS E30) GROUP($GROUP)
DEFINE PROGRAM(BVPS FA0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FC0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FD0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FE0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FF0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FH0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FIN) GROUP($GROUP)
DEFINE PROGRAM(BVPS FI0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FJ0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FK0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FL0) GROUP($GROUP)
DEFINE PROGRAM(BVPS F00) GROUP($GROUP)
DEFINE PROGRAM(BVPS FP0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FQ0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FR0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FS0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FT0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FV0) GROUP($GROUP)
DEFINE PROGRAM(BVPS FX0) GROUP($GROUP)
DEFINE PROGRAM(BVPS F00) GROUP($GROUP)
DEFINE PROGRAM(BVPS F05) GROUP($GROUP)
DEFINE PROGRAM(BVPS F07) GROUP($GROUP)
DEFINE PROGRAM(BVPS F10) GROUP($GROUP)
DEFINE PROGRAM(BVPS F20) 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(BVPS000) GROUP($GROUP)
DEFINE PROGRAM(BVPS002) GROUP($GROUP)
DEFINE PROGRAM(BVPS003) GROUP($GROUP)
DEFINE PROGRAM(BVPS004) GROUP($GROUP)
DEFINE PROGRAM(BVPS005) GROUP($GROUP)
DEFINE PROGRAM(BVPS010) GROUP($GROUP)
DEFINE PROGRAM(BVPS012) GROUP($GROUP)
DEFINE PROGRAM(BVPS037) GROUP($GROUP)
DEFINE PROGRAM(BVPS038) GROUP($GROUP)
DEFINE PROGRAM(BVPS080) GROUP($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(BVPSROC) GROUP($GROUP)
DEFINE PROGRAM(BVPS00) GROUP($GROUP)
DEFINE PROGRAM(BVPS1B) GROUP($GROUP)
DEFINE PROGRAM(BVPS1C) GROUP($GROUP)
DEFINE PROGRAM(BVPS10) GROUP($GROUP)
DEFINE PROGRAM(BVPS20) GROUP($GROUP)
DEFINE PROGRAM(BVPS30) GROUP($GROUP)
DEFINE PROGRAM(BVPS40) GROUP($GROUP)
DEFINE PROGRAM(BVPS50) 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(BVPTST) GROUP($GROUP)
DEFINE PROGRAM(BVPTWS) GROUP($GROUP)
DEFINE PROGRAM(BVPUCTR) GROUP($GROUP)
RESIDENT(YES)
DEFINE PROGRAM(BVPUCTX) GROUP($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(BVPSOC)
DEFINE TRANSACTION($CPIC) GROUP($GROUT)
DESCRIPTION(CPIC TRANSACTION CODE) PROGRAM(BVPCPI)
*****
ADD GROUP($GROUP) LIST($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 : DELETE                       *
//*   .STEP2 : ALLOCATION                     *
//*****
//*
//STEP1 EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=$OUT
//SYSIN DD *
DELETE ($INDSN..BVPSY)
//*
//STEP2 EXEC PGM=IEFBR14
//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 ($INDSV..BVP AE) CLUSTER
SET LASTCC = 0
SET MAXCC = 0
DEFINE CLUSTER ( NAME ($INDSV..BVP AE)           -
                  SHR (2,3) RUS   KEYS (12,0)    -
                  VOL ($VOLSV)                  -
                  CYL (45)                       -
                  RECSZ (80 80) )                -
INDEX   ( NAME ($INDSV..BVP AE.I)               -
          CISZ (1024) )                          -
DATA    ( NAME ($INDSV..BVP AE.D)               -
          FSPC (2,1)                             -
          CISZ (4096) ) /*: CATALOG ($SCAT) */
:/  ADD NAME=DFBVPGN
DELETE ($INDSV..BVP GN) CLUSTER
SET LASTCC = 0
SET MAXCC = 0
DEFINE CLUSTER ( NAME ($INDSV..BVP GN)           -
                  SHR (2) RUS   KEYS (49,0)     -
                  VOL ($VOLSV)                  -
                  CYL (4 1)                      -
                  RECSZ (59,59) )                -
INDEX   ( NAME ($INDSV..BVP GN.I)               -
          CISZ (4096) )                          -
DATA    ( NAME ($INDSV..BVP GN.D)               -
          FSPC (10,5)                            -
          CISZ (4096) ) /*: CATALOG ($VCAT) */
:/  ADD NAME=DFBVPGR
DELETE ($INDSV..BVP GR) CLUSTER
SET LASTCC = 0
SET MAXCC = 0
DEFINE CLUSTER ( NAME ($INDSV..BVP GR)           -
                  SHR (2) RUS   NUMBERED         -
                  VOL ($VOLSV)                  -
                  CYL (4 1)                      -
                  RECSZ (144,144) )              -
DATA    ( NAME ($INDSV..BVP GR.D)               -
          CISZ (4096) ) /*: CATALOG ($VCAT) */
:/  ADD NAME=DFBVPGY
DELETE ($INDSV..BVP GY) CLUSTER
SET LASTCC = 0
SET MAXCC = 0
DEFINE CLUSTER ( NAME ($INDSV..BVP GY)           -
                  SHR (2) RUS   NUMBERED         -
                  VOL ($VOLSV)                  -
                  CYL (4 1)                      -
                  RECSZ (1018,1018) )            -
DATA    ( NAME ($INDSV..BVP GY.D)               -
          CISZ (4096) ) /*: CATALOG ($VCAT) */
:/  ADD NAME=DFBVPGJ
DELETE ($INDSV..BVP GJ) 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 (1024) )                          -
  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 ($INDSV..BVPSC.I)              -
        CISZ (256) )                          -
  DATA ( NAME ($INDSV..BVPSC.D)              -
        FSPC (10,5) SPEED TRK (5)             -
        CISZ (3584) ) /*: CATALOG ($SCAT) */
:/      ADD NAME=DFBVPSPA
DELETE ($INDSV..BVPSPA) CLUSTER
  DEFINE CLUSTER ( NAME ($INDSV..BVPSPA)         -
                  SHR (2,3) RUS   KEY (5 0)   -
                  VOL ($VOLSV)                 -
                  RECSZ (4605,4605) )          -
  INDEX ( NAME ($INDSV..BVPSPA.I)              -
        CISZ (256) )                          -
  DATA ( NAME ($INDSV..BVPSPA.D)              -
        FSPC (10,5) SPEED CYL (4 1)           -
        CISZ (5120) ) /*: CATALOG ($SCAT) */
:/      ADD NAME=DFBVPSPG

```



```

:/      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 (256) )                             -
  DATA  ( NAME ($INDSV..BVPSS.D)                -
          FSPC (10,5) SPEED CYL (5 1)           -
          CISZ (5120) ) /*: CATALOG ($SCAT) */
:/      ADD NAME=DFBVP GK
DELETE ($INDSV..BVP GK) CLUSTER
  DEFINE CLUSTER ( NAME ($INDSV..BVP GK)          -
                   SHR (2) RUS      KEY (29 0)   -
                   VOL ($VOLSV)                -
                   CYL (4 1)                   -
                   RECSZ (80,80) )              -
  INDEX  ( NAME ($INDSV..BVP GK.I)              -
          CISZ (1024) )                          -
  DATA  ( NAME ($INDSV..BVP GK.D)              -
          FSPC (10,5)                            -
          CISZ (4096) ) /*: CATALOG ($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 (1024) )                             -
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 ($DSMS..I)                       -
        CISZ (1024) )                             -
DATA   ( NAME ($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 ($INDSV..BVPLB.D) -
        FSPC (10,5) -
        CISZ (4096) ) /*: CATALOG ($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 (512) ) -
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 (512) ) -
                DATA ( NAME (&USES.SYSEXT.&USER.D) -
                FSPC (10 5) SPEED -
                CISZ (4096) ) /*: CATALOG ($VCAT) */
:/ ADD NAME=DFSYIANA
DELETE ($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 ($INDUV..SYIANA.&USER.I) -
                CISZ (512) ) -
                DATA ( NAME ($INDUV..SYIANA.&USER.D) -
                FSPC (10 5) SPEED -
                CISZ (4096) ) /*: CATALOG ($VCAT) */
:/ ADD NAME=DFWKREOR
DELETE ($INDUV..WK&USER) CLUSTER
SET LASTCC = 0
SET MAXCC = 0
DEFINE CLUSTER ( NAME ($INDUV..WK&USER) -
                SHR (2 3) RUS KEYS(8 0) -
                VOL ($VOLUV) -
                CYL (1 1) -
                RECSZ (162,162) ) -
                INDEX ( NAME ($INDUV..WK&USER.I) -
                CISZ (4096) ) -
                DATA ( NAME ($INDUV..WK&USER.D) -
                FSPC (10 5) SPEED -
                CISZ (4096) ) /*: CATALOG ($VCAT) */
:/ ADD NAME=DFWYREOR
DELETE ($INDUV..WY&USER) CLUSTER
SET LASTCC = 0
SET MAXCC = 0
DEFINE CLUSTER ( NAME ($INDUV..WY&USER) -
                SHR (2 3) RUS KEYS(8 0) -
                VOL ($VOLUV) -
                CYL (2 1) -
                RECSZ (1028,1028) ) -
                INDEX ( NAME ($INDUV..WY&USER.I) -
                CISZ (4096) ) -

```

