

VisualAge Pacbase



# Installation Guide UNIX Server & Client Components

*Version 3.5*





VisualAge Pacbase



# Installation Guide

## UNIX 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:

<http://www.ibm.com/support/docview.wss?rs=37&uid=swg27005477>

Consult the Documentation home page to make sure you have the most recent edition of this document.

**Eight Edition (December 2014)**

This edition applies to the following licensed programs:

- VisualAge Pacbase Version 3.5

Comments on publications (including document reference number) should be sent electronically through the Support Center Web site at: <http://www.ibm.com/software/awdtools/vapacbase/support.html> or to the following postal address:

IBM Paris Laboratory  
1, place Jean-Baptiste Clément  
93881 Noisy-le-Grand, France.

When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

© Copyright IBM Corporation 1983,2014.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

---

# Contents

<b>Notices</b> . . . . .	<b>vii</b>	Deletion of a Database . . . . .	23
<b>Trademarks</b> . . . . .	<b>ix</b>	List of components with their date of creation . . . . .	24
<b>Chapter 1. Foreword</b> . . . . .	<b>1</b>	INSL - Execution Script . . . . .	24
Introduction . . . . .	1	<b>Chapter 4. Installation/Reinstallation of Client Components</b> . . . . .	<b>27</b>
VisualAge Pacbase Architecture . . . . .	1	Things to Know Before Installing . . . . .	27
Contents of Supply . . . . .	2	Root Directory . . . . .	27
Bibliography . . . . .	3	Installation Startup. . . . .	28
<b>Chapter 2. Prerequisites</b> . . . . .	<b>5</b>	Fundamentals of VA Pac Client-Server Communication . . . . .	28
Prerequisites for the Server Environment . . . . .	5	Administrator & Developer workbench . . . . .	30
Hardware and Software . . . . .	5	Open Jade and Tidy / Publishing facility . . . . .	33
Disk Space . . . . .	5	eBusiness Tools . . . . .	34
Prerequisites for the Client Environment . . . . .	5	VisualAge Pacbase WorkStation . . . . .	35
Hardware . . . . .	5	Web Application Models (WAM) . . . . .	41
Disk Space . . . . .	6	Middleware . . . . .	41
Software . . . . .	6	Editing Communication Parameters . . . . .	43
Communications . . . . .	6	The bases.ini File . . . . .	43
<b>Chapter 3. Installation of the Server Components</b> . . . . .	<b>7</b>	The vaplocat.ini File . . . . .	46
Installation . . . . .	7	Component Updating, Modification, or Removing . . . . .	50
General Overview . . . . .	7	<b>Chapter 5. Tests</b> . . . . .	<b>51</b>
Installation Process . . . . .	7	List of Utilities . . . . .	51
Installation of System Environment . . . . .	8	Installation Tests . . . . .	51
Update of the '/etc/services' File . . . . .	8	Generation-Print, Online and Batch Update Tests . . . . .	52
Creation of a Specific UNIX User . . . . .	9	Administration Database Procedures Tests . . . . .	52
Modification of the Configuration Files . . . . .	9	Development Database Procedures Tests . . . . .	52
Code page definition . . . . .	11	Extraction-Utility Tests . . . . .	53
Installing from a CDROM . . . . .	11	<b>Chapter 6. Server Re-installation</b> . . . . .	<b>55</b>
Description of the Installation Procedure Steps . . . . .	11	Re-installation . . . . .	55
List of installed elements. . . . .	13	General Overview . . . . .	55
An element of the System: the online server . . . . .	14	Description of the Re-Installation Procedure Steps . . . . .	55
Configuration . . . . .	14	<b>Chapter 7. Retrieval - Exchanges between 2.n &amp; 3.n Databases</b> . . . . .	<b>57</b>
Startup. . . . .	14	Retrieval of VisualAge Pacbase 2.0 and 2.5 . . . . .	57
Description of the commands . . . . .	15	Foreword . . . . .	57
Installation of the Specifications Database . . . . .	19	Notes . . . . .	57
Administration Database. . . . .	19		
Development Database . . . . .	21		
Access key entering . . . . .	23		
Backup of the Administration Database . . . . .	23		

Operations to be Performed . . . . .	58	GY Transactions exchanges between 2.n &	
Retrieval of User Parameters (PE25) . . . . .	60	3.n (GY25) . . . . .	116
PE25 - Introduction . . . . .	60	GY25 - Introduction . . . . .	116
PE25 - Input / Processing / Results . . . . .	61	GY25 - Description of Steps . . . . .	117
PE25 - Description of Steps . . . . .	62	GY25 - Execution Script . . . . .	117
PE25 - Execution Script . . . . .	64	MB Transactions exchanges between 3.n &	
Retrieval of the Development Database		2.n (MB30) . . . . .	118
(PC25) . . . . .	67	MB30 - Introduction . . . . .	118
PC25 - Introduction . . . . .	67	MB30 - Description of Steps . . . . .	119
PC25 - Notes on Data Retrieval . . . . .	67	MB30 - Execution Script . . . . .	119
PC25 - Input / Processing / Results . . . . .	69	GY Transactions exchanges between 3.n &	
PC25 - Description of Steps . . . . .	69	2.n (GY30) . . . . .	121
PC25 - Execution Script . . . . .	73	GY30 - Introduction . . . . .	121
Generation-Print Commands Retrieval		GY30 - Description of Steps . . . . .	121
(PG20) . . . . .	78	GY30 - Execution Script . . . . .	122
PG20 - Introduction . . . . .	78	Procedures - Summary Table of Changes	123
PG20 - Input / Processing / Results . . . . .	79	Retrieval of VisualAge Pacbase 3.0 . . . . .	126
PG20 - Description of Steps . . . . .	80	Operations to be Performed . . . . .	126
PG20 - Execution Script . . . . .	84		
Generation-Print Commands Retrieval		<b>Chapter 8. RPP Utilities . . . . .</b>	<b>127</b>
(PG25) . . . . .	88	MIAM - Migration Help Function . . . . .	127
PG25 - Introduction . . . . .	88	MIAM - Introduction . . . . .	127
PG25 - Input / Processing / Results . . . . .	89	MIAM - User Input . . . . .	137
PG25 - Description of Steps . . . . .	89	MIAM - Description of Steps . . . . .	139
PG25 - Execution Script . . . . .	93	MIAM - Execution Script . . . . .	140
Retrieval of PJ Transactions (PJ25). . . . .	97	UTOV - Analysis of Overrides . . . . .	142
PJ25 - Introduction . . . . .	97	UTOV - Overview . . . . .	142
PJ25 - Description of Steps . . . . .	98	UTOV - User Input . . . . .	143
PJ25 - Execution Script . . . . .	99	UTOV - Description of steps . . . . .	143
Retrieval of PP file (PP25) . . . . .	100	UTOV - Execution script . . . . .	144
PP25 - Introduction . . . . .	100	MIBA - Batch Migration. . . . .	145
PP25 - Input / Processing / Results . . . . .	101	MIBA - Introduction . . . . .	145
PP25 - Description of Steps . . . . .	101	MIBA - User Input . . . . .	145
PP25 - Execution Script . . . . .	103	MIBA - Description of Steps . . . . .	148
Retrieval of passwords (UTMP) . . . . .	106	MIBA - Execution Script . . . . .	153
UTMP - Introduction. . . . .	106	MIBR - Batch Migration of the Context . . . . .	159
UTMP - Description of Steps . . . . .	107	MIBR - Introduction . . . . .	159
UTMP - Execution Script . . . . .	107	MIBR - User Input . . . . .	160
Retrieval of Pac/Transfer Parameters		MIBR - Libraries splitting . . . . .	163
(UV25) . . . . .	108	MIBR - Migration perimeters . . . . .	165
UV25 - Introduction . . . . .	108	MIBR - Description of Steps . . . . .	166
UV25 - Input / Processing / Results . . . . .	108	MIBR - Execution Script . . . . .	171
UV25 - Description of Steps . . . . .	109	MIBJ - Migration of the journal . . . . .	178
UV25 - Execution Script. . . . .	111	MIBJ - Introduction . . . . .	178
MB Transactions exchanges between 2.n &		MIBJ - User input. . . . .	178
3.n (MB25) . . . . .	113	MIBJ - Description of steps. . . . .	181
MB25 - Introduction . . . . .	113	MIBJ - Execution Script . . . . .	185
MB25 - Description of Steps . . . . .	114	MIBU - User migration . . . . .	193
MB25 - Execution Script. . . . .	115	MIBU - Introduction . . . . .	193
		MIBU - User input . . . . .	193

MIBU - Description of steps . . . . .	194	TRDQ - Conversion of DBD Blocks into SQL Blocks . . . . .	248
MIBU - Execution Script . . . . .	196	TRDQ - Introduction. . . . .	248
MIMA - Migration of the Macros . . . . .	199	TRDQ - User Input . . . . .	249
MIMA - Introduction. . . . .	199	TRDQ - Description of Steps . . . . .	250
MIMA - User Input . . . . .	200	TRDQ - Execution JCL . . . . .	252
MIMA - Description of Steps . . . . .	201		
MIMA - Execution Script . . . . .	202		
MITH - Migration of the Thesaurus. . . . .	205	<b>Chapter 9. Components . . . . .</b>	<b>257</b>
MITH - Introduction . . . . .	205	Server Environment Components . . . . .	257
MITH - User Input . . . . .	205	Introduction . . . . .	257
MITH - Description of Steps . . . . .	206	On-Line Documentation . . . . .	257
MITH - Execution Script . . . . .	208	Generation Skeletons. . . . .	257
MIUS - Migration of the Users . . . . .	210	Administration Database . . . . .	258
MIUS - Introduction . . . . .	210	Administration Database Files . . . . .	258
MIUS - User Input . . . . .	210	Administration Database Backup. . . . .	258
MIUS - Description of Steps . . . . .	211	Development Database . . . . .	258
MIUS - Execution Script . . . . .	213	Development Database Files . . . . .	258
MILA - Migration of Administration Error Messages . . . . .	216	Development Database Backup Files . . . . .	259
MILA - Introduction . . . . .	216	Modules - Specific Files. . . . .	259
MILA - User Input . . . . .	216	Pac/Impact . . . . .	259
MILA - Description of Steps . . . . .	217	DSMS. . . . .	260
MILA - Execution Script . . . . .	219	PAF . . . . .	260
MERT - Transformation of Model entities	221	Complementary Libraries and Files	260
MERT - Introduction. . . . .	221		
MERT - User input . . . . .	222	<b>Chapter 10. Appendix . . . . .</b>	<b>263</b>
MERT - Description of steps . . . . .	222	Installation of the Administration Database	
MERT - Execution JCL . . . . .	224	Model . . . . .	263
MIAx - Optional control cards . . . . .	225	VINS - Introduction . . . . .	263
MIA1 - Program Generation . . . . .	226	VINS - Input / Processing / Results . . . . .	263
MIA1 - Introduction . . . . .	226	VINS - Description of Steps . . . . .	264
MIA1 - User Input . . . . .	226	VINS - Execution Script. . . . .	266
MIA1 - Description of Steps . . . . .	227	Installation of the Development Database	
MIA1 - Execution Script . . . . .	229	Model . . . . .	268
MIA2 - Screen Generation . . . . .	232	VINS - Introduction . . . . .	268
MIA2 - Introduction . . . . .	232	VINS - Input / Processing / Results . . . . .	268
MIA2 - User Input . . . . .	232	VINS - Description of Steps . . . . .	270
MIA2 - Description of Steps . . . . .	232	VINS - Execution Script. . . . .	271
MIA2 - Execution Script . . . . .	234	GS/HE/ZS Files Initialization Utilities . . . . .	273
MIA3 - Client Generation . . . . .	237	LDGS - Introduction . . . . .	273
MIA3 - Introduction . . . . .	237	LDGS - Description of Steps . . . . .	274
MIA3 - User Input . . . . .	237	LDGS - Execution Script . . . . .	274
MIA3 - Description of Steps . . . . .	238	LDHE - Introduction. . . . .	275
MIA3 - Execution Script . . . . .	240	LDHE - Description of Steps . . . . .	275
MIA4 - Server Generation . . . . .	243	LDHE - Execution Script . . . . .	275
MIA4 - Introduction . . . . .	243	LDZS - Introduction . . . . .	276
MIA4 - User Input . . . . .	243	LDZS - Description of Steps . . . . .	276
MIA4 - Description of Steps . . . . .	243	LDZS - Execution Script . . . . .	276
MIA4 - Execution Script . . . . .	245	Retrieval utilities . . . . .	277
		UTU1 UTU2 - Adaptation of 'UNS' operators . . . . .	277

UTU1 - Extraction of 'P' lines with 'UNS' . . . . .	277	UTU2 - Execution Script . . . . .	280
UTU1 - Input / Processing / Results	277	UTM1 UTM2 - Conversion of 'old' Meta Entities . . . . .	281
UTU1 - Description of Steps . . . . .	278	UTM1 - Description of Steps . . . . .	283
UTU1 - Execution Script . . . . .	278	UTM1 - Execution Script . . . . .	284
UTU2 - Update of 'P' lines with 'UNS'	279	UTM2 - Input / Processing / Results	285
UTU2 - Input / Processing / Results	279	UTM2 - Description of Steps . . . . .	285
UTU2 - Description of Steps . . . . .	279	UTM2 - Execution Script . . . . .	286



---

## Notices

References in this publication to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Subject to IBM's valid intellectual property or other legally protectable rights, any functionally equivalent product, program, or service may be used instead of the IBM product, program, or service. The evaluation and verification of operation in conjunction with other products, except those expressly designated by IBM, are the responsibility of the user.

IBM may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to the IBM Director of Licensing, IBM Corporation, North Castle Drive, Armonk NY 10504-1785, U.S.A.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact IBM Paris Laboratory, SMC Department, 1 place J.B.Clément, 93881 Noisy-Le-Grand Cedex. Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

IBM may change this publication, the product described herein, or both.



---

## Trademarks

IBM is a trademark of International Business Machines Corporation, Inc. AIX, AS/400, CICS, CICS/MVS, CICS/VSE, COBOL/2, DB2, IMS, MQSeries, OS/2, PACBASE, RACF, RS/6000, SQL/DS, TeamConnection, and VisualAge are trademarks of International Business Machines Corporation, Inc. in the United States and/or other countries.

Java and all Java-based trademarks and logos are trademarks of Sun Microsystems, Inc. in the United States and/or other countries.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States and/or other countries.

UNIX is a registered trademark in the United States and/or other countries licensed exclusively through X/Open Company Limited.

All other company, product, and service names may be trademarks of their respective owners.



---

# 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,
- Server installation CD-ROM,
- Client installation CD-ROM,
- Documentation CD-ROM.

---

## Bibliography

- A number of administration actions must be carried out online in Administrator workbench in order to make a VisualAge Pacbase installation or re-installation operational. These actions are documented in the 'AD workbench User's Guide', chapter 'Prior Administration Actions'.
- The procedures, used by the Administrator for the Management of Databases and versions, and utilities provided, are documented in the Administrator's procedures Guide.
- For IBM sites, the installation of a Security System, to control user codes, passwords and access authorizations, is documented in the 'Installation of Server Components' chapter, 'Additional Installations' subchapter, and also in the Online Help of Administrator workbench.