```

        DATA    ( NAME ($INDUV..WY&USER.D)           -
                  FSPC (10 5) SPEED                   -
                  CISZ (4096) ) /*: CATALOG ($VCAT) */
:/    ADD NAME=DFWKROAD
DELETE ($INDSV..WKROAD) CLUSTER
SET LASTCC = 0
SET MAXCC = 0
DEFINE CLUSTER ( NAME ($INDSV..WKROAD)               -
                  SHR (2 3) RUS KEYS(8 0)           -
                  VOL ($VOLSV)                      -
                  CYL (1 1)                          -
                  RECSZ (162,162) )                 -
INDEX   ( NAME ($INDSV..WKROAD.I)                  -
          CISZ (4096) )                             -
DATA    ( NAME ($INDSV..WKROAD.D)                  -
          FSPC (10 5) SPEED                         -
          CISZ (4096) ) /*: CATALOG ($VCAT) */
:/    ADD NAME=DFWYROAD
DELETE ($INDSV..WYROAD) CLUSTER
SET LASTCC = 0
SET MAXCC = 0
DEFINE CLUSTER ( NAME ($INDSV..WYROAD)              -
                  SHR (2 3) RUS KEYS(8 0)           -
                  VOL ($VOLSV)                      -
                  CYL (2 1)                          -
                  RECSZ (1028,1028) )               -
INDEX   ( NAME ($INDSV..WYROAD.I)                  -
          CISZ (4096) )                             -
DATA    ( NAME ($INDSV..WYROAD.D)                  -
          FSPC (10 5) SPEED                         -
          CISZ (4096) ) /*: CATALOG ($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 (512) )                             -
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)            -

```





```

// 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(DFBVP GK),DISP=SHR
// DD DSN=$INDSN..BVPSY(DFBVP LB),DISP=SHR
// DD DSN=$INDSN..BVPSY(DFBVP TR),DISP=SHR
// DD DSN=$INDSN..BVPSY(DFBVP WS),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 working file maxi key (PAF user on-line request) |
| STEP2 | IDCAMS  | Initialization of GS extraction schema file max. key (PAF extension)  |
| STEP3 | IDCAMS  | Initialization WS working file max. key (Workstation)                 |
| STEP4 | IDCAMS  | Initialization of jobs follow-up file max. key                        |

### 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
//*:STEP1 DD DSN=$SCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//PA0 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
//*:STEP2 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
//*:STEP3 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
//*:STEP4 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
//*:STEP5 DD DSN=$SCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//GKO DD DSN=$INDSV..BVPKG,DISP=SHR
//GKI DD DSN=$INDSN..BVPSY(MAXKEY),DISP=SHR
//SYSIN DD *
    REPRO INFILE (GKI)  OUTFILE (GKO)
//*
//PTINTR EXEC PGM=BVPTINTR
//*-----
//*:STEP4 DD DSN=$VCAT,DISP=SHR
//*:STEP5 DD DSN=$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
//

```

## Loading of Procedures

It is recommended that all operation procedures be cataloged in one procedure 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 procedure 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 : ALLOCATION
//*
//*****
//*
//STEP1 EXEC PGM=IEFBRI4
//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 the 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 older 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=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=BVPGPPM
:/ ADD NAME=BVPGPRP
:/ ADD NAME=BVPGPRC
:/ ADD NAME=BVPGPRT
:/ ADD NAME=BVPGPRU
:/ 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=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=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=BVPTRD
:/ 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=$OUT
//SAO DD DSN=$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=$HLQ..SBVPF5(BVPSA$LSK),DISP=SHR
//SCI DD DSN=$HLQ..SBVPF6(BVpsc$LSK),DISP=SHR
//SGI DD DSN=$HLQ..SBVPF5(BVPSG$LSK),DISP=SHR
//SNI DD DSN=$HLQ..SBVPF5(BVPSN$LSK),DISP=SHR
//SRI DD DSN=$HLQ..SBVPF5(BVPSR$LSK),DISP=SHR
//SSI DD DSN=$HLQ..SBVPF5(BVPSs$LSK),DISP=SHR
//SPI DD DSN=$HLQ..SBVPF5(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..SBVPF7(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 on-line 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 recognize one or more languages, you must add as many parameter lines containing the two-characters language code in position 3.

To recognize all the available languages, you must enter a parameter line containing **'\*\*'** in position 3.

| Step   | Program  | Comments                              |
|--------|----------|---------------------------------------|
| INPUT  | BVPTU001 | Recognition of the language parameter |
| DELDEF | IDCAMS   | DELETE DEFINE of AE                   |
| MAXKEY | IDCAMS   | Maximum key valorization of AE        |
| PTUCAE | BVPTUCAE | AE supplying shipped                  |

### 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 at 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 when the test JCL lines are run.

#### Note:

For a re-installation on a version higher or equal to 3.0, if you want to backup the Administration Database of the previous version, you will first have to retrieve the GU file corresponding 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 at the first installation only.

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

### Caution

If the files are handled on SMS, delete the lines DD //GDGMOD of the IDCAMS Steps JCL before submitting the job.

| Step  | Program  | Comments                           |
|-------|----------|------------------------------------|
| STEP1 | IDCAMS   | GDG of administration file journal |
| 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
//*:STEP1 DD DSN=$VDCAT,DISP=SHR
//GDGMOD DD DSN=$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..SBVPF2(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 at 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. With the exit of this stage, a key of evaluation is installed, but allows only the execution of certain procedures, in particular the procedures of installation.

The access key must be updated via the Administrator workbench, to take into account the whole product.

### 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 at the first installation.

It defines and then loads the QJ 'Archival journal 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 at the first installation and at 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..SBVPF8(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:

- Access key entering,
- Targets definition,
- Key activation.

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

This step is recommended to avoid, in case of problem, entering again the access key.

---

## List of components with their date 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 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

### Utility to purge work files

The JCLPURGE JCL is provided in standard.

Its purpose is to purge VA Pacbase work files, in particular the WS file (which size is 150 cylinders to perform voluminous requests).

It is recommended to execute this JCL daily or to insert it in the CICS startup to avoid a lock in online mode.

### CICS Complements for EXCI

This step is to be executed only for sites using SCM.

You will have to verify that the EXCI interface of communication with the CICS is operational.

If this is not the case, check that the CICS is started with the ISC=YES option and 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 - CICSUSD *
//* EXCI: CSD BATCH UPDATE SYSTEM *
//*****
//DFHUSD EXEC PGM=DFHUSD
//STEPLIB DD DSN=$CSDL,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//DFHUSD DD DSN=$DFHUSD,DISP=SHR
//SYSIN DD *
*****
DEFINE CONNECTION($EXCN) GROUP($GROU)
      ACCESSMETHOD(IRC) PROTOCOL(EXCI) CONNTYPE(GENERIC)
      SINGLESESS(NO) DATASTREAM(USER) RECORDFORMAT(U)
      QUEUELIMIT(NO) MAXQTIME(NO) AUTOCONNECT(NO)
      INSERVICE(YES) ATTACHSEC(LOCAL)

```

```

        BINDSECURITY(NO) USEDFTUSER(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) NEPCCLASS(0)
        RECOVPTION(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 check resource access authorizations.

The Interface is designed to ensure control communication between the security systems and VA Pac.

In order to ensure compatibility with all security systems, the VA Pac system is not directly connected 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 done in the Administrator workbench module, and the others in the security system.

- From the Administrator workbench module

You have to 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 realize 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 on 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

Installing and using RACF implies that it is possible to work in VisualAge Pacbase with a user code different from the one used to connect to CICS or TSO.

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 a resource class

The definition of a resource class is made 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 resource authorizations

It must be done with PERMIT used as follows:

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

```
PERMIT nBBB CLASS(cccc) ID(user) ACCESS(ALTER) n varies from 0 to 3
and corresponds to the VA Pac authorization level for the BBB library.
```

### ON-LINE MODE REQUESTS

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

- Connection in on-line mode

The 'user' and 'password' fields are locked.

They are retrieved by 'EXEC CICS ASSIGN' while connecting to CICS (CESN transaction or equivalent).

All authorization controls are made for this user via the RACF request.

- Workbench connection

On the sign-on screen, only the user and password of the middleware are required.

As for the on-line mode, the user code is retrieved by 'EXEC CICS ASSIGN'.

- Use of the CPIC protocol: the user validity is checked (equivalent to CESN).
- Use of sockets (SPECIFIC TO CICS): it implies the use of a CICS listener, which in standard, is deprived from authentication system. The RACF control is performed via the security exit-user BVPCICSE delivered by SMP/E in the PDS hlq.SBVPMT8.
- Implementation of the security exit-user BVPCICSE.

It must be declared with the clause 'EXECKEY(CICS)' in the CSD (see the installation JCL D00CSD).

On the CICS, enter the 'EZAC AL' command:

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

After selecting the listener:

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

You find the following screen where you must enter the exit-user code:

```
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 GIVESOCKET |
| 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 | ===>                   ===>  |

## BATCH REQUESTS

Unlike the on-line mode, there is no command allowing the execution of a RACF request: therefore, it is necessary to execute the RACF request through the use of an assembler sub-program.

This sub-program BVPSECRA, supplied by SMP/E in the PDS hlq.SBVPMBR8, must be copied in an authorized program library (AUTHORIZED LIBRARY) with the name BVPSECUR and a RACLIST authorization. It must be declared in the ICHAUTAB table with authorization of RACLIST SVC and RACINIT SVC (X'C0000000').

Then, you must check if the user is authorized to execute the procedure. In case of a multi-user procedure (UPDT for instance), for each identification line met, only authorizations to library levels are checked.

## Implementation for TOPSECRET

The sources of the sub-programs (assembler) for 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 its compilation and link-edit.

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 made up of 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 'LLL' (or '###' depending on the keyboard used).

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

#### DEFINITION OF RESOURCES

- Definition of a resource class  
SS ADD (RDT) RESCLASS(cccc) RESCODE(xx)  
cccc = code of the resource class corresponding 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 preparation, installation and operation of the system uses OS and VSAM standard functions. The user is entirely responsible for any adaptation modifying the parameters entered in the installation parameterization, described in the chapter 3.

In particular, all modifications on JCL 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 Endeavor system is constituted of two types of elements:

- 'VA Pac' type: All VA Pac entities (compilable or not) are stored in Endeavor 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 Endeavor 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 Endeavor system; in particular the LOADTEST parameter must correspond to the user load-module 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 Endeavor 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 Endeavor 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 Endeavor 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-compileable 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:

- EXIT2 ZAP '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 \$MSG SXH parameter is other than 50. |

### Execution JCL

```
//$PRFJ.ZXIT JOB ($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 'MSGSHX' PARAMETER MUST BE *
//* CODED: MSGSHX='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 containing the building command of the 'QU' backup index of 'UQ' VA Pac update file.
- 'ISPLOGON' member containing the 3 VSAM files used by the VA Pacbase Endeavor system. They must be defined in the user LOGON of the TSO procedure.
- 'ISPF' member containing 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 Endeavor system and is copied in the Endeavor '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

```
//$PRFJ.SY JOB ($CPT),'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=$INDSN..BVPSY,DISP=SHR
//SYSIN DD DATA,DLM='$%'
:/ ADD NAME=DF$BASE.QJ
DELETE ($INDSVE..$BASE.QJ) CLUSTER
DEFINE CLUSTER ( NAME ($INDSVE..$BASE.QJ)          -
                 SHR (2)          NUMBERED          -
                 VOL ($VOLSV) REC (310)          -
                 RECSZ (310,310) RUS )          -
DATA ( NAME ($INDSVE..$BASE.QJ.D)          -
      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 ($INDSVE..BVPUU) CLUSTER
:/ ADD NAME=DL$BASE.QJ
DELETE ($INDSVE..$BASE.QJ) CLUSTER
:/ ADD NAME=VERIFY
VERIFY FILE (PAC7TY)
:/ ADD NAME=BLBVPUQ
DEFINE GENERATIONDATAGROUP -
      (NAME ($INDUNE..BVPQU) LIMIT (3) SCR)
:/ ADD NAME=ISPLGON
/**
/** THE FOLLOWING THREE FILES MUST BE DECLARED
/** INTO THE USER TSO LOGON PROCEDURE.
/**
/**IKJ      EXEC PGM=IKJEFT01, ...
.
.
/PAC7TY DD DSN=$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

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```

/** INTO THE USER ISPF CONNECTION PROCEDURE.
/**
CONTROL MAIN NOMSG
SET &PTRACE = &STR('$INDUNE..&SYSUID..PTRACE')
FREE FI(PTRACE)
ALLOC FI(PTRACE) SHR REU DA(&PTRACE)
IF &LASTCC > 0 THEN DO
    FREE ATTRLIST(DCBTRACE)
    ATTR DCBTRACE RECFM(F B) LRECL(120) BLKSIZE(12000) DSORG(PS)
    ALLOC FI(PTRACE) DA(&PTRACE) SPACE(20,10) TRACKS USING(DCBTRACE)
    FREE FI(PTRACE)
    ALLOC FI(PTRACE) SHR REU DA(&PTRACE)
END
:/ ADD NAME=CIIU$MSGSX
CIIU$MSGSX.1E    'INVALID TYPE (INFOPAC) ' .ALARM = YES .HELP = *
'''INFOPAC''' TYPE ELEMENTS ARE NOT ALLOWED FOR UPDATING
CIIU$MSGSX.2E    'INVALID ACTION (PACBASE)' .ALARM = YES .HELP = *
'ACTIONS '''ADD & UPDATE''' ARE NOT ALLOWED FOR PACBASE OUT OF PROCESSOR
CIIU$MSGSX.3E    'INVALID ACTION (PACBASE)' .ALARM = YES .HELP = *
'ONLY ACTIONS '''ADD & UPDATE''' ARE ALLOWED FOR PACBASE THROUGH PROCESSO
:/ ADD NAME=PRCSGENI
/**
/**-----*
/** G E N E R A T E      P R O C E S S O R              (INFOPAC TYPE) *
/**-----*
/**
//GENI    PROC ROOTPGM='BV',
//          STEPLIB='$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)

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//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,_),&C1ENVMT(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,_),&C1ENVMT(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)

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//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)

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//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,_),&C1ENVMT(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,_),&C1ENVMT(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')

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//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',

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```

//          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 DSN=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 DSN=CEE.SCEELKED,DISP=SHR
//          DD DSN=&LOADTEST,DISP=SHR
//SYSLIN DD DSN=&&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)

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//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,_)&C1ENVMT(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
//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,_)&C1ENVMT(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=PRCSDEL P
/*
/*-----*
/* 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_,&C1ENVMT(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,_),&C1ENVMT(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 *
//        ,&C1ENVMT(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,_),&C1ENVMT(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 'PACUP' *
//* 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,CXMSG SX),MAXRC=8,
// COND=(00,NE,MOV04)
//PAC7BS DD DSN=&&BSTIPT01,DISP=(OLD,PASS)
//CXMSG SX 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)
//*
$%
//*
//

```

## Initial preparation of files

D13PREP module: '\$prfj.PRE' job

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

| Step  | Program  | Comments   |
|-------|----------|--|
| ET010 | IDCAMS   | Allocation of VSAM file of Endeavor types of VA Pac and 'INFOPAC' elements : 'TY'<br>Allocation of work file of VA Pacbase context of elements in Endeavor (update preparation) : 'UP'<br>Allocation of work file of VA Pacbase + Endeavor context of elements in Endeavor (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          *
//*****
//*
//ET010  EXEC PGM=IDCAMS
//*:STEP CAT DD DSN=$VCAT, DISP=SHR
//SYS PRINT DD SYSOUT=$OUT
//SYS IN DD DSN=$INDSN..BVPSY(DFBVPTY), DISP=SHR
//        DD DSN=$INDSN..BVPSY(DFBVPU), DISP=SHR
//        DD DSN=$INDSN..BVPSY(DFBVPUQ), DISP=SHR
//*
//*****
//*          LOADING 'UQ'          *
//*****
//*
//ET020  EXEC PGM=BVPNINUQ
//STEPLIB DD DSN=$HLQ..SBVPMBR8, DISP=SHR
//PAC7UQ DD DSN=$INDSVE..BVPUQ, DISP=SHR
//SYSOUT DD SYSOUT=$OUT
//SYS DUMP 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(REPR0999),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
//*
//

```

## LINK-EDIT of EXITS in an authorized library

D14EXIT module: '\$prfj.EXT job

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

The '\$PRFJ.EXT' JOB includes the 2 following steps (to adapt to the sites) :

| Step  | Program | Comments   |
|-------|---------|------------|
| ET010 | IEWL    | EXIT2 link |
| ET020 | IEWL    | EXIT3 link |

**Note:** After this job, the user must define EXITs in Endeavor by adding them via the C1UEXIT macro structure lines of the 'BC1JXITS' Endeavor 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 ENDEAVOR BY ADDING    *
//*          THEM TO THE ãC1UEXIT MACRO IN THE ENDEAVOR 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
//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
//SYSLMOD DD DSN=$LDLIB,DISP=SHR
//SYSPRINT DD SYSOUT=*
//SYSLIN DD *
INCLUDE SYSLIB(EPC1UEXT)
INCLUDE SYSLIB(C1UEXT03)
ENTRY EPC1UEXT
NAME C1UEXT03(R)
/*
//*
//

```

## Loading of VA Pac-ENDEVOR / TSO messages

D15MSG module: '\$prfj.MSG' job

This job loads the TSO user messages of the VA Pacbase Endevor 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' in Endevor 'ISPMLIB' library |

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

### Execution JCL

```

//$PRFJ.MSG JOB ($CPT),'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,0=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 sites switching from 2.5 version of VA-Pacbase / Endeavor 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   |
| 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 data of Elements managed by Endeavor contained in VA Pacbase as user entities of .NDENV and .NDVLM meta entities to the new model user entities. |

## Execution JCL

```

//$PRFJ.2530 JOB ($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 BVPJND,
//      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
//*
//ET040   EXEC BVPRP25,
//          PAC7TY='????'           <-- TYPE FILE 'TY' 2.5
//*
//INPUT.CARTE DD *
              ENVIRON SYSTEM  SUBSYSTEM
//*
//

```

---

## Installation of the Development Database

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

You do so via the 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 initialized.

### 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 files codes selected by the user.

Files:

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

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

## Note

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 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 definition 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 (1024) )                            -
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=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 generation files (GDG) of the Development Database.

## Caution

If the files are handled under 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=$VOLUN,
// SPACE=(TRK,0),
// DCB=($DCSB,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
//*:STEP3 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=$HLQ..SBVPP2(BVPPC),DISP=SHR
//SYSUT2 DD DSN=$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 with as input, the backup file previously loaded on the disk in STEP4 of job '\$prfj.I3I'.

To install the test Database you are provided with, run the JCL and do not add any change.