---

## Chapter 2. Prerequisites

---

### Prerequisites for the Server Environment

#### Hardware and Software

- Architecture: A UNIX server
- Memory: RAM memory (64 Mb). You may need additional memory according to the number of servers installed on the same machine.
- Software - COBOL runtime
  - For the Micro Focus version:  
Micro Focus Server for COBOL 5.0 or greater.  
VA Pacbase is available on a 32-bit version on the AIX, HP, Linux, and Sun platforms.  
On the AIX and HP platforms, a 64-bit version is also available.
  - For the ACUCOBOL-GT version:  
ACUCOBOL-GT 7.2 or Extend 8.  
VA Pacbase is available on 32 and 64-bit versions on the AIX platform.
- Installation medium: CD-ROM drive.

#### Disk Space

The disk space occupied by files varies according to the size of the applications managed by the system.

The table here below indicates approximately (in million bytes) the disk space required by the installation of servers:

Size of installation	Total
Total for installation	140
Total for system	116
Total for installation tests user files	22
Total for installation tests administrator files	2

---

### Prerequisites for the Client Environment

#### Hardware

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

- Processor: Intel Pentium III 450 Mhz minimum or compatible processor.

- Monitor: graphic monitor (800x600) VGA or higher resolution (XGA or SVGA).
- CD-ROM drive.
- Card: adapted to the site network.
- Memory (RAM): 512 Mb (1 Gb advised).

## Disk Space

Required disk space:

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

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

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

## Software

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

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

---

## Communications

To enable the communication between the workstation components and the servers in a UNIX environment, the communication protocol is TCP-IP Socket.

---

## Chapter 3. Installation of the Server Components

---

### Installation

#### General Overview

The product is supplied on a CDROM which contains:

- pacinst.Vnn,
- PACBASE.xxx.

('Vnn' represents the number of the installed version).

('xxx' represents the COBOL runtime version).

**WARNING:** Depending on the support and the UNIX system, the names of the installation files might be in upper case letters or in lower case letters.

#### Description of pacinst.Vnn :

The pacinst.Vnn file contains the VA Pac installation or reinstallation commands.

These commands are written in shell language.

#### Description of PACBASE.xxx:

The PACBASE.xxx files are compressed tar files which contain the VA Pac execution and operations files.

When installing or reinstalling, you can choose the runtime and then install files which are compatible with the runtime in use.

#### Installation Process

It is recommended to backup the system before starting the VA Pac installation and to closely follow the various installation steps.

- Update of the '/etc/services' file,
- Creation of a specific login to the software,
- Creation or modification of the environment variables,
- installation of the system, from the CD-ROM,
- installation of the Administration Database,
- installation of the Development Database,

Between the system installation and the Databases installation, the Mklink is executed. If its execution abnormally ends, you just have to correct the error and link the executable programs to the runtime if needed. Then, restart the installation of the Databases by executing the "pacadmin" procedure (see the "Installation of the Specifications Database" section in this chapter) stored in the following directory: \$PACDIR/system/install.

**WARNING:** VA Pac must be installed on disks physically present on the UNIX machine and not on the NFS-mounted disks.

For the Microfocus or Acucorp versions, the COBOL runtime is required for VA Pac to operate properly. It must be installed before VA Pac.

**WARNING:** For the installation of the Acucobol version on HP-UX, you must assign the [nflocks] system variable, 'max Number of File LOCKS', a value higher than 9000.

---

## Installation of System Environment

### Update of the '/etc/services' File

The use of the 'socket' communication interface for the communication between the server and the clients requires the reservation of communication port numbers in the '/etc/services' UNIX file.

This file must be updated BEFORE the installation of the Development Databases. Since this installation can follow the system installation, this file must be updated BEFORE the system installation.

A communication port number must be associated with each database. Communication ports cannot be chosen at random.

Some ports are reserved for standard 'internet' applications or for later applications. Other ports are allocated in a dynamic way.

So you must choose a port number which is not used in '/etc/services' and which is not being used, i.e. dynamically allocated.

Example:

A port number must be chosen for each on-line server, including the ADMIN Database. Let us suppose that we have chosen number 52030.

- The port number 52030/tcp must not be in the '/etc/services' file ;

- The port number must not be currently used. You can make sure of that via the following UNIX command:

```
netstat -an | grep 52030
```

- If both these conditions are met, the UNIX (root) administrator must update the '/etc/services' file using the following line:

```
paclanx 52030/tcp
```

The port number chosen for each on-line server must be carefully noted because it will be needed when creating Development Databases.

## Creation of a Specific UNIX User

Most software running on UNIX must be installed in a specific user's account. This is necessary for security reasons, in order to isolate the various software programs installed on one machine.

NEVER INSTALL UNDER THE "ROOT" UNIX ACCOUNT!

The UNIX administrator (root) must therefore create a UNIX user under which VA Pac will be installed.

This user will be the VA Pac administrator's.

He must be authorized to use the 'at' command.

## Modification of the Configuration Files

Log in with the VA Pac administrator login, and update the shell configuration files (.profile, .kshrc or .login).

The environment variables PACDIR and PATH will be created or modified:

```
PACDIR=$HOME/paclanx
export PACDIR
PATH=$PACDIR/system/bin:$PACDIR/system/proc
:$COBDIR/bin:$PATH
export PATH
```

The environment variables COBDIR, COBPATH, ACUDIR and, CODE\_PREFIX must be added, according to the runtime:

For Microfocus :

```
COBDIR=<COBOL runtime directory path>
export COBDIR
COBPATH=$PACDIR/system/gnt
export COBPATH
```

For ACUCOBOL -GT:

```
ACUDIR=<COBOL runtime directory path>
export ACUDIR
CODE_PREFIX=$PACDIR/system/acu
export CODE_PREFIX
```

If the TMPDIR variable (temporary directory of the COBOL runtime) is assigned, the indicated directory must exist.

For the AIX version of Microfocus, you must create or modify the LIBPATH variable:

```
LIBPATH=/usr/lib:$COBDIR/coblib:$PACDIR/system/bin
export LIBPATH
```

If you use ACUCOBOL -GT, LIBPATH must contain:

```
LIBPATH=/usr/lib:$ACUDIR/lib:$PACDIR/system/bin
export LIBPATH
```

For the HP, Linux or Sun versions of Micro Focus, you must use LD\_LIBRARY\_PATH instead of LIBPATH.

For the HP version, in addition to the LD\_LIBRARY\_PATH variable, you must set the SHLIB\_PATH variable as follows:

```
export SHLIB_PATH=$PACDIR/system/bin:$SHLIB_PATH
```

The COBOL runtime corresponds to the directory which contains the executable files and libraries required to execute COBOL programs.

For Micro Focus, COBDIR can generally take the following values: /usr/lib/cobol, /usr/lpp/cobol or /opt/cobol. (For further details on the COBDIR environment variable, refer to the installation documentation of your COBOL compiler and to your COBOL manuals.)

For ACUCOBOL -GT, the ACUDIR variable contains the compiler or the COBOL runtime installation directory.

Once you have performed these updates, restart the configuration initialization by typing '.profile', and use the UNIX command 'set' to check that the modifications were taken into account in the configuration files.

If the environment variables are not correctly initialized, log out and then log in again, to the VisualAge Pacbase administrator's account.

## Code page definition

The Repository code page is an IBM-923 code page equivalent to the ISO8859-1 code page which supports the Euro character (ISO8859-15).

### Positioning the 'LANG' code for the UNIX user

In order to visualize properly the reports which contain national characters, the user must define a code page compatible with the VA Pac Repository code page.

Refer to your documentation related to the UNIX system to define a code page compatible with the ISO8859-1 or ISO8859-15 code page.

As a general rule, the positioning of the 'LANG' variable alone is sufficient to define the code page to be used.

Example : for the support of French national characters, you set:

- on AIX, SOLARIS:  
`export LANG=fr_FR.ISO8859-1`
- on HP-UX :  
`export LANG=fr_FR.iso8859-1`

## Installing from a CDROM

**WARNING:** If necessary, mount the CD-Rom disk driver on a system directory.

## Description of the Installation Procedure Steps

To ensure a correct installation of the software, check that the disk space is equal to five times the size of the PACBASE.xxx file in the installation directory.

After unloading in the VA Pac administrator's login directory, or the CDROM mounting, go to the following directory:

```
PB350"package_code"."version_code"
```

which is located in \$HOME or in the CDROM mounting directory.

Example on AIX:

```
cd $HOME/PB350AIX.Vnn (nn = version number)
```

and type the following command:

```
sh pacinst.Vnn (nn = version number)
```

followed by a carriage-return (Enter or Return key).

The installation is made up of the following steps:

- Consistency check on the environment variables,
- Display of the installation menu
- Selection of the COBOL runtime in use
- Selection of the generation language code
- Creation of the installation directory
- Distribution of files coming from PACBASE.xxx
- Creation of the journal\_pacinstall file
- Creation of the Administration Database
- Creation of the standard test Database (BVAP).

#### Consistency check of the environment variables

Before running pacinst.Vnn, the VA Pac Administrator must check the modifications done in the configuration file, even though the installation process performs some consistency checks.

#### Display of the installation menu

The installation menu looks like this:

```
*****
                          VisualAge Pacbase
*****
inst      : version installation
*****
Type the command name or 'x' to exit pacinst.Vnn :
```

Description of commands:

- The 'inst' command starts the installation process.

Enter the command and follow the instructions given by pacinst.Vnn.

#### Choice of the COBOL runtime in use

This choice is proposed on some platforms at installation.

Ask your UNIX Administrator to know which runtime is used.

#### Selection of the generation language

The generation language code is 'en' for English or 'fr' for French.



## Creation of the installation directory

pacinst.Vnn requires the installation directory to be named paclanx in order to:

- isolate VA Pac from the other applications and so control its evolution more easily,
- allow pacinst.Vnn to control the type of processing (installation or reinstallation) to be done.

## Distribution of files:

During this step, pacinst.Vnn creates the directories described further on in this manual (paragraph 'Description of created Directories') and extracts all the PACBASE.xxx files.

## Update of the journal\_pacinstall file:

The journal\_pacinstall file contains information resulting from the use of pacinst.Vnn. During the installation process, this information is:

- the installation date,
- the release number,
- the version number,
- the generation language code.

## Note:

The BVPDS600 and BVPDS610 load-modules for the interface 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 instead of PDS600 and PDS610 which have no longer been compatible since VA Pacbase 3.0.

## **List of installed elements**

The installation copies:

- the translation file, the labels file produced by the procedures in case of error or for information,
- the skeletons in the languages supported by the product,
- the programs,
- the procedures,
- the Database creation utility,
- the startup script models.

## An element of the System: the online server

### Configuration

When started, each listener executes a 'BVPSEVER.ini' command file type to assign any environment file it needs.

This file is created when the listener is created in the \$PACDIR/config/"database code" directory and listener environment variables:

- BVPCKET : socket number,
- SRV\_DIR : directory containing the listener trace files,
- SEMLOCK : serialization lock of conflicting updates of the user Database,
- SEMADMIN : serialization lock of conflicting updates of the 'ADMI' administrator Database.

### Startup

The listener, whose executables (pactp, bvpsver, paclaunch) are in the \$PACDIR/system/bin directory allows to:

- Set the listener(s) in active or inactive mode,
- Supply information concerning the listener(s),
- Purge one or more workstation attached to a listener,
- Purge the listener(s).

To carry out the operations listed above, the listener commands interpreter (pactp) is started up.

There are two possible modes:

- the 'command' mode,
- the 'shell' mode.

For the 'command' mode type, enter:

```
pactp <command>
```

To return to 'shell' mode, enter:

```
pactp -s
```

The 'command' mode is used to insert the listener commands in a commands file.

For example, the com\_paclan file contains the following commands:

```

# display the listener' status
pactp info
# start the BVAP listener
pactp start BVAP
# display information on the BVAP listener in ten seconds
pactp info BVAP
# stop the ADMI listener
pactp shutdown ADMI
# start the 003 station purge command dependant on the BVAP
listener
pactp purge BVAP 003

```

The advantage of the 'shell' mode is that you avoid re-starting the interpreter for each command and so you avoid delays between commands.

The commands available are:

- debug (activation/deactivation of debugger mode)
- exit (exit from 'shell' mode),
- help (help on a command's syntax),
- info (information on the listener(s)),
- purge (purge the workstation),
- purge\_server (purge the listener),
- shutdown (stop the listener without confirmation),
- start (start the listener),
- stop (stop the listener with confirmation),
- view (display the listener's status).

A detailed description of the commands is given below in the paragraph 'Description of the commands'.

### Execution conditions

The PACDIR environment variable must be initialized.

The COBPATH environment variable must contain the access path to the online modules: '\$PACDIR/system/gnt'.

(see chapter 'Installation of Server Environment' - 'Installation of System Environment' - 'Modification of the Configuration Files').

## **Description of the commands**

### Debug command

This command activates or deactivates the 'debug' mode. The listener name must be passed as a parameter, followed by 'on' or 'off' to activate or deactivate the 'debug' mode.

There are two types of result files:

```
srv[process_number].txt
```

to trace the processing of the listener which listens new connections.

```
dial[process_number].txt
```

to trace the processing of each connection to the listener.

So there is a trace for each connection to the listener.

These files are located in the directory pointed by the SRV\_DIR environment variable. This variable is assigned in the \$PACDIR/config/"database code"/BVPSEVER.ini configuration file. Its default value is: \$PACDIR/data/"database code"/tmp/server.

EXAMPLE:

- Start the debug mode on the BVAP listener

```
pactp debug BVAP on      (in command mode)
VA Pac : debug BVAP on  (in shell mode)
```
- Stop the debug mode on the BVAP listener

```
pactp debug BVAP off    (in command mode)
VA Pac : debug BVAP off (in shell mode)
```

- Different trace levels can be applied:

#### 1. Level 1

Minimum trace to follow the listener processing with the calls to the COBOL communication monitor,

#### 2. Level 2

Detailed trace of the listener processing,

#### 3. Level 4

Trace of messages exchanged between the listener and the client.

The 'debug on' command activates a level 1 trace on the active listener. To use other traces, the listener must be restarted after setting the SRV\_TRACE variable in the 'BVPSERVER.ini' file.

EXAMPLE:

SRV\_TRACE=1 for a level 1 trace

SRV\_TRACE=3 for a level 1 and 2 trace

SRV\_TRACE=5 for a level 1 and 4 trace

The 'debug off' command stops the trace creation for the new listener connections.

### Exit command

This command is used to exit the shell mode (commands interpreter) previously activated by pactp -s.

### Help command

This command displays help concerning a listener administration command. If no parameter is specified, the list of available commands is displayed. If a command is specified, the help for this command is displayed on the screen.

EXAMPLE: request help on the syntax of the start command

```
start
pactp help start      (in command mode)
VA Pac : help start  (in shell mode)
```

### Info command

This command displays information on the listener(s).

This command followed by a base code (info "database code") gives the following information :

- active (if the listener is active),
- inactive (is the listener is inactive),
- Error (if the listener is stopped abnormally).

### Purge command

This command purges a workstation (i.e. it disconnects a workstation).

If the interpreter (pactp) is in command mode, the syntax for the purge command is as follows:

```
'pactp purge <database code> <no. of the station to be purged>'
```

In shell mode there are two syntaxes for the purge command:

- 'purge <no. of the station to be purged>' if the prompt is different from 'VA Pac :' (the prompt taking the value of listener name, after the use of the view command, for example).
- 'purge <database code> <no. of the station to be purged>' if the prompt is 'VA Pac :'.

### Purge\_server command

This command purges a listener in the case of abend, displayed with the 'Error' status after the 'info' command. The syntax for the purge\_server command is as follows:

```
'pactp purge_server <database code>'
```

In shell mode the syntax for the command is:

```
'purge_server <database code>'
```

N.B.: This command deletes the listener process(es), as well as the used IPC resources (semaphores, shared memory).

### Shutdown command

This command stops the listener. The database code must be passed as a parameter of the command.

EXAMPLE: stop the BVAP listener

```
pactp shutdown BVAP      (in command mode)
VA Pac : shutdown BVAP  (in shell mode)
```

### Start command

This command starts the listener. The database code must be passed as a parameter of the start command. The initialization file BVPSEVER.ini must be in the \$PACDIR/config/'database code' directory. The listener start-up program, palaunch, starts the 'bvpsver' process. If problems arise (listener lock), use the following command first:

```
pactp purge_server 'database code'.
```

If this command has no effect, the 'bvpsrver' process can always be killed using the 'kill -15' command or 'kill -9' followed by process number (PID).

EXAMPLE: starting the BVAP listener

```
pactp start BVAP      (in command mode)
VA Pac : start BVAP  (in shell mode)
```

### Stop command

This command stops a listener. The database code must be passed as a parameter of the stop command. You have to confirm stopping the server.

EXAMPLE: stop the BVAP listener

```
pactp stop BVAP      (in command mode)
VA Pac : stop BVAP   (in shell mode)
```

### View command

This command displays information concerning a listener: the list of the connected workstations, the IP address of the client workstation, the PID number of the client process launched by the listener, the VA Pac user code, the name of the executed COBOL program and its 'Elapse' execution time in milliseconds. It also gives information on the status of the semaphore used to synchronize the concurrent accesses to the database.

EXAMPLE: display information about the BVAP listener

```
pactp view BVAP      (in command mode)
VA Pac : view BVAP   (in shell mode)
```

---

## Installation of the Specifications Database

### Administration Database

This step creates the Administration Database which controls the Development Databases. Only one Administration Database can be installed. Its code is 'ADMI'.

The Administration Database must be installed right after the system installation, or later with the 'pacadmin' procedure located in the directory:

\$PACDIR/system/install.

This installation is constituted of the following steps:

### Display of the installation menu

The installation menu looks like this:

```
*****
                          VisualAge Pacbase
*****
  creadmin      :  creation of the administration database
*****
Type the command name or 'x' to exit pacadmin :
```

Description of commands:

- The 'creadmin' command starts up the installation process.

Enter the command and follow the instructions given by pacadmin.

Input the language code in the Database

- en (English)
- fr (French)

Input the socket number of the listener

The socket number must be between 49152 and 65535.

It must be declared in the /etc/services file (refer to 'Update of the /etc/services File' sub-chapter).

Creation of the Database subdirectories

- \$PACDIR/data/ADMI/base
- \$PACDIR/data/ADMI/journal
- \$PACDIR/data/ADMI/save
- \$PACDIR/data/ADMI/script
- \$PACDIR/data/ADMI/tmp
- \$PACDIR/data/ADMI/users
- \$PACDIR/config/ADMI

Execution of the initialization batch procedures

- INGU : initialization of GU file,
- INGK : initialization of GK file,
- INQJ : initialization of QJ file,
- REST : Database restoration,
- VINS : initialization of the Metamodel.

INGU : Initialization of the Users file



This procedure is executed for the first installation only. It defines and then loads the GU file with the 'TEST' user code (blank password) and 'ADMIN' user code ('ADMIN' password). These user codes will be used to activate the keys and start the test scripts.

### Update of the journal\_pacinstall file

The journal\_pacinstall file also includes information related to the Database creation:

- Database name and creation date.

## **Development Database**

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

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

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

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

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

More than one Development Database can be installed ; each has its own environment.

A Development Database can be installed right after the system installation, or later, with the 'pacadmin' procedure which is located in the directory:

\$PACDIR/system/install.

This installation involves the following steps:

### Display of the installation menu

The installation menu looks like this:

```
*****  
                               VisualAge Pacbase  
*****  
crebase      :  creation of a new database
```

\*\*\*\*\*

Type the command name or 'x' to exit pacadmin :

Description of commands:

- The 'crebase' command starts up the installation process.

Enter the command and follow the instructions given by pacadmin.

#### Input of the Database code (except for the test Database)

Enter the Database code on 4 alphanumeric uppercase characters and its label on 30 alphanumeric uppercase characters.

This code must have been declared in the Administration Database.

When installing the first Database (test Database), the Database code is always BVAP.

#### Selection of the Database language code

This code can be:

- en (English)
- fr (French)

#### Input of the socket number allocated to the listener

The socket number is a 5-digit number between 49152 and 65535.

You must specify this number manually in the vaplocat.ini file (see the 'COMMUNICATION FILES' in chapter 4).

It must be declared in the /etc/services file. (see paragraph 'Update of the "/etc/services" File').

#### Creation of the Database subdirectories

- \$PACDIR/data/BVAP/base
- \$PACDIR/data/BVAP/journal
- \$PACDIR/data/BVAP/save
- \$PACDIR/data/BVAP/script
- \$PACDIR/data/BVAP/tmp
- \$PACDIR/data/BVAP/users
- \$PACDIR/config/BVAP

### Execution of the initialization batch procedures

- UPGP : update of the Development Database code and label in the Administration Database,
- REST : loading of the test Database,
- VINS : initialization of the metamodel,
- LDHE : initialization of HE file,
- LDZS : initialization of ZS file,
- LDGS : initialization of GS file,
- INFQ : initialization of FQ file,
- INFP : initialization of FP file,
- INFO : initialization of FO file.

### Update of the journal\_pacinstall file

The journal\_pacinstall file also includes the information related to the Database creation:

- Database name and creation date.

## **Access key entering**

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

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

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

## **Backup of the Administration Database**

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

## **Deletion of a Database**

To delete a Database, you must be positioned in the installation user connection directory and delete the following directories:

`$PACDIR/data/"database code"`

and

`$PACDIR/config/"database code"`

Use the command: `rm -r [directory_name]`

## List of components with their date of creation

### INSL procedure

This procedure is used to edit:

- the list of batch, online programs and their generation characteristics,
- In case of system operation problem, this list should be printed in order to communicate to VisualAge Pacbase Support all the installation references.

In any case, you must verify that the provided user input is adapted to your environment.

### **INSL - Execution Script**

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) INSL BATCH PROCEDURE
# * -----
# *     VISUALAGE PACBASE
# *
# * -----
# *     - LIST OF INSTALLED PROGRAMS AND FILES -
# *
# * -----
# *
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "INSL"
echo "          ====="
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
echo ""
OUTFILE=`BVPENV INSL OUTFILE $PACUSERS/INSL.txt`
for i in `cat $PACINPUT`
do
  if [ -d "$i" ]
  then
    cd $i
    ls * >> $PACTMP/LIST
  else
    echo $i >> $PACTMP/LIST
  fi
done
```

```
fi
done
LIST=$PACTMP/LIST
export LIST
LOGFILE=$PACUSERS/INSL.log
export LOGFILE
BVPMSG 1009 "bvupdate"
bvupdate $OUTFILE > $LOGFILE 2>&1
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "bvupdate"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN
```



---

## Chapter 4. Installation/Reinstallation of Client Components

---

### Things to Know Before Installing

- To install the VisualAge Pacbase Client components on a Windows workstation, you must have an Administrator profile.
- VA Pac Client components are installed via InstallShield for Windows Installer (ISWI).  
If Windows Installer is not installed on the workstation, it will be installed automatically.
- You also need Microsoft Windows Script, version 5.1 or higher. You can download it from the following URL:  
<http://www.microsoft.com/downloads>
- Both the Administrator & Developer workbench and the eBusiness Tools components require, for their online help, that a standard internet browser be used (Mozilla Firefox or Internet Explorer is advised).
- The installation of a Client component does not require the prior installation on the server of the VA Pac Database(s) to which it will connect. However, the code of each VA Pac Database you must indicate when you install some Client components will have to be strictly reused when these Databases are installed at the server level.

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

### Root Directory

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

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

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

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

**NOTE:** Do not use blank characters in directory names.

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

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

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

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

## **Installation Startup**

Insert the installation CD-Rom.

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

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

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

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

Choose the Client component you want to install.

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

---

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

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

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

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

AVAILABLE COMMUNICATION TYPES



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

## MIDDLEWARE

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

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

However you can also choose a communication via a gateway.

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

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

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

## COMMUNICATION FILES

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

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

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

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

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

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

#### THE VAPLOCAT.INI FILE

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

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

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

A location :

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

#### THE BASES.INI FILE

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

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

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

---

## Administrator & Developer workbench

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

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

- Administrator workbench
- Developer workbench

Developer workbench includes the following modules, each running independently:

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

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

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

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

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

- If you choose the direct communication option, the middleware installation script will automatically start once the installation of the workbench is finished. It will ask you to specify a number of communication parameters. For complete details on this part of the installation, refer to the Middleware subchapter.
- If you choose the gateway option, enter first the IP address of the gateway here. The installation of the middleware on the Developer workstation - also necessary in this context - will then start automatically after the installation of the workbench.

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

To do this, a window enables you to enter:

1. The name of a VA Pac Database, already installed at the server level or not. The names entered here will be displayed in the connection smartguide, thus showing users which Databases they can connect to. The

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

2. The Database logical code.

Maximum length: 4 characters.

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

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

3. The location name

Maximum length: 20 characters.

Default: Location-1

More than one Database may be associated with one location.

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

You select the mode via two check boxes.

VisualAge Pacbase signon:

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

Middleware signon:

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

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

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

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

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

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

### 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**

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

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

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

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

---

## eBusiness Tools

The eBusiness Tools are:

- Proxy Generator
- Location Editor
- Services Test Facility
- VisualAge Pacbase Web Connection (Dialog Web Revamping Generator)
- Web Application Models (WAM)

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

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

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

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

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

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

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

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

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

### START-UP FILES

The start-up files are :

- For the Proxy Generator:

vapGen.exe

- For the Location Editor:

vapLocationEditor.exe

- For the Services Test Facility:

vapServicesTestFacility.exe

- For VisualAge Pacbase Web Connection:

PacWebgen.exe

These files are to be found in the following sub-directory:

ebusinesstools\bin

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

### START MENU / PROGRAMS CHOICE

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

eBusinessTools

Location Editor

Proxy Generator

Services test Facility

Dialog Web Revamping Generator

---

## **VisualAge Pacbase WorkStation**

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

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

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

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

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

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

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

In the next panel, select the elements to install:

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

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

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

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

- If you choose the direct communication option, the middleware installation script will automatically start once the installation of the workstation is finished. It will require the configuration of communication parameters. For information on this part of the installation, see the subchapter Middleware.
- If you choose the gateway option, enter the IP address of the gateway here. The installation of the middleware on the Developer workstation - also necessary in this context - will then start automatically after the installation of the WorkStation.

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

To do this, a panel enables you to enter:

1. The name of a Database, already installed at the server level or not. The names entered here will be displayed in the connection smartguide, thus showing users which Databases they can connect to.



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

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

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

2. The Database logical code.

Maximum length: 4 characters.

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

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

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

3. The location name

Maximum length: 20 characters.

Default: Location-1

More than one Database may be associated with one location.

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

You select the mode via two check boxes:

'Pacbase is secured':

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

'Middleware is secured':

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

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

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

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

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

### START-UP FILE

The start-up file is :

pexec.exe

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

### START MENU / PROGRAMS CHOICE

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

```
WorkStation
    WorkStation 3.5
    WorkStation 3.5 News
    <methodology> News
```

### INSTALLATION PARAMETERS FILE

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

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

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

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

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

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

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

### DESCRIPTION OF THE PARAMETERS FILE

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

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

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

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

The Pacbase.dat file should not be destroyed.

The possible values for the Methodology parameter are:

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

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

### WARNING ON VAPLOCAT.INI FILE

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

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

#### FILES REQUIRED FOR THE USE OF THE GENERATION-PRINT MONITOR

To activate the "Generation and Print Monitor" function in the WorkStation, the path to the Databases accessed by the user must be entered in the GPMON.PRM file.

This file is saved under the following path:

SPAC\NNNL\GPMON.PRM

If this file does not exist, you must create it in the directories indicated above. You just have to give it the name GPMON and to enter a .PRM extension.

Then, open the file, under Notepad for example, and enter a SU line for each Database accessed by the user as follows:

SU bbbb u:/Root/USERS,

bbbb for the Database code,

u for the root driver,

Root for the path to the USERS directory.

The user of the WorkStation must be able to view and access the USERS directory from his computer. To make it possible, you must use the File Share function or a network unity which should be accessible from the two stations.

In the GPMON.PRM file, you must enter the path to the USERS directory as accessible from the user's computer.

#### FILE OF NON-STANDARD LABELS

To enable the WorkStation to take into account the non- standard labels of the files produced by a customized generation and print procedure, you need to create a GPMON.LBL file 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 or 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 intermediate MQSeries Server on NT, this parameter must identify the intermediate NT Queue Manager and not the Queue Manager.  
Maximum: 4 characters.

- Request Queue name:  
Maximum: 48 characters.
- Reply Queue name:  
Maximum: 48 characters.
- Transaction code:  
Maximum of 4 characters for CICS.  
Maximum of 8 characters for IMS.
- MVS IMS Connect
  - IP address: IP address and port used by the VA Pacbase server.
  - Transaction code: IMS transaction code of the VA Pacbase Communications Monitor.
  - Code page: Value identifying the coding of characters used by the VA Pacbase server.  
1140 (US EBCDIC) or 1146 (UK EBCDIC)
  - Data Store:  
Name of the link to IMS defined in IMS Connect (IMS Data Store ID).
  - RACF group: Name of the RACF group for IMS Connect.

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

---

## Editing Communication Parameters

### The bases.ini File

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

By default this file's access path is:

C:\Program Files\IBM\VisualAge\_Pacbase\_35\Common\

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

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

The name of each section will be presented to the user in the connection smartguide. In the displayed list of VA Pac Databases, the user picks the Database he/she wants to connect to. This is why section names need be very explicit. All the more so since you can manage several communication options

for one VA Pac Database. To do so, define as many configurations/sections as needed for one Database, clearly differentiated from one another by their name.

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

### DESCRIPTION OF A SECTION'S CONTENTS

The parameters in each section are listed below. There is one parameter per line:

- baseCode = code of the VisualAge Pacbase Database (required)  
Maximum length: 4 characters

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

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

The following parameters vary according to the chosen option.

- connectionCleaningInterval = period of time (in millisecond) between two startups of connections cleaning procedures.  
Parameter needed for the VisualAge Pacbase Workstation only.  
Default value for Windows NT/2000/XP = 60000.  
For Windows 95/98, this parameter must be set to -1, and cannot be modified, to avoid problems of multi-threading, not supported by these platforms.



## PARAMETERS FOR DIRECT ADAPTER (LOCAL MIDDLEWARE)

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

Default: ..\common\vaplocat.ini

**CAUTION:** The default value of this parameter should not be modified.

- location = location name for the Database

Maximum length: 20 characters.

Default: Location-1

More than one Database can point to the same location.

REMINDER: A location identifies the communication protocol used to access the VisualAge Pacbase server and the physical address of this server for this protocol.

- traceFile = path and name of the file which will receive the trace of the middleware execution.  
By default this file is automatically created (with timestamp) in the VapTrace sub-directory.
- traceLevel = trace level of the middleware execution. Its possible values are:
  - 0 : no trace
  - 1 : trace with errors (default)
  - 2 : standard trace, not detailed
  - 3 : trace for information
  - 4 and + : trace for debugging
- codePageFile = path and name of the file which contains the conversion table of the code pages.  
Default: ..\middleware\CharConv.txt

## PARAMETERS FOR GATEWAY ADAPTER (REMOTE MIDDLEWARE)

- host = name or IP address of the host where the VisualAge Pacbase gateway is installed.  
Do not enter left aligned '0', source of error with some configurations.  
Default: 127.0.0.1 for a local host
- port = value of the IP port where the gateway receives the client requests.  
Default: 5647
- location = location name for the Database  
Maximum length: 20 characters.  
Default : Location-1  
More than one Database can point to the same location.

REMINDER: A location identifies the communication protocol used to access the VisualAge Pacbase server and the physical address of this server for this protocol.

- The traceFile and traceLevel parameters can be used to start the GATEWAY. For more details, refer to the Middleware User's Guide.

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

## The vaplocat.ini File

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

By default, the path to this file is:

C:\Program Files\IBM\VisualAge\_Pacbase\_35\Common\

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

The maximum length of this name is 20 characters.

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

- VAP SOCKET

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

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

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

- MQ-CICS Bridge

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

- IMS Connect

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

- MQ-IMS Bridge

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

## DETAILS ON THE PARAMETERS

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

- COMM\_TYPE:

This parameter identifies the communication protocol in use.

The possible values are:

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

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

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

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

- IXO\_DATASTORE: Name of link to IMS defined in IMS Connect (IMS DataStore ID).
- IXO\_DYNAMICREPLYQUEUE  
MQ-CICS Bridge and MQ-IMS Bridge.

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

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

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

- IXO\_LOCALCCSID: code of the character set of the machine locally MQ-CICS Bridge and MQ-IMS Bridge.  
This code (819 by default), used for the conversion of messages by MQSeries during the read and write of Queues.  
(9 characters maximum).
- IXO\_QUEUEMANAGER: Local Queue Manager name of the client part. MQ-CICS Bridge and MQ-IMS Bridge.  
(4 characters maximum).  
If there is an intermediate MQSeries Server on NT, this parameter identifies the intermediate NT Queue Manager and not the Queue Manager.
- IXO\_RACFGROUP: Name of RACF group for IMS Connect.
- IXO\_REPLYQUEUE: Name of reply messages Queue.  
MQ-CICS Bridge and MQ-IMS Bridge.  
(48 characters maximum).
- IXO\_REQUESTEXPIRY: Expiration delay of the request message, in seconds.  
MQ-CICS Bridge and MQ-IMS Bridge.  
(9 characters maximum).
- IXO\_REQUESTQUEUE: Name of request messages Queue.  
MQ-CICS Bridge and MQ-IMS Bridge.  
(48 characters maximum).
- IXO\_TIMEOUT: Maximum time required for a workstation to receive an answer from the server before indicating any communication error.  
This parameter is indicated in seconds. Its default value is 30.
- IXO\_TRANSID: Transaction code.  
(4 characters maximum for CICS and 8 characters maximum for IMS).  
This IMS transaction will have to be declared on IMS by a GEN INPUT IMS as follows:  