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



| Step   | Program  | Comments                               |
|--------|----------|--|
| 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='$VCAT', USER VSAM CATALOG
//*: SYSCAT='$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=$UWK WORK UNIT
//*****
//INIF01 EXEC PGM=BVPRMSYS,PARM='&INDUN.&USER.&BASE'
//*-----
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
// DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//SYSABOUT DD SYSOUT=&OUT
//PACRIN DD DDNAME=SYSIN
//PACROU DD DSN=&&DFF0,DISP=(,PASS),UNIT=&UWK,SPACE=(TRK,1),
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//INIF02 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=&&DFF0,DISP=(OLD,DELETE)

```

```

//INIF03 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=&&DFDQ,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

```

```
//INIF01.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)
/*
//
```

---

## Chapter 4. Installation/Re-installation 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://msdn.microsoft.com/library/default.asp?url=/downloads/list/webdev.asp>
- Both Administrator & Developer workbench and eBusiness Tools components require, for their online help, that a 4.7 or higher Netscape version or a 5.5 or higher Internet Explorer version be used.
- 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 sub-chapters dedicated to each component.

---

## **Fundamentals of VA Pac Client-Server Communication**

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

The following pages contain important information essential to the choice of 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).

**NOTE:** With MVS CICS CPI-C, you must install and configure this protocol on the (or all) workstation(s) where the VisualAge Pacbase Middleware is installed.

For more information on this configuration, see subchapter 'Additional Information', section 'How to configure the MVS CICS CPI-C protocol'.

- If it runs on MVS/IMS, you can use the MVS 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, its installation will automatically take place. 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

**WARNING:** Installing Administrator workbench on at least one workstation is **REQUIRED** as it will allow for the entering and activation of the access key, for the creation of the site's VA Pac Database(s), Libraries, Profiles, users, etc.

- 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 provide for 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.

**NOTE:** You will also have to install the middleware and configure the communication on the intermediate server which hosts the gateway.

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 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 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.

**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.

### START-UP FILES

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

The Publishing facility requires the installation of the Open Jade and Tidy open source utilities.

You can download them through the VA Pac Support web page at:

<http://www.ibm.com/software/awdtools/vapacbase/support.htm>

Under 'Self Help' and 'Download', click the 'VisualAge Pacbase downloads' link, then 'VisualAge Pacbase Downloads in English', you will find a number of specific instructions, follow the 'Open Jade' and 'Tidy' links, accordingly.

Open Jade must be installed in the 'adworkbench' directory and Tidy in the 'adworkbench\workstation\publish' directory.

---

## 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, its installation will automatically take place. 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 following 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 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

The root used for this installation depends on this installation's 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 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 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.

**NOTE:** You will also have to install the middleware and configure the communication on the intermediate server which hosts the gateway.

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 at connection. Refer to the Database Administrator to ensure authentication measures at the server level are imposed 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 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                     |

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

#### NON-STANDARD LABELS FILE (GPMON)

To enable the WorkStation to take into account non- standard files' labels in output of a personalized generation and print procedure, you need to create a file GPMON.LBL in which you enter the specific labels of the files.

The file is to be created under the BASE directory and must contain the label and code of each specific file. Their extensions must be consistent with the usual standard extensions: Ix, Gx, Ox ou Dx (example, IP, GA...).

Each label begins in column 4. The lines are maximum 60 characters long.

---

## 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 in-between MQSeries Server on NT, this parameter must identify the in-between 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 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 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 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 debug

- 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
```

## 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  
MQ-CICS Bridge.  
Version of the MQCIH structure: 1 (default) or 2, depending on the used CICS Bridge interface. (1 character maximum).
- IXO\_LOCALCCSID  
MQ-CICS Bridge and MQ-IMS Bridge.  
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. (9 characters maximum).
- IXO\_QUEUEMANAGER  
MQ-CICS Bridge and MQ-IMS Bridge.  
Local Queue Manager name of the client part. (4 characters maximum).  
If there is an in-between MQSeries Server on NT, this parameter identifies the in-between NT Queue Manager and not the Queue Manager.
- IXO\_RACFGROUP:  
Name of RACF group for IMS Connect.
- IXO\_REPLYQUEUE  
MQ-CICS Bridge and MQ-IMS Bridge.  
Name of reply messages Queue. (48 characters maximum).
- IXO\_REQUESTEXPIRY  
MQ-CICS Bridge and MQ-IMS Bridge.  
Expiration delay of the request message, in seconds. (9 characters maximum).
- IXO\_REQUESTQUEUE  
MQ-CICS Bridge and MQ-IMS Bridge.  
Name of request messages Queue. (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 parameters in 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 user's Guide.

---

## Component Updating, Modification, or Removing

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

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

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



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## 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 of 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 on-line 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:

- On-line 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 previous provided access key.
- 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 previous provided access key.
- 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. Re-installation of Server

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

To install this version, download the cartridge in the dedicated PDS by using SMP/E and execute the JCL supplied if it is necessary.

This version is identified by a number and includes:

- An installation cartridge (or tape),
- 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.

Your context may be :

### Case 1: Standard re-installation

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

1. D06SKEL: loading skeleton files,
2. D07AE0 : loading error messages,
3. D08XMET: installation of the Administration Model, (see the description in the appendix at the end of the manual).
4. I05META: installation of 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).

### Note

If the D08XMET JCL report 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 I05META JCL report 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 note provided in the supply.

---

## 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 completed 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 'Help to retrieve 2.5 utilities' manual for a detailed documentation.

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 : 'UNS' lines extraction,
- UTU2 : 'UNS' lines update.

#### 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.

#### Screen branching:

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).

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,
  - D08INAD: 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:
  - access key entering,
  - 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,
  - JCLUTMP: retrieval of 2.0 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 through 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 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 JCL:

- RPG200: if retrieval of 2.0 PG file,
- RPG250: if retrieval of 2.5 PG file.

### 5) Retrieval of Pac/Transfer parameters (UV).

It involves in executing the following JCL's:

- RUV250: retrieval of the UV file data.

### 6) Retrieval of PEI files.

It involves executing the following JCL:

- RPP250: retrieval of the PP file data.

### 7) Retrieval (potential) of PJ journal

It involves executing the RPJ250 JCL.

## 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 in the Administration Database.

### 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 the security system (RACF) is used.

The 'A' line has the following structure:

| Position | Length | Value     | Meaning              |
|----------|--------|-----------|----------------------|
| 2        | 1      | 'A'       | Line code            |
| 3        | 8      | bbbbbbbbb | 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<br>(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 | Transactions formatting (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 |

| Code   | Physical name | Type   | Label   |
|--------|---------------|--------|---|
| PAC7ME | &&PAC7ME      | Input  | Work file   |
| PAC7MV | &&PAC7MV      | Input  | Update transactions                               |
| PAC7RB | DUMMY         | Output | UPDT erroneous transactions<br>(length=80)        |
| PAC7RY | DUMMY         | Output | UPDP erroneous transactions<br>(length=310)       |
| PAC7IE |               | Report | Update report (length=132)                        |
| PAC7IF |               | Report | Summary of erroneous<br>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 error
- 4 : fatal 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
//*:       SYSCAT='$SCAT',              SYSTEM VSAM CATALOG
//          STEPLIB='$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=IDCAM5
//*-----
//*: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
//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
//*:STEPDAT DD DSN=&SYSDAT,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 produced by the backup of the old Development Database in a new PC file 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 new Development Database format. This new PC file must be used as input to the next required step: the re-organization step.

### 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 'EIBM'.

Long data: user entities, input aids, report layouts

There are no more continuation records for these entities. There is only one index for one main record and one index for each continuation record. Long data are 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 at 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)  |
| 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) |
| 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   |   |

| Code     | Physical name | Type | Label |
|----------|---------------|------|-------|
| 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..BVP AE | Input        | Error messages  |
| 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         |   |

| Code     | Physical name | Type | Label |
|----------|---------------|------|-------|
| 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<br>(Definition and Descriptions)<br>(length=193) |
| SORTWK01 |               | Sort   |  |
| SORTWK02 |               | Sort   |  |
| SORTWK03 |               | Sort   |  |