```
APPLCTN PSB=BVPSSOC
TRANSACTION CODE=WK35,SEGSIZE=32000,MODE=SNGL,SEGNO=00050,
          PRTY=(07,10,00002),PROCLIM=(00005,00015),EDIT=ULC,
          MSGTYPE=(MULTSEG,RESPONSE,$CLS)
```
- HOST\_ENCODING: Identifies the encoding of the characters used by the VisualAge Pacbase server.  
1140 (US EBCDIC) or 1146 (UK EBCDIC)  
Not used with MQ-CICS Bridge and MQ-IMS Bridge.
- MESSAGE\_LENGTH The value of this parameter MUST be 31744.

- **MONITOR:** Communication monitor code for VisualAge Pacbase, which is BVPSCPI, or BVPSSOC for MVS CICS SOCKET.

Not used with IMS Connect and MQ-IMS Bridge.

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

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

---

## Component Updating, Modification, or Removing

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

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

This option is available only with:

- Administrator & Developer workbench:  
To add one of both workbenches as the other is already installed,
- VisualAge Pacbase WorkStation:  
To add a Methodology.

- 'Remove' a component which is already installed.

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

---

## Chapter 5. Tests

---

### List of Utilities

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

Script	Description
ARCH	Archiving of the Administration Database journal
PACS	Saving of the Administration Database (SAVE)
REOR	Reorganization of the Administration Database
REST	Restoration of the Administration Database
PAGX	Extraction of Administration Database
UPGP	Update of PAF batch format of Administration Database
ARCH	Saving of the Development Database journal
PACS	Saving of the Development Database (SAVE)
PACS	Library management of the Development Database (MLIB)
REOR	Reorganization of the Development Database
REST	Restoration of the Development Database
UPDT	Batch update of the Development Database
GPRT	Generation print
PACX	Library extraction (EXLI)
PACX	Journal extraction (EXPJ)
PACX	Entities extraction (EXTR)
PACS	sub-networks extraction (UXSR)

---

### Installation Tests

The VA Pac Installation tests include the following operations:

- Generation-print, online and batch update tests,
- Administration procedures tests,
- Development procedures tests,
- Extraction utility tests.

## **Generation-Print, Online and Batch Update Tests**

These tests consist of the following steps:

- Online use tests:
  - Starting up the test Database server.
  - Testing screen branching.
  - Executing some updates.
- Batch updating tests:
  - Executing the UPDT procedure.
- Test on generation and print of programs:
  - Executing the 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 ARCH procedure, which outputs a PJ(1) file.
- Backup of the Administration Database: execute the PACS procedure (SAVE option), which outputs a PC(1) file ; as the evaluation key does not allow to execute this procedure, you must enter the access key previously provided.
- Reorganization of the sequential backup, PC(1), of the Administration Database: execute the REOR procedure, which outputs a PC(2) file.
- Restoration of the Administration Database using the PJ(1) archived transaction file and the PC(2) Database backup file: execute the REST procedure.

During all these tests, the Administration Database server must be shut down.

- Extraction of Administration Database data: execute the PAGX procedure and save the GY file of extracted data.
- PAF update of the Administration Database: execute the UPGP procedure with the extracted file (result of the PAGX procedure 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 ARCH procedure, which outputs a PJ(1) file.
- Direct backup of the Development Database: execute the PACS procedure (SAVE option), which outputs a PC(1) file ; as the evaluation key does not allow to execute this procedure, you must enter the access key previously provided.
- Library manager: add/delete a library in the Development Database: execute the PACS (mlib) procedure, which outputs a PC(2) file.
- Reorganization of the sequential backup, PC(2), of the Development Database: execute the REOR procedure, 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 REST procedure.

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 PACX procedure (EXLI option).
- Extraction of entities from a library: execute the PACX procedure (EXTR option).
- Extraction of selected transactions and/or lists of transactions from the archived journal (PJ): execute the PACS procedure (EXPJ option).
- Extraction of sub-network: execute the PACS procedure (UXSR option).

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

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



---

## Chapter 6. Server Re-installation

---

### Re-installation

#### General Overview

You must reinstall the system environment of VisualAge Pacbase server when you receive a new version with corrections of bugs or new developments.

Generally, only system files (error messages, generation skeletons...) and programs are affected by this version.

#### GENERAL COMMENTS

- The reinstallation procedure does not create directories which are assumed to be identical to those created during the initial installation of the version.
- It does not copy the batch procedures (\$PACDIR/system/proc directory) so as not to delete possible adaptations to the site, except if the new version cannot run with the old procedures.

The new procedures are copied into the '\$PACDIR/system/proc.Vnn' (nn=version number) directory.

- Operational startup scripts, in the \$PACDIR/data/[database\_name]/script directory, are not impacted. To get the last version of the scripts, at reinstallation, refer to the startup script models in the /system/install/admin/script and /system/install/base/script directories.

**WARNING:** The metamodel of the Administration and Development Databases must be updated by executing the VINS procedure for each Database.

#### Description of the Re-Installation Procedure Steps

**WARNING:** The servers of the Administration Database and Development Databases must be stopped.

After downloading into the administrator's login directory, or mounting the CDROM, go to the following directory:

```
PB350"package_code"."version_code"
```

as in an installation operation (see sub-chapter 'VA Pac Installation'), and type the command:

```
sh pacinst.Vnn (nn = version number)
```

followed by a carriage return (Enter or Return key).

## Description of steps

The steps of the reinstallation procedure are as follows:

- consistency check on the environment variables (.profile, .kshrc or .login file),
- display of the reinstallation menu,
- choice of COBOL runtime in use (if necessary),
- distribution of the files coming from PACBASE.xxx,
- update of the journal\_pacinstall file.

## Consistency check of the environment variables

See subchapter 'Installation'.

## Display of the reinstallation menu

The reinstallation menu is displayed as follows:

```
*****
                          VisualAge Pacbase
*****
reinst      : version reinstallation
*****
Type the command name or 'x' to exit pacinst.Vnn :
```

## Description of commands

- You perform an overall reinstallation via the 'reinst' command.

Enter the command and follow the instructions given by pacinst.Vnn.

## Choice of COBOL runtime in use

See the subchapter 'Installation'.

## Update of the journal\_pacinstall file

The journal\_pacinstall file also includes information about the reinstallation:

- reinstallation date,
- release number,
- version number.

---

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

---

### Retrieval of VisualAge Pacbase 2.0 and 2.5

#### Foreword

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

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

There are two types of procedures:

#### Procedures to be executed on the 2.5 Database.

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

These procedures are :

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

#### Procedures to be executed on the new Database.

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

These procedures are :

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

#### Notes

The files which come from the retrieval must be converted, if needed, to IBM-923 code page if they are not already in ISO8859 code page.

The 'bvptrans' utility supplied in a 3.n environment enables to convert a file from one given code page to the IBM-923 code page. If needed, this utility should be applied to the PC, PE, PJ, PP, PG files which come from the 2.5 version in order to be retrieved properly in the 3.n version.

Example :

'IN' file, which comes from a 2.5 version, to convert from a PC850 code page to the 932 code page of the 3.n Repository:

```
bvptrans F-IN F-OUT 850 923
```

Note: Before the transfer of a 2.5 Database, you must execute the LVBL procedure followed by a REOR procedure on the source platform.

## Operations to be Performed

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

### Sequence of operations

It consists of seven steps:

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

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

2) Installation of the Administration Database

To install the Administration Database, execute the installation process.

This step creates the AN, AR, AY, AJ and GU files.

You must execute the following procedures:

- Creation of the Administration Database,
  - INGU: creation and initialization of GU user codes file,
  - REST: initialization of the Administration Database with installation data,
  - VINS: installation of the Administration Model (see the Appendix, at the end of the manual),
- Implementation of the access key from Administrator workbench by executing the following operations:
  - Input of access key,
  - targets definition,
  - key activation.

- Re-organization of the Administration Database if it is mentioned in the execution report of the preceding script (VINS).
  - PACS (SAVE): backup of the Administration Database,
  - REOR: re-organization of the Administration Database,
  - ARCH: initialization of the Administration Database journal file,
  - REST: restoration of the Administration Database.
- Retrieval of the old Database data,
  - PE25: retrieval of user parameters from the PE file which was generated during step 1,
  - UTMP: retrieval of 2.0 user passwords (optional),
  - PACS (SAVE): backup of the Administration Database.

### 3) Retrieval of a Development Database.

This step can be executed only if the corresponding VA Pac Database is already installed, with the test data.

You must execute the following procedures:

- PC25: retrieval and re-organization of the old Development Database from the backup of the old Database which was created during step 1,
- REOR: re-organization of the new Database,
- ARCH: archiving of the Development Database,
- REST: 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,
- VINS: installation of the Development Model of the new Database (see the description in the appendix at the end of this manual and create the MR file to take its transactions into account in the re-organization),

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

- PACS (SAVE option): backup of the new Development Database,
- REOR: re-organization of new Development Database,
- REST: 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 consists in executing the following procedures:

- PG20: if retrieval of 2.0 PG file,

- PG25: if retrieval of 2.5 PG file.

#### 5) Retrieval of PJ journal

It involves executing the following procedure:

- PJ25: retrieval of PJ file data.

#### 6) Retrieval of PEI files.

It involves executing the following procedure:

- PP25: retrieval of PP file,

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

It involves executing the following procedure:

- UV25: retrieval of UV file data.

## **Retrieval of User Parameters (PE25)**

### **PE25 - Introduction**

#### Principle

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

#### Execution conditions

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

#### Printed output

This procedure prints a report which indicates the errors encountered.

#### Result

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

#### Notes

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



The retrieval reinitializes the license assignments.

## PE25 - Input / Processing / Results

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

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

The 'A' line has the following structure:

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

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

- the Database code: it is the logical code, which will be indicated upon the Database restoration.
- the Database name

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
42	4	cccc	Transaction code (internal area)

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

Processing of user parameters (PE): PTU920

Code	Physical name	Type	Label
PAC7EN	Save dir.: OLDPE	Input	User parameters, old version
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PAC7MB	User input	Input	User input
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7GY	Tmp dir.: WGY	Output	User parameter transactions (length=310)
PAC7ET	User dir.: PE25ET920	Report	Error report

Transaction formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	Admin. Database - Base dir.: AR	Input	Administration Database data
PAC7AN	Admin. Database - Base dir.: AN	Input	Administration Database index
PAC7AE	System - Skel. dir.: AE	Input	Error labels
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7GY	Tmp dir.: WGZ or WGY	Input	Update transactions

Code	Physical name	Type	Label
PAC7MV	Tmp dir.: WMV	Output	Formatted transactions (should be able to contain all input transactions and the elementary cancel transactions generated by multiple cancel transactions) (length=170)
PAC7ME	Tmp dir.: WME	Output	Work file (length=372)
PAC7MW	Tmp dir.: WMW	Output	Work file (length=170)
PAC7MX	Tmp dir.: WMX	Output	Work file (length=743)
PAC7MY	Tmp dir.: WMY	Output	Work file (length=743)

Administration Database update: PACA15

Code	Physical name	Type	Label
PAC7AR	Admin. Database - Base dir.: AR	Output	Administration Database data
PAC7AN	Admin. Database - Base dir.: AN	Output	Administration Database index
PAC7AY	Admin. Database - Base dir.: AY	Output	Administration Database extension
PAC7AJ	Admin. Database - Journal dir.: AJ	Output	Administration Database journal
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGY	Admin. Database - Base dir.: AY	Input	Administration Database extension
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7ME	Tmp dir.: WME	Input	Work file
PAC7MV	Tmp dir.: WMV	Input	Update transactions
PAC7RB	Tmp dir.: WRB	Output	UPDT erroneous transactions (length=80)
PAC7RY	Tmp dir.: WRY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)

Code	Physical name	Type	Label
PAC7IF		Report	Summary of erroneous transactions (length=132)

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

Return codes:

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

### PE25 - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) PE25 BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      RETRIEVAL OF PE FILE
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "PE25"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
. $PACDIR/config/$1/PACSAVPC.ini
PAC7EN=`BVPENV PTU920 PAC7EN \dirname $PACSAVPC\OLDPE`
BVPMSG 1044 PE 2.5 $PAC7EN
echo "-----"
echo ""
BVPPAUSE
STATUS=`pactp info $1 | grep "Server Status" | cut -d: -f2`
if [ "$STATUS" != "Inactive" -a "$STATUS" != "" ]
then
    BVPMSG 1012 "PE25"
    BVPMSG 1037 $1
    BVPERR
    exit 12
fi
BVPMKDIR
# -----
```

```

. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/PACSAVPC.ini
PAC7EN=~BVPENV PTU920 PAC7EN `dirname $PACSAVPC`~/OLDPE~
export PAC7EN
PAC7ET=~BVPENV PTU920 PAC7ET $PACUSERS/PE25ET920.txt~
export PAC7ET
PAC7GY=~BVPENV PTU920 PAC7GY $PACTMP/WGY~
export PAC7GY
PAC7MB=$PACINPUT
export PAC7MB
BVPMSG 1009 "BVPTU920"
rtspac BVPTU920
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTU920"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7GY=~BVPENV PAF900 PAC7GY $PACTMP/WGY~
export PAC7GY
echo " CHECKP 4000UPDT" > $PAC7GY.tmp
cat $PAC7GY >> $PAC7GY.tmp
mv $PAC7GY.tmp $PAC7GY
PAC7ME=~BVPENV PAF900 PAC7ME $PACTMP/WME~
export PAC7ME
PAC7MV=~BVPENV PAF900 PAC7MV $PACTMP/WMV~
export PAC7MV
PAC7MW=~BVPENV PAF900 PAC7MW $PACTMP/WMW~
export PAC7MW
PAC7MX=~BVPENV PAF900 PAC7MX $PACTMP/WMX~
export PAC7MX
PAC7MY=~BVPENV PAF900 PAC7MY $PACTMP/WMY~
export PAC7MY
BVPMSG 1009 "BVPAF900"
rtspac BVPAF900
RETURN=$?
case $RETURN in
0)
;;

```

```

*)
BVPMSG 1012 "BVPAF900"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AJ.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/PACGGY.ini
. $PACDIR/config/$1/SEMLOCK.ini
PAC7IE=~BVPENV PACA15 PAC7IE $PACUSERS/PE25IEA15.txt`
export PAC7IE
PAC7IF=~BVPENV PACA15 PAC7IF $PACUSERS/PE25IFA15.txt`
export PAC7IF
PAC7ME=~BVPENV PACA15 PAC7ME $PACTMP/WME`
export PAC7ME
PAC7MV=~BVPENV PACA15 PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7RB=~BVPENV PACA15 PAC7RB $PACTMP/WRB`
export PAC7RB
PAC7RY=~BVPENV PACA15 PAC7RY $PACTMP/WRY`
export PAC7RY
BVPMSG 1009 "BVPACA15"
rtspac BVPACA15
RETURN=$?
case $RETURN in
0)
;;
2)
BVPMSG 1012 "BVPACA15"
BVPMSG 1054
BVPERR
BVPRMTMP
exit $RETURN
;;
4)
BVPMSG 1012 "BVPACA15"
BVPMSG 1055
BVPERR
BVPRMTMP
exit $RETURN
;;
*)

BVPMSG 1012 "BVPACA15"
BVPMSG 1025

```

```

BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMMSG 1010
BVPRMTMP
exit $RETURN

```

## Retrieval of the Development Database (PC25)

### PC25 - Introduction

#### Principle

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

#### Execution conditions

None.

#### Printed output

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

#### Result

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

### PC25 - Notes on Data Retrieval

#### Splitting up of the comment description (-G)

The comment description is split up into several descriptions.

- Comments

They include the comments and the COBOL alias (-GC).

#### Caution

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

- Generation lines

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

- Generation parameters

They include the O line type (-GO).

- Error messages management

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

- Call of entities via Relations

They include the R line type (-CR).

- Specificity of the Input Aid entity

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

### **WARNING:**

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

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

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

### Data structures table type

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

### Transformation of U type manuals

Manuals are replaced with volumes, their codes are completed with 'EIBM'.

### Extension data: User entities, Input Aids, Report Layouts

There are no more continuation records for these entities. There is only one index for each main record and one index for each continuation record. This Long data is created to concatenate the information included in the previous records. This data can be 1,000 characters long. It is split up into several records. Now a single index is created and it points to the first of these records.



## PC25 - Input / Processing / Results

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

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

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

This line must be structured in this way:

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

## PC25 - Description of Steps

General processes: PTU911

Code	Physical name	Type	Label
PAC7MC	Save dir. : OLDPC	Input	Sequential image of the network (old release)
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7MB	User input	Input	User input
PAC7PB	Tmp dir. : WPC	Output	First data record (length=153)
PAC7PE	Tmp dir. : WPE	Output	User Entity Occurrence definition (2.5 release), Report layouts, and Comments (except the calls of Input Aids) (length=193)
PAC7PG	Tmp dir. : WPG	Output	Description of Input Aids and Comments including calls of Input Aids. (length=193)
PAC7PL	Tmp dir. : WPL	Output	Definition and Description of Volumes, Definition and Description of Manuals (length=193)
PAC7PZ	Tmp dir. : WPZ	Output	User Entities and description of their Occurrences (2.5 release) (length=193)
PAC7PF	Tmp dir. : WPF	Output	Other records (length=153)

Code	Physical name	Type	Label
PAC7PM	Tmp dir. : WPM	Output	Report file (length=62)
PAC7ET	User dir. : PC25ET911	Report	Report only if absence of Database code

#### Manuals and volumes processing: PTU909

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7PB	Tmp dir. : WPC	Input	First data record
PAC7PL	Tmp dir. : WPL	Input	Definition and Description of Volumes and Manuals
PAC7PI	Tmp dir. : WPI	Output	Sorted and re-formatted Volumes Definitions and Descriptions (length=153)
PAC7PM	Tmp dir. : WPM	Input/ Output	Report file

#### Comments processing: PTU92A

Code	Physical name	Type	Label
PAC7PG	Tmp dir. : WPG	Input	Description of Input Aids and of the call of Input Aids in the Comments
PAC7PM	Tmp dir. : WPM	Input/ Output	Report
PAC7PE	Tmp dir. : WPH	Output	Description of Input Aids and of the call of Input Aids in Comments (length=193)

#### Sort of Input aids : PTU92B

Code	Physical name	Type	Label
PAC7PE	Tmp dir. : WPH	Input	Description of Input Aids and Comments including calls of Input Aids
PAC7PK	Tmp dir. : WPK	Output	Description of Input Aids and Comments including calls of Input Aids (length=193)

Sort of Input aids : PTU92C

Code	Physical name	Type	Label
PAC7PK	Tmp dir. : WPK	Input	Description of Input Aids and Comments including calls of Input Aids
PAC7KP	Tmp dir. : WKP	Output	Description of Input Aids and Comments including calls of Input Aids (length=193)
PAC7PB	Tmp dir. : WPC	Input	First data record
PAC7PD	Tmp dir. : WPD	Output	First data record (length=153)

Report layout processing: PTU919

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7PE	Tmp dir. : WPE	Input	User Entity Occurrences Definition (2.5 rel.), Report layouts and Comments (except calls of input aids)
PAC7PB	Tmp dir. : WPD	Input	First data record
PAC7PM	Tmp dir. : WPM	Input/ Output	Report file
PAC7ZP	Tmp dir. : WEP	Output	User entity Occurrences Definition (2.5 rel.), Report layouts (length=193)
PAC7PO	Tmp dir. : WPO	Output	Comments (except the call of Input Aids) (length=153)
PAC7KP	Tmp dir. : WKP	Input	Comments (including the calls of Input Aids)
PAC7PD	Tmp dir. : WPB	Output	First data record (length=153)

Meta entities processing: PTU912

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7PZ	Tmp dir. : WPZ	Input	User Entities (2.5 release)
PAC7PB	Tmp dir. : WPC	Input	First data record

Code	Physical name	Type	Label
PAC7ZP	Tmp dir. : WZP	Output	Development Model records (Definition and Descriptions) (length=193)

#### User entities processing: PTU913

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7PX	Tmp dir. : WEP	Input	Definition of User Entity Occurrences (2.5 release) and Report Layout
PAC7PZ	Tmp dir. : WZP	Input	Definition and Description of the Development Model and Description of User Entity Occurrences (2.5 rel.)
PAC7PB	Tmp dir. : WPB	Input	First data record
PAC7ZP	Tmp dir. : WZX	Output	Long data of the Development Model, User Entities, Report layouts, and Comments (including the calls of Input Aids ) (length=193)
PAC7PD	Tmp dir. : WPR	Output	First data record (length=153)

#### Sort of long data: PTU91A

Code	Physical name	Type	Label
PAC7PZ	Tmp dir. : WZX	Input	Intermediate extension data
PAC7ZP	Tmp dir. : WXZ	Output	Sorted long data (length=193)

#### 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	System - Skel dir. : AE	Input	Error messages
PAC7ZP	Tmp dir. : WXZ	Input	Sorted long data

Code	Physical name	Type	Label
PAC7PO	Tmp dir. : WPO	Input	Comments (no call of Input Aids)
PAC7PD	Tmp dir. : WPB	Input	First data record
PAC7PI	Tmp dir. : WPI	Input	Volumes Definition and Description
PAC7PF	Tmp dir. : WPF	Input	Other records
PAC7PM	Tmp dir. : WPM	Input	Report file
PAC7PC	Save dir. : PC (+1)	Output	Sequential image of the network (present release)
PAC7ET	User dir. : PC25ET914	Report	Retrieval report

### PC25 - Execution Script

```

#!/bin/sh
#@(#)VA Pac xxx xxx (R) PC25 BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      RETRIEVAL OF PC FILE
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "PC25"
echo "======"
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
. $PACDIR/config/$1/PACSAVPC.ini
PAC7MC=~BVPENV PTU911 PAC7MC `dirname $PACSAVPC`/OLDPC`
BVPMSG 1044 PC 2.5 $PAC7MC
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
if [ ! -f "$PAC7MC" ]
then
  BVPMSG 1034 $PAC7MC
  RETURN=1
  BVPRMTMP
  exit $RETURN
fi
# -----

```

```

. $PACDIR/config/$1/PAC7AE.ini
PAC7ET=~BVPENV PTU911 PAC7ET $PACUSERS/PC25ET911.txt`
export PAC7ET
PAC7MB=$PACINPUT
export PAC7MB
. $PACDIR/config/$1/PACSAVPC.ini
PAC7MC=~BVPENV PTU911 PAC7MC `dirname $PACSAVPC`\`OLDPC`
export PAC7MC
PAC7PB=~BVPENV PTU911 PAC7PB $PACTMP/WPC`
export PAC7PB
PAC7PE=~BVPENV PTU911 PAC7PE $PACTMP/WPE`
export PAC7PE
PAC7PF=~BVPENV PTU911 PAC7PF $PACTMP/WPF`
export PAC7PF
PAC7PG=~BVPENV PTU911 PAC7PG $PACTMP/WPG`
export PAC7PG
PAC7PL=~BVPENV PTU911 PAC7PL $PACTMP/WPL`
export PAC7PL
PAC7PM=~BVPENV PTU911 PAC7PM $PACTMP/WPM`
export PAC7PM
PAC7PZ=~BVPENV PTU911 PAC7PZ $PACTMP/WPZ`
export PAC7PZ
BVPMSG 1009 "BVPTU911"
rtspac BVPTU911
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTU911"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
PAC7PB=~BVPENV PTU909 PAC7PB $PACTMP/WPC`
export PAC7PB
PAC7PI=~BVPENV PTU909 PAC7PI $PACTMP/WPI`
export PAC7PI
PAC7PL=~BVPENV PTU909 PAC7PL $PACTMP/WPL`
export PAC7PL
PAC7PM=~BVPENV PTU909 PAC7PM $PACTMP/WPM`
export PAC7PM
BVPMSG 1009 "BVPTU909"
rtspac BVPTU909
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTU909"
BVPMSG 1025

```

```

BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7PG=~BVPENV PTU92A PAC7PG $PACTMP/WPG`
export PAC7PG
PAC7PE=~BVPENV PTU92A PAC7PE $PACTMP/WPH`
export PAC7PE
PAC7PM=~BVPENV PTU92A PAC7PM $PACTMP/WPM`
export PAC7PM
BVPMSG 1009 "BVPTU92A"
rtspac BVPTU92A
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTU92A"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7PE=~BVPENV PTU92B PAC7PE $PACTMP/WPH`
export PAC7PE
PAC7PK=~BVPENV PTU92B PAC7PK $PACTMP/WPK`
export PAC7PK
BVPMSG 1009 "BVPTU92B"
rtspac BVPTU92B
RETURN=$?
case $RETURN in
0)
;;
*)

BVPMSG 1012 "BVPTU92B"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7PB=~BVPENV PTU92C PAC7PB $PACTMP/WPC`
export PAC7PB
PAC7PK=~BVPENV PTU92C PAC7PK $PACTMP/WPK`
export PAC7PK
PAC7PD=~BVPENV PTU92C PAC7PD $PACTMP/WPD`
export PAC7PD
PAC7KP=~BVPENV PTU92C PAC7KP $PACTMP/WKP`
export PAC7KP

```

```

BVPMSG 1009 "BVPTU92C"
rtspac BVPTU92C
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTU92C"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
PAC7PB=`BVPENV PTU919 PAC7PB $PACTMP/WPD`
export PAC7PB
PAC7PD=`BVPENV PTU919 PAC7PD $PACTMP/WPB`
export PAC7PD
PAC7PE=`BVPENV PTU919 PAC7PE $PACTMP/WPE`
export PAC7PE
PAC7PM=`BVPENV PTU919 PAC7PM $PACTMP/WPM`
export PAC7PM
PAC7PO=`BVPENV PTU919 PAC7PO $PACTMP/WPO`
export PAC7PO
PAC7ZP=`BVPENV PTU919 PAC7ZP $PACTMP/WEP`
export PAC7ZP
PAC7KP=`BVPENV PTU919 PAC7KP $PACTMP/WKP`
export PAC7KP
BVPMSG 1009 "BVPTU919"
rtspac BVPTU919
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTU919"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
PAC7PB=`BVPENV PTU912 PAC7PB $PACTMP/WPC`
export PAC7PB
PAC7PZ=`BVPENV PTU912 PAC7PZ $PACTMP/WPZ`
export PAC7PZ
PAC7ZP=`BVPENV PTU912 PAC7ZP $PACTMP/WZP`
export PAC7ZP
BVPMSG 1009 "BVPTU912"
rtspac BVPTU912
RETURN=$?

```



```

case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTU912"
BVPMSG 1025
BVPERR
BVPRMTMP

exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
PAC7PB=~BVPENV PTU913 PAC7PB $PACTMP/WPB`
export PAC7PB

PAC7PD=~BVPENV PTU913 PAC7PD $PACTMP/WPR`
export PAC7PD
PAC7PX=~BVPENV PTU913 PAC7PX $PACTMP/WEP`
export PAC7PX
PAC7PZ=~BVPENV PTU913 PAC7PZ $PACTMP/WZP`
export PAC7PZ
PAC7ZP=~BVPENV PTU913 PAC7ZP $PACTMP/WZX`
export PAC7ZP
BVPMSG 1009 "BVPTU913"
rtspac BVPTU913
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTU913"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7PZ=~BVPENV PTU91A PAC7PZ $PACTMP/WZX`
export PAC7PZ
PAC7ZP=~BVPENV PTU91A PAC7ZP $PACTMP/WXZ`
export PAC7ZP
BVPMSG 1009 "BVPTU91A"
rtspac BVPTU91A
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTU91A"
BVPMSG 1025
BVPERR
BVPRMTMP

```

```

    exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
PAC7ET=`BVPENV PTU914 PAC7ET $PACUSERS/PC25ET914.txt`
export PAC7ET
. $PACDIR/config/$1/PACSAVPC.ini
PACSAVPC=`BVPENV PTU914 PAC7PC $PACSAVPC`
PAC7PC=$PACSAVPC.NEW
export PAC7PC
PAC7PD=`BVPENV PTU914 PAC7PD $PACTMP/WPB`
export PAC7PD
PAC7PF=`BVPENV PTU914 PAC7PF $PACTMP/WPF`
export PAC7PF
PAC7PI=`BVPENV PTU914 PAC7PI $PACTMP/WPI`
export PAC7PI
PAC7PM=`BVPENV PTU914 PAC7PM $PACTMP/WPM`
export PAC7PM
PAC7PO=`BVPENV PTU914 PAC7PO $PACTMP/WPO`
export PAC7PO
PAC7ZP=`BVPENV PTU914 PAC7ZP $PACTMP/WXZ`
export PAC7ZP
BVPMSG 1009 "BVPTU914"
rtspac BVPTU914
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTU914"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPMSG 1016 "PCBACKUP.ini"
sh $PACDIR/config/$1/PCBACKUP.ini
BVPRMTMP
exit $RETURN

```

## 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 format of the new release.

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

#### Execution conditions

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

#### Printed output

This procedure outputs a report which contains the errors encountered.