User entities processing: PTU913

| Code     | Physical name | Type   | Label   |
|----------|---------------|--------|---|
| PAC7AE   | &INDSV..BVPAE | Input  | Error messages  |
| PAC7PX   | &&EP          | Input  | Definition of User Entity<br>Occurrences (2.5 release) and<br>Report Layout   |
| PAC7PZ   | &&ZP          | Input  | Definition and Description of the<br>Development Model and<br>Description of User Entity<br>Occurrences (2.5 rel.)                            |
| PAC7PB   | &&PB          | Input  | First data record   |
| PAC7ZP   | &&ZX          | Output | Long data of the Development<br>Model, User Entities, Report<br>layouts, and Comments<br>(including the calls of Input Aids<br>) (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 long 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..BVP AE       | Input  | Error messages                                    |
| PAC7ZP | &&XZ                 | Input  | Sorted long data                                  |
| 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=&SYSTCAT,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=&SYSTCAT,DISP=SHR
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//      DD DSN=$BCOB,DISP=SHR
//SYSOUT  DD SYSOUT=&OUT
//PAC7AE  DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7PB  DD DSN=&&PC,DISP=(OLD,PASS)
//PAC7PL  DD DSN=&&PL,DISP=(OLD,DELETE)
//PAC7PI  DD DSN=&&PI,DISP=(NEW,PASS),UNIT=&UWK,
//          SPACE=(CYL,&CYL,RLSE),
//          DCB=(RECFM=FB,LRECL=153,BLKSIZE=27846)
//PAC7PM  DD DSN=&&PM,DISP=(OLD,PASS)
//SORTLIB DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//PTU92A EXEC PGM=BVPTU92A,COND=(0,NE,PTU911)
//*-----
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:      DD DSN=&SYSTCAT,DISP=SHR
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//      DD DSN=$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)
//*-----
//*:STEPCHAT DD DSN=&VSAMCAT,DISP=SHR
//*:          DD DSN=&SYSTCAT,DISP=SHR
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//          DD DSN=$BCOB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVPAE,DISP=SHR
//PAC7PB   DD DSN=&&PB,DISP=(OLD,DELETE)
//PAC7PD   DD DSN=&&PR,DISP=(NEW,PASS),UNIT=&UWK,
//          SPACE=(CYL,&CYL,RLSE),
//          DCB=(RECFM=FB,LRECL=153,BLKSIZE=27846)
//PAC7PZ   DD DSN=&&ZP,DISP=(OLD,DELETE)
//PAC7PX   DD DSN=&&EP,DISP=(OLD,DELETE)
//PAC7ZP   DD DSN=&&ZX,DISP=(NEW,PASS),UNIT=&UWK,
//          SPACE=(CYL,&CYL,RLSE),
//          DCB=(RECFM=FB,LRECL=193,BLKSIZE=27985)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//SORTZX EXEC PGM=SORT,COND=(0,NE,PTU911)
//*-----
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTIN   DD DSN=&&ZX,DISP=(OLD,DELETE)
//SORTOUT  DD DSN=&&XZ,DISP=(NEW,PASS),UNIT=&UWK,
//          SPACE=(CYL,&CYL,RLSE),
//          DCB=(RECFM=FB,LRECL=193,BLKSIZE=27985)
//SYSIN    DD DSN=&INDSN..BVPSY(SRTPC25),DISP=SHR
//PTU914 EXEC PGM=BVPTU914,COND=(0,NE,PTU911)
//*-----
//*:STEPCHAT DD DSN=&VSAMCAT,DISP=SHR
//*:          DD DSN=&SYSTCAT,DISP=SHR
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//          DD DSN=$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

#### Principle

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

#### Execution conditions

The files of the Administration and Development Databases must be closed in the on-line mode.

#### 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      |
| 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  |
| 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                                  |

| Code   | Physical name | Type   | Label                                       |
|--------|---------------|--------|---|
| 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: Critical 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 | Transactions formatting (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..BVPJ  | 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)                     |
| 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 error
- 4 : fatal 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=$BCOB,DISP=SHR
//*:STEP CAT DD DSN=&SYSTCAT,DISP=SHR
//*:      DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PAC7AE DD DSN=&INDSV..BVP AE,DISP=SHR
//PAC7AJ DD DSN=&INDUV..&BASE.AJ,DISP=SHR
//ANLSR DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//AYLSR DD DSN=&INDUV..&BASE.AY,DISP=SHR
//PAC7AY DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=40')
//GNLSR DD DSN=&INDSV..BVP GN,DISP=SHR
//PACGGN DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR DD DSN=&INDSV..BVP GR,DISP=SHR
//PACGGR DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GYLSR DD DSN=&INDSV..BVP GY,DISP=SHR
//PACGGY DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=10')
//GULSR DD DSN=&INDSV..BVP GU,DISP=SHR
//PACGGU DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7DC DD DUMMY
//PAC7IE DD SYSOUT=&OUTL
//PAC7IF DD SYSOUT=&OUTL
//PAC7ME DD DSN=&&PAC7ME,DISP=(OLD,DELETE)
//PAC7MV DD DSN=&&PAC7MV,DISP=(OLD,DELETE)
//PAC7RB DD DUMMY
//PAC7RY DD DUMMY
//SYSUDUMP DD SYSOUT=&OUT
//PAF90Z EXEC PGM=BVP AF900,COND=(0,NE,PTU921)
//*-----
//*:STEP CAT DD DSN=&SYSTCAT,DISP=SHR
//*:      DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//      DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//SYSOUX DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE DD DSN=&INDSV..BVP AE,DISP=SHR
//ANLSR DD DSN=&INDSV..BVP GN,DISP=SHR
//PAC7AN DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=10','BUFNI=10')
//ARLSR DD DSN=&INDSV..BVP GR,DISP=SHR
//PAC7AR DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=10')
//GNLSR DD DSN=&INDSV..BVP GN,DISP=SHR
//PACGGN DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR DD DSN=&INDSV..BVP GR,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
//*:STEP CAT DD DSN=&SYSTCAT,DISP=SHR
//*:      DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PAC7AE DD DSN=&INDSV..BVP AE,DISP=SHR
//PAC7AJ DD DSN=&INDSV..BVP GJ,DISP=SHR
//ANLSR DD DSN=&INDSV..BVP GN,DISP=SHR
//PAC7AN DD SUBSYS=(&LSR, 'DDNAME=ANLSR', 'BUFND=10', 'BUFNI=10')
//ARLSR DD DSN=&INDSV..BVP GR,DISP=SHR
//PAC7AR DD SUBSYS=(&LSR, 'DDNAME=ARLSR', 'BUFND=10')
//AYLSR DD DSN=&INDSV..BVP GY,DISP=SHR
//PAC7AY DD SUBSYS=(&LSR, 'DDNAME=AYLSR', 'BUFND=10')
//GNLSR DD DSN=&INDSV..BVP GN,DISP=SHR
//PACGGN DD SUBSYS=(&LSR, 'DDNAME=GNLSR', 'BUFND=10', 'BUFNI=10')
//GRLSR DD DSN=&INDSV..BVP GR,DISP=SHR
//PACGGR DD SUBSYS=(&LSR, 'DDNAME=GRLSR', 'BUFND=10')
//GYLSR DD DSN=&INDSV..BVP GY,DISP=SHR
//PACGGY DD SUBSYS=(&LSR, 'DDNAME=GYLSR', 'BUFND=10')
//GULSR DD DSN=&INDSV..BVP GU,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 release PG file, sequential image of the generation-print commands, in 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 having JCL lines to generate in online mode (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  |
| 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           |

| 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..BVP AE  | Input  | Error messages                              |
| PACGGN | &INDSV..BVP GN  | Input  | Administration Database Index file          |
| PACGGR | &INDSV..BVP GR  | Input  | Administration Database Data file           |
| PACGGY | &INDSV..BVP GY  | Input  | Administration Database Extension           |
| PACGGU | &INDSV..BVP GU  | 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: Critical 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 | Transactions formatting (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                     |

| 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 | 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 error
- 4 : fatal 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..BVP AE,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..BVP AE,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=BVPAP900,COND=(0,NE,PTU921)
//*-----
//*:STEP CAT DD DSN=&SYSTCAT,DISP=SHR
//*: DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
// DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//SYSOUX DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE DD DSN=&INDSV..BVP AE,DISP=SHR
//ANLSR DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AN DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=40','BUFNI=30')
//ARLSR DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//GNLSR DD DSN=&INDSV..BVP GN,DISP=SHR
//PACGGN DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR DD DSN=&INDSV..BVP GR,DISP=SHR
//PACGGR DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR DD DSN=&INDSV..BVP GU,DISP=SHR
//PACGGU DD SUBSYS=(&LSR,'DDNAME=GULSR','BUFND=10','BUFNI=10')
//PAC7GY DD DSN=&&PACGY,DISP=(OLD,DELETE)
//PAC7ME DD DSN=&&PAC7ME,DISP=(,PASS),UNIT=&UWK,
// SPACE=&SPAMB,
// DCB=(RECFM=FB,LRECL=372,BLKSIZE=27156)
//PAC7MV DD DSN=&&PAC7MV,DISP=(,PASS),UNIT=&UWK,
// SPACE=&SPAMB,
// DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MW DD DISP=(,DELETE),UNIT=&UWK,
// SPACE=&SPAMB,
// DCB=(RECFM=FB,LRECL=170,BLKSIZE=6120)
//PAC7MX DD DISP=(,DELETE),UNIT=&UWK,
// SPACE=&SPAMB,
// DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PAC7MY DD DISP=(,DELETE),UNIT=&UWK,
// SPACE=&SPAMB,
// DCB=(RECFM=FB,LRECL=748,BLKSIZE=26928)
//PACA1Y EXEC PGM=BVPACA15,COND=((0,NE,PTU921),(0,NE,PAF90Y))
//*-----
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
// DD DSN=$BCOB,DISP=SHR
//*:STEP CAT DD DSN=&SYSTCAT,DISP=SHR
//*: DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//PAC7AE DD DSN=&INDSV..BVP AE,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..BVP GN,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=&$COB,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=BVPA15,COND=((0,NE,PTU921),
// (0,NE,PAF90Z))
/*-----
//STEPLIB DD DSN=&STEPLIB,DISP=SHR

```

```

//          DD DSN=$BCOB,DISP=SHR
//*:STEP CAT DD DSN=&SYSTCAT,DISP=SHR
//*:          DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT    DD SYSOUT=&OUT
//PAC7AE    DD DSN=&INDSV..BVP AE,DISP=SHR
//PAC7AJ    DD DSN=&INDSV..BVP GJ,DISP=SHR
//ANLSR     DD DSN=&INDSV..BVP GN,DISP=SHR
//PAC7AN    DD SUBSYS=(&LSR,'DDNAME=ANLSR','BUFND=10','BUFNI=10')
//ARLSR     DD DSN=&INDSV..BVP GR,DISP=SHR
//PAC7AR    DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=10')
//AYLSR     DD DSN=&INDSV..BVP GY,DISP=SHR
//PAC7AY    DD SUBSYS=(&LSR,'DDNAME=AYLSR','BUFND=10')
//GNLSR     DD DSN=&INDSV..BVP GN,DISP=SHR
//PACGGN    DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR     DD DSN=&INDSV..BVP GR,DISP=SHR
//PACGGR    DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GYLSR     DD DSN=&INDSV..BVP GY,DISP=SHR
//PACGGY    DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=10')
//GULSR     DD DSN=&INDSV..BVP GU,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 a journal file (transactions sequential file), into a new archival file in the new version format.