#### Note

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

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

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

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

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

### **PG20 - Input / Processing / Results**

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

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

The line structure is as follows:

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

Position	Length	Value	Meaning
22	4	cccc	Database code

## PG20 - Description of Steps

### Generation-print commands formatting: PTU908

Code	Physical name	Type	Label
PAC7IN	Save dir. : OLDPG	Input	Generation-print commands, old release
PAC7OU	Tmp dir.: WPG	Output	Re-formatted generation-print commands (length=150)

### Generation-print commands processing: PTU921

Code	Physical name	Type	Label
PAC7PG	Tmp dir.: WPG	Input	Generation-print commands, old release
PAC7AE	System - Skel dir. : AE	Input	Error labels
PAC7MB	User input	Input	User Entities
PAC7GY	Tmp dir. : WGY	Output	Generation-print commands transactions (length=310)
PAC7GZ	Tmp dir. : WGZ	Output	Script line transactions (length = 310)
PAC7ET	User dir. : PG20ET921	Report	Error report

### Transaction formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	Admin. Database - Base dir.: AR	Input	Administration Database data
PAC7AN	Admin. Database - Base dir.: AN	Input	Administration Database index
PAC7AE	System - Skel. dir.: AE	Input	Error labels
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index

Code	Physical name	Type	Label
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7GY	Tmp dir.: WGZ or WGY	Input	Update transactions
PAC7MV	Tmp dir.: WMV	Output	Formatted transactions (should be able to contain all input transactions and the elementary cancel transactions generated by multiple cancel transactions) (length=170)
PAC7ME	Tmp dir.: WME	Output	Work file (length=372)
PAC7MW	Tmp dir.: WMW	Output	Work file (length=170)
PAC7MX	Tmp dir.: WMX	Output	Work file (length=743)
PAC7MY	Tmp dir.: WMY	Output	Work file (length=743)

Administration Database update: PACA15

Code	Physical name	Type	Label
PAC7AR	Admin. Database - Base dir.: AR	Output	Administration Database data
PAC7AN	Admin. Database - Base dir.: AN	Output	Administration Database index
PAC7AY	Admin. Database - Base dir.: AY	Output	Administration Database extension
PAC7AJ	Admin. Database - Journal dir.: AJ	Output	Administration Database journal
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGY	Admin. Database - Base dir.: AY	Input	Administration Database extension
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7ME	Tmp dir.: WME	Input	Work file
PAC7MV	Tmp dir.: WMV	Input	Update transactions

Code	Physical name	Type	Label
PAC7RB	Tmp dir.: WRB	Output	UPDT erroneous transactions (length=80)
PAC7RY	Tmp dir.: WRY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)
PAC7IF		Report	Summary of erroneous transactions (length=132)

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

Return codes:

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

Transactions formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7GY	Tmp. dir.: WGY	Input	Update transactions
PAC7MV	Tmp. dir.: WMV	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	Tmp. dir.: WME	Output	Work file (length=372)
PAC7MW	Tmp dir.: WMW	Output	Work file (length=170)
PAC7MX	Tmp dir.: WMX	Output	Work file (length=743)

Code	Physical name	Type	Label
PAC7MY	Tmp dir.: WMY	Output	Work file (length=743)

#### Development Database update: PACA15

Code	Physical name	Type	Label
PAC7AR	Base dir.: AR	Output	Development Database data
PAC7AN	Base dir.: AN	Output	Development Database index
PAC7AY	Base dir.: AY	Output	Development Database extension
PAC7AJ	Journal dir.: AJ	Output	Development Database journal
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin Database - Base dir.: AN	Input	Administration Database index
PACGGR	Admin Database - Base dir.: AR	Input	Administration Database data
PACGGY	Admin Database - Base dir.: AY	Input	Administration Database extension
PACGGU	Admin Database - Base dir.: GU	Input	Administration Database users
PAC7ME	Tmp dir.: WME	Input	Work file
PAC7MV	Tmp dir.: WMV	Input	Update transactions
PAC7RB	Tmp dir.: WRB	Output	UPDT erroneous transactions (length=80)
PAC7RY	Tmp dir.: WRY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)
PAC7IF		Report	Summary of erroneous transactions (length=132)

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

Return codes:

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

## PG20 - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) PG20 BATCH PROCEDURE
# * -----
# *          VISUALAGE PACBASE
# *
# * -----
# *          RETRIEVAL OF PG FILE SINCE 2.0
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "PG20"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
. $PACDIR/config/$1/PACSAVPC.ini
PAC7IN=~BVPENV PTU908 PAC7IN `dirname $PACSAVPC`/OLDPG`
BVPMSG 1044 PG 2.0 $PAC7IN
echo "-----"
echo ""
BVPPAUSE
STATUS=`pactp info $1 | grep "Server Status" | cut -d: -f2`
if [ "$STATUS" != "Inactive" -a "$STATUS" != "" ]
then
    BVPMSG 1012 "PG20"
    BVPMSG 1037 $1
    BVPERR
    exit 12
fi
BVPMKDIR
if [ ! -f "$PAC7IN" ]
then
    BVPMSG 1034 $PAC7IN
    RETURN=1
    BVPRMTMP
    exit $RETURN
fi
# -----
. $PACDIR/config/$1/PACSAVPC.ini
PAC7IN=~BVPENV PTU908 PAC7IN `dirname $PACSAVPC`/OLDPG`
export PAC7IN
PAC70U=~BVPENV PTU908 PAC70U $PACTMP/WPG`
export PAC70U
BVPMSG 1009 "BVPTU908"
rtspac BVPTU908
RETURN=?
case $RETURN in
0)
```



```

;;
*)
  BVPMSG 1012 "BVPTU908"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
PAC7ET=~BVPENV PTU921 PAC7ET $PACUSERS/PG20ET921.txt`
export PAC7ET
PAC7GY=~BVPENV PTU921 PAC7GY $PACTMP/WGY`
export PAC7GY
PAC7GZ=~BVPENV PTU921 PAC7GZ $PACTMP/WGZ`
export PAC7GZ
PAC7MB=$PACINPUT
export PAC7MB
PAC7PG=~BVPENV PTU921 PAC7PG $PACTMP/WPG`
export PAC7PG
BVPMSG 1009 "BVPTU921"
rtspac BVPTU921
RETURN=$?
case $RETURN in
0)
  ;;
*)
  BVPMSG 1012 "BVPTU921"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
  ;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/ADMI/PAC7AN.ini
. $PACDIR/config/ADMI/PAC7AR.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7GY=~BVPENV PAF900 PAC7GY $PACTMP/WGZ`
export PAC7GY
echo " CHECKP      4000UPDT" > $PAC7GY.tmp
cat $PAC7GY >> $PAC7GY.tmp
mv $PAC7GY.tmp $PAC7GY
PAC7ME=~BVPENV PAF900 PAC7ME $PACTMP/WME`
export PAC7ME
PAC7MV=~BVPENV PAF900 PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7MW=~BVPENV PAF900 PAC7MW $PACTMP/WMW`
export PAC7MW
PAC7MX=~BVPENV PAF900 PAC7MX $PACTMP/WMX`
export PAC7MX

```

```

PAC7MY=~BVPENV PAF900 PAC7MY $PACTMP/WMY`
export PAC7MY
BVPMSG 1009 "BVPAF900"
rtspac BVPAF900
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPAF900"
BVPMSG 1025
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/ADMI/PAC7AJ.ini
. $PACDIR/config/ADMI/PAC7AN.ini
. $PACDIR/config/ADMI/PAC7AR.ini
. $PACDIR/config/ADMI/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/PACGGY.ini
. $PACDIR/config/ADMI/SEMLOCK.ini
PAC7IE=~BVPENV PACA15 PAC7IE $PACUSERS/PG20IEADM.txt`
export PAC7IE
PAC7IF=~BVPENV PACA15 PAC7IF $PACUSERS/PG20IFADM.txt`
export PAC7IF
PAC7ME=~BVPENV PACA15 PAC7ME $PACTMP/WME`
export PAC7ME
PAC7MV=~BVPENV PACA15 PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7RB=~BVPENV PACA15 PAC7RB $PACTMP/WRB`
export PAC7RB
PAC7RY=~BVPENV PACA15 PAC7RY $PACTMP/WRY`
export PAC7RY
BVPMSG 1009 "BVPACA15"
rtspac BVPACA15
RETURN=$?
case $RETURN in
0)
;;
2)
BVPMSG 1012 "BVPACA15"
BVPMSG 1054
;;
4)
BVPMSG 1012 "BVPACA15"
BVPMSG 1055
;;
*)
BVPMSG 1012 "BVPACA15"
BVPMSG 1025
;;
esac

```

```

# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7GY=~BVPENV PAF900 PAC7GY $PACTMP/WGY`
export PAC7GY
echo " CHECKP    4000UPDT" > $PAC7GY.tmp

cat $PAC7GY >> $PAC7GY.tmp
mv $PAC7GY.tmp $PAC7GY
PAC7ME=~BVPENV PAF900 PAC7ME $PACTMP/WME`
export PAC7ME
PAC7MV=~BVPENV PAF900 PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7MW=~BVPENV PAF900 PAC7MW $PACTMP/WMW`
export PAC7MW
PAC7MX=~BVPENV PAF900 PAC7MX $PACTMP/WMX`
export PAC7MX
PAC7MY=~BVPENV PAF900 PAC7MY $PACTMP/WMY`
export PAC7MY
BVPMSG 1009 "BVPAF900"
rtspac BVPAF900
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPAF900"
BVPMSG 1025
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AJ.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/PACGGY.ini
. $PACDIR/config/$1/SEMLOCK.ini
PAC7IE=~BVPENV PACA15 PAC7IE $PACUSERS/PG20IEA15.txt`
export PAC7IE
PAC7IF=~BVPENV PACA15 PAC7IF $PACUSERS/PG20IFA15.txt`
export PAC7IF
PAC7ME=~BVPENV PACA15 PAC7ME $PACTMP/WME`
export PAC7ME
PAC7MV=~BVPENV PACA15 PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7RB=~BVPENV PACA15 PAC7RB $PACTMP/WRB`
export PAC7RB

```

```

PAC7RY=~BVPENV PACA15 PAC7RY $PACTMP/WRY~
export PAC7RY
BVPMSG 1009 "BVPACA15"
rtspac BVPACA15
RETURN=$?
case $RETURN in
0)
;;
2)
BVPMSG 1012 "BVPACA15"
BVPMSG 1054
BVPERR
BVPRMTMP
exit $RETURN
;;
4)
BVPMSG 1012 "BVPACA15"
BVPMSG 1055
BVPERR
BVPRMTMP
exit $RETURN
;;
*)
BVPMSG 1012 "BVPACA15"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

## Generation-Print Commands Retrieval (PG25)

### PG25 - Introduction

#### Principle

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

It updates the Development Database with the generation-print commands and the Administration Database with the Script 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 Script 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 Script 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**

Generation-print commands processing: PTU921

Code	Physical name	Type	Label
PAC7PG	Save dir. : OLDPG	Input	Generation-print commands, old release

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error labels
PAC7MB	User input	Input	User Entities
PAC7GY	Tmp dir. : WGY	Output	Generation-print commands transactions (length=310)
PAC7GZ	Tmp dir. : WGZ	Output	Script line transactions (length = 310)
PAC7ET	User dir. : PG25ET921	Report	Error report

Transaction formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	Admin. Database - Base dir.: AR	Input	Administration Database data
PAC7AN	Admin. Database - Base dir.: AN	Input	Administration Database index
PAC7AE	System - Skel. dir.: AE	Input	Error labels
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7GY	Tmp dir.: WGZ or WGY	Input	Update transactions
PAC7MV	Tmp dir.: WMV	Output	Formatted transactions (should be able to contain all input transactions and the elementary cancel transactions generated by multiple cancel transactions) (length=170)
PAC7ME	Tmp dir.: WME	Output	Work file (length=372)
PAC7MW	Tmp dir.: WMW	Output	Work file (length=170)
PAC7MX	Tmp dir.: WMX	Output	Work file (length=743)
PAC7MY	Tmp dir.: WMY	Output	Work file (length=743)

Administration Database update: PACA15

Code	Physical name	Type	Label
PAC7AR	Admin. Database - Base dir.: AR	Output	Administration Database data
PAC7AN	Admin. Database - Base dir.: AN	Output	Administration Database index
PAC7AY	Admin. Database - Base dir.: AY	Output	Administration Database extension
PAC7AJ	Admin. Database - Journal dir.: AJ	Output	Administration Database journal
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGY	Admin. Database - Base dir.: AY	Input	Administration Database extension
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7ME	Tmp dir.: WME	Input	Work file
PAC7MV	Tmp dir.: WMV	Input	Update transactions
PAC7RB	Tmp dir.: WRB	Output	UPDT erroneous transactions (length=80)
PAC7RY	Tmp dir.: WRY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)
PAC7IF		Report	Summary of erroneous transactions (length=132)

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

Return codes:

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

Transactions formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7GY	Tmp. dir.: WGY	Input	Update transactions
PAC7MV	Tmp. dir.: WMV	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	Tmp. dir.: WME	Output	Work file (length=372)
PAC7MW	Tmp dir.: WMW	Output	Work file (length=170)
PAC7MX	Tmp dir.: WMX	Output	Work file (length=743)
PAC7MY	Tmp dir.: WMY	Output	Work file (length=743)

#### Development Database update: PACA15

Code	Physical name	Type	Label
PAC7AR	Base dir.: AR	Output	Development Database data
PAC7AN	Base dir.: AN	Output	Development Database index
PAC7AY	Base dir.: AY	Output	Development Database extension
PAC7AJ	Journal dir.: AJ	Output	Development Database journal
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin Database - Base dir.: AN	Input	Administration Database index
PACGGR	Admin Database - Base dir.: AR	Input	Administration Database data
PACGGY	Admin Database - Base dir.: AY	Input	Administration Database extension



Code	Physical name	Type	Label
PACGGU	Admin Database - Base dir.: GU	Input	Administration Database users
PAC7ME	Tmp dir.: WME	Input	Work file
PAC7MV	Tmp dir.: WMV	Input	Update transactions
PAC7RB	Tmp dir.: WRB	Output	UPDT erroneous transactions (length=80)
PAC7RY	Tmp dir.: WRY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)
PAC7IF		Report	Summary of erroneous transactions (length=132)

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

Return codes:

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

### PG25 - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) PG25 BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      RETRIEVAL OF PG FILE SINCE 2.5
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "PG25"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
. $PACDIR/config/$1/PACSAVPC.ini
PAC7PG=`BVPENV PTU921 PAC7PG `dirname $PACSAVPC`~/OLDPG`
BVPMSG 1044 PG 2.5 $PAC7PG
```

```

echo "-----"
echo ""
BVPPAUSE
STATUS=`pactp info $1 | grep "Server Status" | cut -d: -f2`
if [ "$STATUS" != "Inactive" -a "$STATUS" != "" ]
then
    BVPMSG 1012 "PG25"
    BVPMSG 1037 $1
    BVPERR
    exit 12
fi
BVPMKDIR
if [ ! -f "$PAC7PG" ]
then
    BVPMSG 1034 $PAC7PG
    RETURN=1
    BVPRMTMP
    exit $RETURN
fi
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PACSAVPC.ini
PAC7ET=`BVPENV PTU921 PAC7ET $PACUSERS/PG25ET921.txt`
export PAC7ET
PAC7GY=`BVPENV PTU921 PAC7GY $PACTMP/WGY`
export PAC7GY
PAC7GZ=`BVPENV PTU921 PAC7GZ $PACTMP/WGZ`
export PAC7GZ
PAC7MB=$PACINPUT
export PAC7MB
PAC7PG=`BVPENV PTU921 PAC7PG `dirname $PACSAVPC`/OLDPG`
export PAC7PG
BVPMSG 1009 "BVPTU921"
rtspac BVPTU921
RETURN=$?
case $RETURN in
0)
;;
*)
    BVPMSG 1012 "BVPTU921"
    BVPMSG 1025
    BVPERR
    BVPRMTMP
    exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/ADMI/PAC7AN.ini
. $PACDIR/config/ADMI/PAC7AR.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7GY=`BVPENV PAF900 PAC7GY $PACTMP/WGZ`
export PAC7GY

```

```

echo " CHECKP    4000UPDT" > $PAC7GY.tmp
cat $PAC7GY >> $PAC7GY.tmp
mv $PAC7GY.tmp $PAC7GY
PAC7ME=~BVPENV PAF900 PAC7ME $PACTMP/WME`
export PAC7ME
PAC7MV=~BVPENV PAF900 PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7MW=~BVPENV PAF900 PAC7MW $PACTMP/WMW`
export PAC7MW
PAC7MX=~BVPENV PAF900 PAC7MX $PACTMP/WMX`
export PAC7MX
PAC7MY=~BVPENV PAF900 PAC7MY $PACTMP/WMY`
export PAC7MY
BVPMSG 1009 "BVPAF900"
rtspac BVPAF900
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPAF900"
BVPMSG 1025
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/ADMI/PAC7AJ.ini
. $PACDIR/config/ADMI/PAC7AN.ini
. $PACDIR/config/ADMI/PAC7AR.ini
. $PACDIR/config/ADMI/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/PACGGY.ini
. $PACDIR/config/ADMI/SEMLOCK.ini
PAC7IE=~BVPENV PACA15 PAC7IE $PACUSERS/PG25IEADM.txt`
export PAC7IE
PAC7IF=~BVPENV PACA15 PAC7IF $PACUSERS/PG25IFADM.txt`
export PAC7IF
PAC7ME=~BVPENV PACA15 PAC7ME $PACTMP/WME`
export PAC7ME
PAC7MV=~BVPENV PACA15 PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7RB=~BVPENV PACA15 PAC7RB $PACTMP/WRB`
export PAC7RB
PAC7RY=~BVPENV PACA15 PAC7RY $PACTMP/WRY`
export PAC7RY
BVPMSG 1009 "BVPACA15"
rtspac BVPACA15
RETURN=?
case $RETURN in
0)
;;
2)
BVPMSG 1012 "BVPACA15"

```

```

BVPMSG 1054
;;
4)
BVPMSG 1012 "BVPACA15"
BVPMSG 1055
;;
*)
BVPMSG 1012 "BVPACA15"
BVPMSG 1025
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7GY=`BVPENV PAF900 PAC7GY $PACTMP/WGY`
export PAC7GY
echo " CHECKP    4000UPDT" > $PAC7GY.tmp
cat $PAC7GY >> $PAC7GY.tmp
mv $PAC7GY.tmp $PAC7GY
PAC7ME=`BVPENV PAF900 PAC7ME $PACTMP/WME`
export PAC7ME
PAC7MV=`BVPENV PAF900 PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7MW=`BVPENV PAF900 PAC7MW $PACTMP/WMW`
export PAC7MW
PAC7MX=`BVPENV PAF900 PAC7MX $PACTMP/WMX`
export PAC7MX
PAC7MY=`BVPENV PAF900 PAC7MY $PACTMP/WMY`
export PAC7MY
BVPMSG 1009 "BVPAF900"
rtspac BVPAF900
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPAF900"
BVPMSG 1025
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AJ.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/PACGGY.ini
. $PACDIR/config/$1/SEMLOCK.ini

```

```

PAC7IE=~BVPENV PACA15 PAC7IE $PACUSERS/PG25IEA15.txt`
export PAC7IE
PAC7IF=~BVPENV PACA15 PAC7IF $PACUSERS/PG25IFA15.txt`
export PAC7IF
PAC7ME=~BVPENV PACA15 PAC7ME $PACTMP/WME`
export PAC7ME
PAC7MV=~BVPENV PACA15 PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7RB=~BVPENV PACA15 PAC7RB $PACTMP/WRB`
export PAC7RB
PAC7RY=~BVPENV PACA15 PAC7RY $PACTMP/WRY`
export PAC7RY
BVPMSG 1009 "BVPACA15"
rtspac BVPACA15
RETURN=$?
case $RETURN in
0)
;;
2)
BVPMSG 1012 "BVPACA15"
BVPMSG 1054
BVPERR
BVPRMTMP
exit $RETURN
;;
4)
BVPMSG 1012 "BVPACA15"
BVPMSG 1055
BVPERR
BVPRMTMP
exit $RETURN
;;
*)
BVPMSG 1012 "BVPACA15"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

## Retrieval of PJ Transactions (PJ25)

### PJ25 - Introduction

#### Principle

This procedure (PJ25) is used to change the PJ file, which is the journal file (transactions sequential file), into a new archive file in the new version format.

## Execution conditions

None.

## Printed output

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

**WARNING:** The number of written transactions can be much higher than the number of read transactions. More than one transaction of the new version can be created from an old 2.n transaction, in particular for the meta entities and user entities.

Some Input Guide call transactions might be incomplete if their content is distributed on more than one transaction and if only one of these transactions is displayed in the journal. A message is displayed in this case.

## Result

This procedure generates a PJ journal file in the new release format.

## Comments

This conversion process of the journal is optional. It should be executed if required by the batch procedures (Use of Pac/Transfer).

This retrieval procedure must be used only for a conversion from a 2.0 or 2.5 version into the new version.

To retrieve some transactions, it is sometimes necessary to search for information in the new version Database. But the corresponding data may no longer exist in the new Database (example: session or library deleted). In such a case, the old transaction is retrieved with its 2.n format.

## **PJ25 - Description of Steps**

### Processing of PJ transactions sequential file: PTU918

Code	Physical name	Type	Label
PAC7PJ	Save dir.: OLDPJ	Input	journal file old version
PAC7AE	System - skel. dir.: AE	Input	Error messages
PAC7AR	DBase dir.: AR	Input	Development Database data

Code	Physical name	Type	Label
PAC7AN	DBase dir.: AN	Input	Development Database index
PAC7AY	DBase dir.: AY	Input	Development Database extension data
PAC7JP	Save dir.: PJ	Output	Journal file in the new format (length=170)
PAC7ET	User dir.: PJ25ET918	Report	Report

## PJ25 - Execution Script

```

#!/bin/sh
#@(#)VA Pac xxx xxx (R) PJ25 BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      RETRIEVAL OF PJ FILE
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "PJ25"
echo "      ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
. $PACDIR/config/$1/PACSAVPJ.ini
PAC7PJ=~BVPENV PTU918 PAC7PJ `dirname $PACSAVPJ`~/OLDPJ`
BVPMSG 1044 PJ 2.5 $PAC7PJ
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
if [ ! -f "$PAC7PJ" ]
then
  BVPMSG 1034 $PAC7PJ
  RETURN=1
  BVPRTMP
  exit $RETURN
fi
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AY.ini
PAC7ET=~BVPENV PTU918 PAC7ET $PACUSERS/PJ25ET918.txt`
export PAC7ET

```

```

. $PACDIR/config/$1/PACSAVPJ.ini
PAC7JP=~BVPENV PTU918 PAC7JP $PACSAVPJ`
export PAC7JP
PAC7PJ=~BVPENV PTU918 PAC7PJ `dirname $PACSAVPJ`~/OLDPJ`
export PAC7PJ
BVPMSG 1009 "BVPTU918"
rtspac BVPTU918
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTU918"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

## Retrieval of PP file (PP25)

### PP25 - Introduction

#### Principle

This procedure retrieves the 2.0 or 2.5 PP file, which is the sequential image of the Production Environment Interface, and updates the Development Database of the installed version.

#### Execution conditions

The Development Database files must be closed in the on-line mode.

#### Printed output

This procedure outputs a report which indicates the error encountered.

#### Result

The procedure generates a transaction file which contains the existing production environments, the list of the generated entities, the default environments (-GO of the Library), the list of production sessions in the new format, and updates the Development Database of the installed version.

#### Note



Any update transactions in a session or library which is not already defined in the Database will be rejected.

The PP file may contain environments with library codes or sessions to be created or purged later in the 2.0 or 2.5 Database.

When creating environments in the oldest Session (0001 or the Library initialization Session), a default Application is automatically created in the same context.

### PP25 - Input / Processing / Results

A '\*' line with a user code and a password.

If the user code is not indicated, an error message is displayed and the procedure cannot be run.

The structure of the line is presented as follows:

Position	Length	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	3	'***'	Option to update the environments
			in inter-library

### PP25 - Description of Steps

Management of production environment: PTU923

Code	Physical name	Type	Label
PAC7PP	Save dir. : OLDPP	Input	Back up of production environment (old release)
PAC7AE	System - Skel. dir. : AE	Input	Error message
PAC7MB	User input	Input	User input
PAC7AR	Base dir. : AR	Input	Development Database data
PAC7AN	Base dir. : AN	Input	Development Database index
PAC7AY	Base dir. : AY	Input	Development Database extension data
PAC7GY	Tmp dir. : WGY	Output	Records of production environments (length=310)

Code	Physical name	Type	Label
PAC7ET	User dir. : PP25ET923	Report	Report in case of error

Transactions formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7GY	Tmp. dir.: WGY	Input	Update transactions
PAC7MV	Tmp. dir.: WMV	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	Tmp. dir.: WME	Output	Work file (length=372)
PAC7MW	Tmp. dir.: WMW	Output	Work file (length=170)
PAC7MX	Tmp. dir.: WMX	Output	Work file (length=743)
PAC7MY	Tmp. dir.: WMY	Output	Work file (length=743)

Development Database update: PACA15

Code	Physical name	Type	Label
PAC7AR	Base dir.: AR	Output	Development Database data
PAC7AN	Base dir.: AN	Output	Development Database index
PAC7AY	Base dir.: AY	Output	Development Database extension
PAC7AJ	Journal dir.: AJ	Output	Development Database journal
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin Database - Base dir.: AN	Input	Administration Database index

Code	Physical name	Type	Label
PACGGR	Admin Database - Base dir.: AR	Input	Administration Database data
PACGGY	Admin Database - Base dir.: AY	Input	Administration Database extension
PACGGU	Admin Database - Base dir.: GU	Input	Administration Database users
PAC7ME	Tmp dir.: WME	Input	Work file
PAC7MV	Tmp dir.: WMV	Input	Update transactions
PAC7RB	Tmp dir.: WRB	Output	UPDT erroneous transactions (length=80)
PAC7RY	Tmp dir.: WRY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)
PAC7IF		Report	Summary of erroneous transactions (length=132)

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

Return codes:

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

### PP25 - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) PP25 BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      RETRIEVAL OF PP FILE
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "PP25"
echo "      ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
```

```

BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
. $PACDIR/config/$1/PACSAVPC.ini
PAC7PP=~BVPENV PTU923 PAC7PP `dirname $PACSAVPC`/OLDPP`
BVPMSG 1044 PP 2.5 $PAC7PP
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
if [ ! -f "$PAC7PP" ]
then
  BVPMSG 1034 $PAC7PP
  RETURN=1
  BVPRMTMP
  exit $RETURN
fi
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/PACSAVPC.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
PAC7PP=~BVPENV PTU923 PAC7PP `dirname $PACSAVPC`/OLDPP`
export PAC7PP
PAC7ET=~BVPENV PTU923 PAC7ET $PACUSERS/PP25ET923.txt`
export PAC7ET
PAC7GY=~BVPENV PTU923 PAC7GY $PACTMP/WGY`
export PAC7GY
PAC7MB=$PACINPUT
export PAC7MB
BVPMSG 1009 "BVPTU923"
rtspac BVPTU923
RETURN=$?
case $RETURN in
0)
;;
*)
  BVPMSG 1012 "BVPTU923"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7GY=~BVPENV PAF900 PAC7GY $PACTMP/WGY`

```

```

export PAC7GY
echo " CHECKP    4000UPDT" > $PAC7GY.tmp
cat $PAC7GY >> $PAC7GY.tmp
mv $PAC7GY.tmp $PAC7GY
PAC7ME=~BVPENV PAF900 PAC7ME $PACTMP/WME`
export PAC7ME
PAC7MV=~BVPENV PAF900 PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7MW=~BVPENV PAF900 PAC7MW $PACTMP/WMW`
export PAC7MW
PAC7MX=~BVPENV PAF900 PAC7MX $PACTMP/WMX`
export PAC7MX
PAC7MY=~BVPENV PAF900 PAC7MY $PACTMP/WMY`
export PAC7MY
BVPMSG 1009 "BVPAF900"
rtspac BVPAF900
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPAF900"
BVPMSG 1025
BVPERR
BVPRTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AJ.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/SEMLOCK.ini
PAC7IE=~BVPENV PACA15 PAC7IE $PACUSERS/PP25IEA15.txt`
export PAC7IE
PAC7IF=~BVPENV PACA15 PAC7IF $PACUSERS/PP25IFA15.txt`
export PAC7IF
PAC7ME=~BVPENV PACA15 PAC7ME $PACTMP/WME`
export PAC7ME
PAC7MV=~BVPENV PACA15 PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7RB=~BVPENV PACA15 PAC7RB $PACTMP/WRB`
export PAC7RB
PAC7RY=~BVPENV PACA15 PAC7RY $PACTMP/WRY`
export PAC7RY
BVPMSG 1009 "BVPACA15"
rtspac BVPACA15
RETURN=?
case $RETURN in