#### Execution conditions

None.

#### Printed output

This procedure generates a transaction file indicating the number of transactions retrieved in their initial format 2.n, the number of transactions converted in the new version format and the number of written transactions.

**WARNING:** The number of written transactions can be very higher than the read transactions number. From an old 2.n transaction, many

transactions of the new version can be created; in particular for the meta entities and user entities.

## 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 conversion from a 2.0 or 2.5 version into the new version.

Sometimes, to retrieve some transactions, it is necessary to search for information in the new version Database. But it is possible that such information 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..BVP AE   | 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=17000)
//PAC7ET DD SYSOUT=&OUT

```

## PEI Retrieval (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 produces a report indicating 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  |

## 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             |
| 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)   |

## 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: Critical 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=$BCOB,DISP=SHR
//CARTE DD DDNAME=SYSIN
//PAC7MB DD DSN=&PP25MB,DISP=(,PASS),
// UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//VERIFY EXEC PGM=IDCAMS
//*-----
//*:STEPCHAT DD DSN=&VSAMCAT,DISP=SHR
//*: DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE DD DSN=&INDSV..BVP AE,DISP=SHR
//PAC7AJ DD DSN=&INDUV..&BASE.AJ,DISP=SHR
//PAC7AN DD DSN=&INDUV..&BASE.AN,DISP=SHR
//PAC7AR DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PACGGR DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGN DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGY DD DSN=&INDSV..BVPGY,DISP=SHR
//PACGGU DD DSN=&INDSV..BVPGU,DISP=SHR
//SYSIN DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
// DD DSN=&INDSN..BVPSY(VERIFAJ),DISP=SHR
// DD DSN=&INDSN..BVPSY(VERIFAN),DISP=SHR
// DD DSN=&INDSN..BVPSY(VERIFAR),DISP=SHR
// DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
// DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
// DD DSN=&INDSN..BVPSY(VERIFGY),DISP=SHR
// DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//PTU923 EXEC PGM=BVPTU923
//*-----
//*:STEPCHAT DD DSN=&VSAMCAT,DISP=SHR
//*: DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
// DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//SYSOUX DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE DD DSN=&INDSV..BVP AE,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')
//PAC7MB DD DSN=&&PP25MB,DISP=(OLD,DELETE)
//PAC7PP DD DSN=&OLDPP,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,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

```

## Retrieval of passwords (UTMP)

### UTMP - Introduction

#### Principle

The purpose of this procedure is to retrieve the passwords of 2.N users, using as input the PE file, produced by the backup of users parameters (PARM procedure), to put them into the Administration Database users file.

#### Execution conditions

The users file of the Administration Database must be closed to online use.

#### Printed report

In case of wrong creation, the procedure prints an error message in display format.

#### Result

The procedure integrates 2.0 or 2.5 users passwords in the Administration Database.

## UTMP - Description of steps

### 2.N passwords retrieval: PTURMP

| Code   | Physical name | Type  | Label                         |
|--------|---------------|-------|-------------------------------|
| 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='$VCAT',                      USER VSAM CATALOG  
//*:      SYSCAT='$SCAT',                      SYSTEM VSAM CATALOG  
//      STEPLIB='$HLQ..SBVPMBR8',          LIBRARY OF LOAD-MODULES  
//      OLDPE=                      DS NAME OF OLD PE  
//*****  
//PTURMP EXEC PGM=BVPTURMP  
//*-----  
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR  
//*:      DD DSN=&VSAMCAT,DISP=SHR  
//STEPLIB DD DSN=&STEPLIB,DISP=SHR  
//      DD DSN=$BCOB,DISP=SHR  
//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                  |

| 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 | &&PACGZ       | Input  | Update transactions  |
| PAC7MV | &&PAC7MV      | Output | Transactions formatting (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)    |

| Code   | Physical name | Type   | Label  |
|--------|---------------|--------|--|
| 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 transactions specific to a user is preceded by a banner with this user's code.

Return codes:

- 0 : OK without error
- 2 : warning error
- 4 : fatal 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
//*:STEP CAT 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 Entities Occurrences, Relations, U-type Volumes are not processed.

The P.I.A. calls are processed as the comments.

The P.I.A. types change between the 2.n and 3.n versions: to allow the transactions exchange between these 2 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 new version UPDT procedure and a revoked transactions file.

### **MB25 - Description of Steps**

MB file retrieval: PTU926

| Code   | Physical name    | Type   | Label                                |
|--------|------------------|--------|--------------------------------------|
| PAC7AE | &INDSV..BVP AE   | 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 in the new release.

#### Limits

The User Entities, 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 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..BVP AE   | 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 |

| Code   | Physical name | Type   | Label                           |
|--------|---------------|--------|---------------------------------|
| PACGGU | &INDSV..BVPGU | Input  | Administration Database users   |
| PAC7GY | &OLDGY        | Input  | 2.5 GY transactions             |
| PAC7MV | &&PACMV       | Output | Retrieval transactions for UPDP |
| 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=$UWK                       WORK UNIT
//*****
//VERIFY EXEC PGM=IDCAMS
//*-----
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE   DD DSN=&INDSV..BVP AE,DISP=SHR
//PACGGR   DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGN   DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGU   DD DSN=&INDSV..BVPGU,DISP=SHR
//SYSIN    DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
//          DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//          DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//          DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//PTU927 EXEC PGM=BVPTU927
//*-----
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:       DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//          DD DSN=$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..BVP AE   | 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..BVP AE,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
//*-----
//*:STPCAT 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..BVP AE,DISP=SHR
//ARLSR   DD DSN=&INDUV..&BASE.AR,DISP=SHR
//PAC7AR  DD SUBSYS=(&LSR,'DDNAME=ARLSR','BUFND=40')
//GNLSR   DD DSN=&INDSV..BVP GN,DISP=SHR
//PACGGN  DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR   DD DSN=&INDSV..BVP GR,DISP=SHR
//PACGGR  DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GULSR   DD DSN=&INDSV..BVP GU,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 in the 2.0 or 2.5 release.

#### Limits

The Meta entities, Relations, Descriptions, Keywords, associated Descriptions 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..BVP AE   | 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  | 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  
//*:       SYSCAT='$SCAT',            DEVPT SYSTEM VSAM CATALOG  
//          STEPLIB='$HLQ..SBVPMBR8', LIBRARY OF LOAD-MODULES
```

```

//          LSR='BLSR',                LSR BATCH SYSTEM NAME
//          OLDGY=,                    DS NAME OF OLD GY
//          UWK=$UWK                    WORK UNIT
//*****
//VERIFY EXEC PGM=IDCAMS
//*-----
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:      DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7AE  DD DSN=&INDSV..BVPAE,DISP=SHR
//PACGGR  DD DSN=&INDSV..BVPGR,DISP=SHR
//PACGGN  DD DSN=&INDSV..BVPGN,DISP=SHR
//PACGGU  DD DSN=&INDSV..BVPGU,DISP=SHR
//SYSIN   DD DSN=&INDSN..BVPSY(VERIFAE),DISP=SHR
//        DD DSN=&INDSN..BVPSY(VERIFGR),DISP=SHR
//        DD DSN=&INDSN..BVPSY(VERIFGN),DISP=SHR
//        DD DSN=&INDSN..BVPSY(VERIFGU),DISP=SHR
//PTU929 EXEC PGM=BVPTU929
//*-----
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:      DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//        DD DSN=$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')
//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

| Procedure | Comments                               |
|-----------|--|
| ARAD      | Archiving Administration Database      |
| ARPM      | Archiving the QJ journal of SCM module |

| <b>Procedure</b> | <b>Comments</b>                                       |
|------------------|---|
| INAE             | Initialization of the error messages file (AE)        |
| INGU             | Initialization of the user codes files (GU)           |
| INQJ             | Initialization of SCM Tools Interface archive journal |
| 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                 |
| 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 journal 2.n                              |
| PP25             | Retrieval of PEI environment (PP)                     |
| 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             | Extract line 'UNS' 3.0 utility                        |
| UTU2             | Update line 'UNS' 3.0 utility'                        |
| CHPM             | Environment and Database elements check report        |
| CPPM             | Comparison between Database and user configuration    |
| EXPM             | Extraction of environments                            |
| GPPM             | Generation report written into QJ                     |
| HIPM             | Implementation of elements                            |

| Procedure | Comments   |
|-----------|--|
| SIPM      | Generation simulation  |
| UBPM      | Update transaction generation from QJ                            |
| TRED      | PacTransfer: print of parameters                                 |
| UPGP      | PAF update 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             |
| MEND      | Endevor : generation of VA Pac Update transactions               |
| MNDO      | Endevor : generation of VA Pac Update transaction in 2.5         |
| RIND      | Endevor : Infopac elements creation (existing data retrieval)    |
| RPND      | Endevor : VA Pacbase elements creation (existing data retrieval) |
| RPTY      | Endevor : Types file retrieval                                   |
| RP25      | Endevor : user entities retrieval                                |
| RRND      | Endevor : existing data retrieval                                |
| TYND      | Endevor : Types loading  |
| UPND      | Endevor : VA Pacbase elements import into Endevor                |

#### List of procedures suppressed since 2.5 release

| Procedure | Program       | Comments                     |
|-----------|---------------|------------------------------|
| CPSN      | PTU850 PTU855 | Integrated in PACX procedure |
| EMSN      | PTU810        |                              |
| MESN      | PTU815        |                              |
| SASN      | PTU130 PTU140 | Integrated in PACS procedure |
| UXSR      | UTIXSR        | Integrated in PACS procedure |
| CRYP      | PACU99        |                              |
| PARM      | PACU15 PACU80 |                              |
| LOAE      | PACU80        |                              |
| REAG      | PTU560        |                              |
| SVAG      | PTU550        |                              |
| GET0      | PACT11        |                              |
| GET1      | PACT41        |                              |

| Procedure | Program              | Comments |
|-----------|----------------------|----------|
| 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               |          |
| RPTD      | PTAR20               |          |

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## Retrieval of VisualAge Pacbase 3.0

### Operations to be Performed

The 3.5 version can be installed in the same environment than 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 3.0 version.

- If this version is installed in the same environment than 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).



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## Chapter 8. Components

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### 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 which is found in the batch load-module library (SBVPMBR8) with 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                                 |
| Reclsize        | 80  |
| CI Size         | 4,096 (data) 1,024 (index)                |
| Key             | 12 (position 0)                           |
| Utilization     | batch and TP                              |
| Dsname          | &INDSV..BVPAE                             |

## Generation Skeletons

The product also includes the following files:

- A skeleton generation file (SA file) used by the Batch generator function for Cobol API.

| Characteristics | Value                      |
|-----------------|----------------------------|
| Size            | Approx. 69 records         |
| Organization    | VSAM-KSDS                  |
| Reclsize        | 4,605                      |
| CI Size         | 5,120 (data) 1,536 (index) |
| Key             | 5 (position 0)             |
| Utilization     | Batch only                 |
| Dsname          | &INDSV..BVP5A              |

- A skeleton generation file (SC file) used by the Batch generator function.

| Characteristics | Value                      |
|-----------------|----------------------------|
| Size            | Approximately 45 records   |
| Organization    | VSAM-KSDS                  |
| Reclsize        | 3,204                      |
| CI Size         | 3,584 (data) 1,024 (index) |
| Key             | 4 (position 0)             |
| Dsname          | &INDSV..BVP5C              |

- A skeleton generation 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 skeleton generation 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 skeleton generation 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 skeleton generation file (SP file) used by the PAF function for the generation of extractors.

| Characteristics | Value                    |
|-----------------|--------------------------|
| Size            | Approx. 5 records        |
| Organization    | VSAM-KSDS                |
| Recl            | 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 skeleton generation file (SS file), used by the eBusiness generator function.

| Characteristics | Value                      |
|-----------------|----------------------------|
| Size            | Approx. 600 records        |
| Organization    | VSAM-KSDS                  |
| Recl            | 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 (they are implemented in the batch procedures used for the installation and run 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 at installation.

### Caution

The 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      |                    |

| <b>Member</b> | <b>Contents or format</b> | <b>Special indication</b>              |
|---------------|---------------------------|--|
| 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                    |  |
| DFSYSAPAF     | DEFINE                    | Updatable (4)                          |
| DLSYSAPAF     | 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 the 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                    |
| Resize          | 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                   |
| Resize          | 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-RRDS                    |
| 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-RRDS |
| Recsize         | 1,105     |

| Characteristics | Value                       |
|-----------------|-----------------------------|
| CI size         | 1,105                       |
| 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.

- Backup of the Database (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                    |
|                 | 1,023 bytes per extension data        |
|                 | 59 bytes per index                    |

- Backup of the journal (PK).

The purpose of this file is to store all 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 data related to applications development.

- The Data file (AR).

| Characteristics | Value                        |
|-----------------|------------------------------|
| Organization    | VSAM-RRDS                    |
| Reclsize        | 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                   |
| Reclsize        | 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                    |
| Reclsize        | 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                    |
| Reclsize        | 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 SYSIN of the IDCAMS utility implemented in the batch procedures used for the working of the Development Databases.

Information relating to the file names and the disks (catalogue), 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: the VA Pac Database Manager can modify the size of the files that make up the Database, according to the changes it undergoes, in these members.

- LISTCAT of VSAM file AJ (Development Database Journal):

Its name has the LIXnnAJ format.

### Development Database Backup Files

According to the 'Dispatch' option taken into account during 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                    |
|                 | 1,018 per extension data              |
|                 | 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)     |

| Characteristics | Value                                 |
|-----------------|---------------------------------------|
| DCB             | Recfm=VB, Lrecl=1,023, Blksize=27,998 |
| Utilization     | Batch                                 |
| Size            | 59 bytes per index                    |

- The backup of the Development Database random 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)          |

| Characteristics | Value  |
|-----------------|--|
| 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  |
| Reclsize        | 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                                       |
| Resize          | 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   |
| Resize          | 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

| <b>Member</b> | <b>Contents of format</b>  | <b>Comments</b> |
|---------------|----------------------------|-----------------|
| BVPQCRA       | Sequential file in English | Standard rules  |
| BVPQCRF       | Sequential file in French  | Standard rules  |

---

## Chapter 9. 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      | T     | Installation of IBM Meta Entities |

### Printed output

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.

### Result

Once the update is performed, the network is ready for either on line or batch use.

### Note

Extracted transactions to be used by the ROAD procedure must be copied in a catalogued file by taking the following - otherwise comment - line into account:

```
'//*VINS.PAC7MR DD DSN=ROADFILE'.
```

## **VING - Description of Steps**

Input recognition: PTU001

Initialization of the KSDS working file: IDCAMS

VSAM files check: IDCAMS

Update of the Administration Database: VING

| Code   | Physical name  | Type   | Label                             |
|--------|----------------|--------|-----------------------------------|
| PAC7AE | &INDSV..BVP AE | Input  | Error labels                      |
| PACGGN | &INDSV..BVP GN | Input  | Administration Database Index     |
| PACGGR | &INDSV..BVP GR | Input  | Administration Database Data      |
| PACGGY | &INDSV..BVP GY | Input  | Administration Database Extension |
| PACGGU | &INDSV..BVP GU | Input  | Administration Database Users     |
| PAC7AJ | &INDSV..BVP GJ | Output | Administration Database Journal   |
| PAC7AN | &INDSV..BVP GN | Output | Administration Database Index     |
| PAC7AR | &INDSV..BVP GR | 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              |
| PAC7IA   |               | Report       | General Report of Programs sequence |
| 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 anomaly and restart the procedure
- 8 : No access authorization for batch procedure
- 12: Input-output error on a file

Deletion of the KSDS working file: IDCAMS

## NING - Execution JCL

```

//* -----
//*      VISUALAGE PACBASE
//*
//* -----
//*      - DATABASE ADMINISTRATOR
//*      - DICTIONARY UPDATING WITH IBM MODEL ADMIN  -
//* -----
//* THE NING 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
//*:    SYSCAT='$SCAT',                SYSTEM VSAM CATALOG
//      STEPLIB='$HLQ..BVPMBR8',      LIBRARY OF LOAD-MODULES
//      SORTLIB='$BIBT',                SORT LIBRARY
//      OUT=$OUT,                       OUTPUT CLASS
//      OUTL=$OUT,                       OUTPUT CLASS OF REPORTS
//      FDIC=,                           DSN USER'S ADMINISTRATION MODEL
//      USER=,                            USER CODE
//      USES='$INDUV',                    PREFIX OF SYSEXT FILE
//      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,&USES'
//*-----
//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(REPR0999),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
//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
//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,&USES',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
//*-----
//*:STEPCHAT 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                      |
|          |        | 'R'      | Retrieval of User Entities with the 'extension' format |
|          |        | ' '      | 'I' + '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, a sequential file of purge transactions for the reorganization procedure can be generated (if 'R' in column 33 in the user input). In that case, the reorganization of the Database with this file is required. If the client user entities of the .PPTX and .QPAQC meta entities exist in several sessions, the reorganization of the Database with the PC file, saved after the retrieval, is required.

### Note

Extracted transactions to be used in input by the REOR procedure must be copied in a cataloged 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 working file: IDCAMS

VSAM files check: IDCAMS

Update of the Development Database : VINS

| Code   | Physical name    | Type   | Label                             |
|--------|------------------|--------|-----------------------------------|
| PAC7AE | &INDSV..BVP AE   | Input  | Error Labels                      |
| PACGGN | &INDSV..BVP GN   | Input  | Administration Database Index     |
| PACGGR | &INDSV..BVP GR   | Input  | Administration Database Data      |
| PACGGY | &INDSV..BVP GY   | Input  | Administration Database Extension |
| PACGGU | &INDSV..BVP GU   | Input  | Administration Database Users     |
| PAC7AJ | &INDUV..&BASE.AJ | Output | Development Database Journal      |
| PAC7AN | &INDUV..&BASE.AN | Output | Development Database Index        |

| Code     | Physical name   | Type         | Label                                  |
|----------|-----------------|--------------|--|
| 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                 |
| PAC7IA   |                 | Report       | Complete printing of programs sequence |
| 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 anomaly and restart the procedure
- 8 : No access authorization for batch procedure
- 12: Input-output error on a file

Deletion of the KSDS working 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
//      USES='$INDUV',                        PREFIX OF SYSEXT FILE
//      LSR='BLSR',                            LSR BATCH SYSTEM NAME
//      UWK=$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=$BCOB,DISP=SHR
//CARTE DD DDNAME=SYSIN
//PAC7MB DD DSN=&&VINSMB,DISP=(,PASS),
//      UNIT=&UWK,SPACE=(TRK,(5,1),RLSE),
//      DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//PRMSYS EXEC PGM=BVPRMSYS,PARM='&USER,&USES'
/**-----
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
//      DD DSN=$BCOB,DISP=SHR
//SYSOUT DD SYSOUT=&OUT

```

```

//PACRIN DD DSN=&INSDN..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
//*-----
/*:STEPCHAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN DD DSN=&&DFSYSEXT,DISP=(OLD,DELETE)
//MAXKEY EXEC PGM=IDCAMS
//*-----
/*:STEPCHAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSPAF DD DSN=&INDUV..SYSEXT.&USER,DISP=SHR
//MAXKEY DD DSN=&INSDN..BVPSY(MAXKEY),DISP=SHR
//SYSIN DD DSN=&INSDN..BVPSY(REPRO999),DISP=SHR
//VERIFY EXEC PGM=IDCAMS
//*-----
/*:STEPCHAT 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=&INSDN..BVPSY(VERIFGN),DISP=SHR
// DD DSN=&INSDN..BVPSY(VERIFGR),DISP=SHR
// DD DSN=&INSDN..BVPSY(VERIFGY),DISP=SHR
// DD DSN=&INSDN..BVPSY(VERIFGU),DISP=SHR
// DD DSN=&INSDN..BVPSY(VERIFAJ),DISP=SHR
// DD DSN=&INSDN..BVPSY(VERIFAN),DISP=SHR
// DD DSN=&INSDN..BVPSY(VERIFAR),DISP=SHR
// DD DSN=&INSDN..BVPSY(VERIFAY),DISP=SHR
//*
//VINS EXEC PGM=BVPVINS,REGION=0K
//*-----
/*:STEPCHAT 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','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=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
//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
//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,&USES',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 'P' lines of programs containing the 'UNS' operator and without any information in the 'Level-Condition type' area. The user will have to verify the output file and delete in this file all the lines he wants to keep. For the other lines, the 'Level-Condition type' area will have to be set to '99BL' before the UTU2 procedure execution.

##### Execution conditions

Specify the result file name of lines to point in the startup JCL: NOMUT='... '

##### Result

A file containing UNS 'P' lines to point 'NOMUT'.

#### UTU1 - Input / Processing / Results

No user input.

#### UTU1 - Description of Steps

Extracting lines 'P' with 'UNS' operator : UTIUN1

| Code   | Physical name       | Type   | Label  |
|--------|---------------------|--------|--|
| PAC7PC | &INDUN..&BASE.PC(0) | Input  | Sequential image of the Development Database |
| UTUTO  | &NOMUT              | Output | Lines 'P' with 'UNS' for UPDATE              |

#### 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 set 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

Lines 'P' update with 'UNS' operator : UTIUN2

| Code   | Physical name        | Type   | Label  |
|--------|----------------------|--------|--|
| PAC7PC | &INDUN..&BASE.PC(0)  | Input  | Sequential image of the Development Database     |
| UTUTI  | &NOMUT               | Input  | Lines 'P' with 'UNS' for UPDATE                  |
| 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
//*-----
/*:STEPDAT DD DSN=&SYSDCAT,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 which 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' meta entities. These meta entities cannot be modified.

Once converted, the 'formatted' meta entities can be modified and enriched.

You will have to manually operate during this conversion which consists of several steps.

### Conversion process

#### Step 1: Analysis of the Database relations (UTM1)

In 3.n version, a relation is associated with one entity type and not with several types as in 2.n version.

Any 'old' 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 of '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 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.

#### Step 2: Conversion of meta entities, relations and impacted entities and update (UTM2)

- The 'old' 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 suit 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 in display format and you will have to chose a new relation code.

Any relation creation is performed in session 1 an in inter- library.

- 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 at 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. It may have many rejects because these entities created in 2.n version are much more controlled than in 3.n version. And manual interventions in the Database are required.

The transactions are not journalized.

The &UTM2MV transaction file is declared as permanent file to allow the user to visualize all the transactions concerned by the update.

### Step 3: Inventory of fixtures

It is recommended to re-execute the first step to make sure that the Database does no more contain 'old' relations calls.

Otherwise, you will have to operate again and re-execute the following steps.

### Step 4: Reorganization

When the conversion is suitable, a reorganization of the Database is required.

### Execution conditions

None during the step 1 (UTM1).

For the step 2 (update), the AR, AN, AJ and AY files must be closed to online use (except for material allowing the Batch/Online concurrency).

### Printed output

At the end of the step 1, a report is printed containing the list of 'old' relations calls.

At the end of the step 2 before the update, error messages are printed in display format.

At the end of the update, a report lists the encountered errors.

## Result

Once the reorganization is performed, the result is a Database free from 'old' meta entities and 'old' relations calls.

## **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..BVP AE  | Input  | Error Labels   |
| PAC7EQ |                 | Report | Report   |

## **UTM1 - Execution JCL**

```
//* -----  
//*      VISUALAGE PACBASE  
//*  
//* -----  
  
//*      - MIGRATION META-ENTITES OLD 1 -  
//*  
//* -----  
//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
//*:STEP CAT DD DSN=&VSAMCAT,DISP=SHR
//*:          DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE DD DSN=&INDSV..BVP AE,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 in input of 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

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..BVP AE  | Input  | Error messages                              |
| PAC7MV | &UTM2MV         | Output | Update transactions (length = 170)          |
| PAC7ET |                 | Report | Report                                      |
| 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: Critical error

### UTM2 - Execution JCL

```

/** -----
/**      VISUALAGE PACBASE
/**
/** -----
/**              - MIGRATION META-ENTITES OLD 2 -
/**
/** -----

```

```

//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=$UWK, WORK UNIT
// SPAMV='(TRK,(300,10),RLSE)' PC FILE SPACE
//* -----
//INPUT EXEC PGM=BVPTU001
//*-----
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
// DD DSN=$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
//PTUME2 EXEC PGM=BVPTUME2
//*-----
//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..BVP AE,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)
//*-----
//STEPLIB DD DSN=&STEPLIB,DISP=SHR
// DD DSN=&BCOB,DISP=SHR
//*:STEP CAT DD DSN=&SYSTCAT,DISP=SHR
//*: DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PAC7AE DD DSN=&INDSV..BVP AE,DISP=SHR
//GNLSR DD DSN=&INDSV..BVP GN,DISP=SHR
//PACGGN DD SUBSYS=(&LSR,'DDNAME=GNLSR','BUFND=10','BUFNI=10')
//GRLSR DD DSN=&INDSV..BVP GR,DISP=SHR
//PACGGR DD SUBSYS=(&LSR,'DDNAME=GRLSR','BUFND=10')
//GYLSR DD DSN=&INDSV..BVP GY,DISP=SHR
//PACGGY DD SUBSYS=(&LSR,'DDNAME=GYLSR','BUFND=10')
//GULSR DD DSN=&INDSV..BVP GU,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 version in SMP/E.

The PDS of 'Target zones' (hlq.SBVPxxx) and 'Distribution zones' (hlq.ABVPxxx) files are purged from components of the previous version and are available for the new installation.

### Implementation:

- Define a MCS as following, replacing HBVPxxx by the FMID of the version to be deleted.

- Create and execute after parameterizing the following JCL which calls the MCS defined just before.

## Examples

MCS TO BE DEFINED :

```
-----
++FUNCTION(DELFUNC)
DESCRIPTION(VISUALAGE PACBASE - CICS)
/* (C) COPYRIGHT IBM CORP 1983, 2003 */.
++VER(Z038)
    DELETE(HBVPXXX) .
```

JCL TO BE EXECUTED :

```
-----
//$$$$DDEF JOB ($$$$$), 'DDEF', CLASS=
/*-----
/* PERFORM SMP/E DELETING SYSMOD
/*
/* BEFORE USING THIS JOB STEP, YOU WILL HAVE TO MAKE THE
/* FOLLOWING MODIFICATIONS.
/*
/* - 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 HBVPXXX 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(HBVPXXX) /* DUMMY AND OLD FUNCTION. */.
    ENDUCL.
    SET BDY(&DLIB) /* SET TO APPLICABLE DLIB. */.
    UCLIN.
    DEL SYSMOD(DELFUNC) /* DELETE SYSMOD ENTRIES FOR */.
    DEL SYSMOD(HBVPXXX) /* DUMMY AND OLD FUNCTION. */.
    ENDUCL.
    SET BDY(GLOBAL) /* SET TO GLOBAL ZONE. */.
```

```
REJECT HOLDDATA NOFMID /* REJECT SYSMODS, HOLDDATA */
DELETEFMID /* FOR THE DELETED FUNCTIONS.*/
(DELFUNC HBVPXXX) /* 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 in parallel by VSAM on the same field: 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 when the file is opened. A minimum of two buffers is required: one for the read of control interval DATA, one for the control interval 'split'.

Default: DATABUFFERS = STRINGS + 1

- INDEXBUFFERS:

It specifies the number of INDEX buffers to be allocated by VSAM when the file is opened. 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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