```

```

0)
;;
2)
BVPMSG 1012 "BVPACA15"
BVPMSG 1054
BVPERR
BVPRMTMP
exit $RETURN
;;
4)
BVPMSG 1012 "BVPACA15"
BVPMSG 1055
BVPERR
BVPRMTMP
exit $RETURN
;;
*)
BVPMSG 1012 "BVPACA15"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

## Retrieval of passwords (UTMP)

### UTMP - Introduction

#### Principle

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

Passwords are refreshed according to the option specified on the '\*' line.

#### Execution conditions

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

#### Printed report

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

#### Result

The procedure integrates 2.0 or 2.5 user passwords into the Administration Database.

## UTMP - Description of Steps

### 2.N passwords retrieval: PTURMP

Code	Physical name	Type	Label
PAC7CE	Save dir.: OLDPE	Input	Old version user parameters
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users

## UTMP - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) UTMP BATCH PROCEDURE
# * -----
# *          VISUALAGE PACBASE
# *
# * -----
# *          PASSWORD RETRIEVAL
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "UTMP"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
. $PACDIR/config/$1/PACSAVPC.ini
PAC7CE=~BVPENV PTURMP PAC7CE `dirname $PACSAVPC`/OLDPE`
BVPMSG 1044 PE 2.5 $PAC7CE
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
. $PACDIR/config/$1/PACGGU.ini
PAC7CE=~BVPENV PTURMP PAC7CE `dirname $PACSAVPC`/OLDPE`
export PAC7CE
BVPMSG 1009 "BVPTURMP"
rtspac BVPTURMP
RETURN=?
case $RETURN in
0)
;;
*)
```

```

BVPMSG 1012 "BVPTURMP"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

## 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

### Processing of transfer parameters: PTU922

Code	Physical name	Type	Label
PAC7UV	Base dir.: OLDUV	Input	Transfer parameters, old release
PAC7AE	System - Skel. dir. : AE	Input	Error messages
PAC7MB	User input	Input	User input
PAC7GY	Tmp dir.: WGY	Output	Transfer parameter transactions (length=310)
PAC7ET	User dir.: UV25ET922	Report	Report in case of error

### Transaction formatting: PAF900

Code	Physical name	Type	Label
PAC7AR	Admin. Database - Base dir.: AR	Input	Administration Database data
PAC7AN	Admin. Database - Base dir.: AN	Input	Administration Database index
PAC7AE	System - Skel. dir.: AE	Input	Error labels
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7GY	Tmp dir.: WGZ or WGY	Input	Update transactions
PAC7MV	Tmp dir.: WMV	Output	Formatted transactions (should be able to contain all input transactions and the elementary cancel transactions generated by multiple cancel transactions) (length=170)
PAC7ME	Tmp dir.: WME	Output	Work file (length=372)
PAC7MW	Tmp dir.: WMW	Output	Work file (length=170)
PAC7MX	Tmp dir.: WMX	Output	Work file (length=743)
PAC7MY	Tmp dir.: WMY	Output	Work file (length=743)

## Update of the Administration Database: PACA15

Code	Physical name	Type	Label
PAC7AR	Admin. Database - Base dir.: AR	Output	Administration Database Data file
PAC7AN	Admin. Database - Base dir.: AN	Output	Administration Database Index file
PAC7AY	Admin. Database - Base dir.: AY	Output	Administration Database extension
PAC7AJ	Admin. Database - Base dir.: AJ	Output	Administration Database journal
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database Index file
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database Data file
PACGGY	Admin. Database - Base dir.: AY	Input	Administration Database Extension
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7DC	Database dir.: DC	Input	DSMS file of Development Database elements
PAC7ME	Tmp dir.: WME	Input	Work file
PAC7MV	Tmp dir.: WMV	Input	Update transactions
PAC7RB	Tmp dir.: WRB	Output	UPDT erroneous transactions (length=80)
PAC7RY	Tmp dir.: WRY	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
- 4 : error

## UV25 - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) UV25 BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      RETRIEVAL OF UV FILE
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "UV25"
echo "      ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
. $PACDIR/config/$1/PAC7AR.ini
PAC7UV=~BVPENV PTU922 PAC7UV `dirname $PAC7AR`/OLDUV`
BVPMSG 1044 UV 2.5 $PAC7UV
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
if [ ! -f "$PAC7UV" ]
then
  BVPMSG 1034 $PAC7UV
  RETURN=1
  BVPRTMP
  exit $RETURN
fi
# -----
. $PACDIR/config/$1/PAC7AE.ini
PAC7UV=~BVPENV PTU922 PAC7UV `dirname $PAC7AR`/OLDUV`
export PAC7UV
PAC7ET=~BVPENV PTU922 PAC7ET $PACUSERS/UV25ET922.txt`
export PAC7ET
PAC7GY=~BVPENV PTU922 PAC7GY $PACTMP/WGY`
export PAC7GY
PAC7MB=$PACINPUT
export PAC7MB
BVPMSG 1009 "BVPTU922"
rtspac BVPTU922
RETURN=?
case $RETURN in
0)
  ;;
*)
  BVPMSG 1012 "BVPTU922"
```

```

BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/ADMI/PAC7AN.ini
. $PACDIR/config/ADMI/PAC7AR.ini
. $PACDIR/config/ADMI/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7GY=`BVPENV PAF900 PAC7GY $PACTMP/WGY`
export PAC7GY
echo " CHECKP    4000UPDT" > $PAC7GY.tmp
cat $PAC7GY >> $PAC7GY.tmp
mv $PAC7GY.tmp $PAC7GY
PAC7ME=`BVPENV PAF900 PAC7ME $PACTMP/WME`
export PAC7ME
PAC7MV=`BVPENV PAF900 PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7MW=`BVPENV PAF900 PAC7MW $PACTMP/WMW`
export PAC7MW
PAC7MX=`BVPENV PAF900 PAC7MX $PACTMP/WMX`
export PAC7MX
PAC7MY=`BVPENV PAF900 PAC7MY $PACTMP/WMY`
export PAC7MY
BVPMSG 1009 "BVPAF900"
rtspac BVPAF900
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPAF900"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/ADMI/PAC7AJ.ini
. $PACDIR/config/ADMI/PAC7AN.ini
. $PACDIR/config/ADMI/PAC7AR.ini
. $PACDIR/config/ADMI/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/PACGGY.ini
. $PACDIR/config/$1/PAC7DC.ini
. $PACDIR/config/$1/SEMLOCK.ini

```

```

PAC7IE=~BVPENV PACA15 PAC7IE $PACUSERS/UV25IEA15.txt`
export PAC7IE
PAC7IF=~BVPENV PACA15 PAC7IF $PACUSERS/UV25IFA15.txt`
export PAC7IF
PAC7ME=~BVPENV PACA15 PAC7ME $PACTMP/WME`
export PAC7ME
PAC7MV=~BVPENV PACA15 PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7RB=~BVPENV PACA15 PAC7RB $PACTMP/WRB`
export PAC7RB
PAC7RY=~BVPENV PACA15 PAC7RY $PACTMP/WRY`
export PAC7RY
BVPMSG 1009 "BVPACA15"
rtspac BVPACA15
RETURN=$?
case $RETURN in
0)
;;
2)
BVPMSG 1012 "BVPACA15"
BVPMSG 1054
BVPERR
BVPRMTMP
exit $RETURN
;;
4)
BVPMSG 1012 "BVPACA15"
BVPMSG 1055
BVPERR
BVPRMTMP
exit $RETURN
;;
*)
BVPMSG 1012 "BVPACA15"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

## MB Transactions exchanges between 2.n & 3.n (MB25)

### MB25 - Introduction

#### Principle

This procedure retrieves the 2.0 or 2.5 UPDT format transactions in the new release.

## Limits

The User Entities, User Entity Occurrences, Relations, U-type Volumes are not processed.

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

The P.I.A. types change between the 2.n and 3.n versions: to allow the exchange of transactions between these 2 versions, execute, in the 2.n version, the UTFG procedure which assigns the types in the 3.n version.

## Execution conditions

None.

## Printed output

This procedure prints a report of the errors encountered.

## Result

This procedure generates a transaction file for the new version UPDT procedure and a revoked transactions file.

## **MB25 - Description of Steps**

MB file retrieval: PTU926

Code	Physical name	Type	Label
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PAC7AR	Database dir.: AR	Input	Development Database data
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7MB	User dir.: OLDMB	Input	2.5 MB transactions
PAC7MV	User dir.: MB25MV	Output	Retrieval transactions for UPDT
PAC7ME	User dir.: MB25ME	Output	Revoked transactions
PAC7EF	User dir.: MB25EF926	Report	Retrieval reports
PAC7DD	User dir.: MB25DD926	Report	Batch procedure authorization option

## MB25 - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) MB25 BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      RETRIEVAL OF MB FILE
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MB25"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
PAC7MB=`BVPENV PTU926 PAC7MB `dirname $PACUSERS`/OLDMB`
export PAC7MB
BVPMSG 1044 MB 2.5 $PAC7MB
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
if [ ! -f "$PAC7MB" ]
then
  BVPMSG 1034 $PAC7MB
  RETURN=1
  BVPRMTMP
  exit $RETURN
fi
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7DD=`BVPENV PTU926 PAC7DD $PACUSERS/MB25DD926.txt`
export PAC7DD
PAC7EF=`BVPENV PTU926 PAC7EF $PACUSERS/MB25EF926.txt`
export PAC7EF
PAC7MB=`BVPENV PTU926 PAC7MB `dirname $PACUSERS`/OLDMB`
export PAC7MB
PAC7ME=`BVPENV PTU926 PAC7ME $PACUSERS/MB25ME`
export PAC7ME
PAC7MV=`BVPENV PTU926 PAC7MV $PACUSERS/MB25MV`
export PAC7MV
BVPMSG 1009 "BVPTU926"
rtspac BVPTU926
```

```

RETURN=$?
case $RETURN in
0)
  ;;
*)
  BVPMSG 1012 "BVPTU926"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
  ;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

## GY Transactions exchanges between 2.n & 3.n (GY25)

### GY25 - Introduction

#### Principle

This procedure retrieves the 2.0 or 2.5 UPDP format transactions into the new release.

#### Limits

The User Entities, Relations, U-type Manuals are not processed.

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

The P.I.A. types change between the 2.n and 3.n versions: to allow the transactions exchange between these versions, execute in 2.n the UTFG procedure which assigns the 3.n types.

#### Execution conditions

None.

#### Printed output

This procedure prints a report of the errors encountered.

#### Result

This procedure generates a transaction file for the UPDP procedure of the new release and a revoked transactions file.



## GY25 - Description of Steps

GY file retrieval: PTU927

Code	Physical name	Type	Label
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PAC7AR	Database dir.: AR	Input	Development Database data
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7GY	User dir.: OLDGY	Input	2.5 GY transactions
PAC7MV	User dir.: GY25MV	Output	Retrieval transactions for UPDP
PAC7ME	User dir.: GY25ME	Output	Revoked transactions
PAC7EF	User dir.: GY25EF927	Report	Retrieval reports
PAC7DD	User dir.: GY25DD927	Report	Authorization option

## GY25 - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) GY25 BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      RETRIEVAL OF GY FILE
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "GY25"
echo "======"
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
PAC7GY=`BVPENV PTU927 PAC7GY `dirname $PACUSERS`/OLDGY`
export PAC7GY
BVPMSG 1044 GY 2.5 $PAC7GY
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
```

```

if [ ! -f "$PAC7GY" ]
then
  BVPMSG 1034 $PAC7GY
  RETURN=1
  BVPRMTMP
  exit $RETURN
fi
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7DD=~BVPENV PTU927 PAC7DD $PACUSERS/GY25DD927.txt`
export PAC7DD
PAC7EF=~BVPENV PTU927 PAC7EF $PACUSERS/GY25EF927.txt`
export PAC7EF
PAC7GY=~BVPENV PTU927 PAC7GY `dirname $PACUSERS`/OLDGY`
export PAC7GY
PAC7ME=~BVPENV PTU927 PAC7ME $PACUSERS/GY25ME`
export PAC7ME
PAC7MV=~BVPENV PTU927 PAC7MV $PACUSERS/GY25MV`
export PAC7MV
BVPMSG 1009 "BVPTU927"
rtspac BVPTU927
RETURN=$?
case $RETURN in
0)
  ;;
*)
  BVPMSG 1012 "BVPTU927"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
  ;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

## 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	System - Skel dir. : AE	Input	Error messages
PAC7AR	Database dir. : AR	Input	Development Database data
PACGGR	Admin Database - Base dir. : AR	Input	Administration Database data
PACGGN	Admin Database - Base dir. : AN	Input	Administration Database index
PACGGU	Admin Database - Base dir. : GU	Input	Administration Database users
PAC7MB	User dir.: OLDMB	Input	MB transactions of the new version
PAC7MV	User dir. : MB30MV	Output	Retrieval transactions for UPDT
PAC7ME	User dir. : MB30ME	Output	Revoked transactions
PAC7EF	User dir. : MB30EF928	Report	Retrieval reports
PAC7DD	User dir. : MB30DD928	Report	Authorization option

**MB30 - Execution Script**

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) MB30 BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
```

```

# *                RETRIEVAL OF MB FILE
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MB30"
echo "                ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
PAC7MB=`BVPENV PTU928 PAC7MB \dirname $PACUSERS\OLDDB`
export PAC7MB
BVPMSG 1044 MB 3.5 $PAC7MB
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
if [ ! -f "$PAC7MB" ]
then
    BVPMSG 1034 $PAC7MB
    RETURN=1
    BVPRMTMP
    exit $RETURN
fi
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7DD=`BVPENV PTU928 PAC7DD $PACUSERS/MB30DD928.txt`
export PAC7DD
PAC7EF=`BVPENV PTU928 PAC7EF $PACUSERS/MB30EF928.txt`
export PAC7EF
PAC7MB=`BVPENV PTU928 PAC7MB \dirname $PACUSERS\OLDDB`
export PAC7MB

PAC7ME=`BVPENV PTU928 PAC7ME $PACUSERS/MB30ME`
export PAC7ME
PAC7MV=`BVPENV PTU928 PAC7MV $PACUSERS/MB30MV`
export PAC7MV
BVPMSG 1009 "BVPTU928"
rtspac BVPTU928
RETURN=$?
case $RETURN in
0)
;;
*)
    BVPMSG 1012 "BVPTU928"
    BVPMSG 1025
    BVPERR

```

```

BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

## GY Transactions exchanges between 3.n & 2.n (GY30)

### GY30 - Introduction

#### Principle

This procedure retrieves the UPDP format transactions of the new release into the 2.0 or 2.5 release.

#### Limits

The Meta entities, Relations, Descriptions, Keywords, associated Documentation and Relation calls are not processed.

But, User entities are retrieved as 2.n User entity occurrences. The user will have to create the corresponding 2.n user entity.

#### Execution conditions

None.

#### Printed output

This procedure prints a report of the errors encountered.

#### Result

This procedure generates a transaction file for the 2.0 or 2.5 UPDP procedure and a revoked transactions file.

### GY30 - Description of Steps

#### GY file retrieval: PTU929

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7AR	Database dir. : AR	Input	Development Database data
PAC7AN	Database dir. : AN	Input	Development Database index

Code	Physical name	Type	Label
PACGGR	Admin Database - Base dir. : AR	Input	Administration Database data
PACGGN	Admin Database - Base dir. : AN	Input	Administration Database index
PACGGU	Admin Database - Base dir. : GU	Input	Administration Database users
PAC7GY	User dir. : OLDGY	Input	GY transactions of the new version
PAC7MV	User dir. : GY30MV	Output	Retrieval transactions for UPDP
PAC7ME	User dir. : GY30ME	Output	Revoked transactions
PAC7EF	User dir. : GY30EF929	Report	Retrieval reports
PAC7DD	User dir. : GY30DD929	Report	Authorization option

### GY30 - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) GY30 BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      RETRIEVAL OF GY FILE
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "GY30"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
PAC7GY=`BVPENV PTU929 PAC7GY \dirname $PACUSERS\`/OLDGY`
export PAC7GY
BVPMSG 1044 GY 3.5 $PAC7GY
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
if [ ! -f "$PAC7GY" ]
then
  BVPMSG 1034 $PAC7GY
  RETURN=1
  BVPRMTP
  exit $RETURN
```

```

fi
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7DD=~BVPENV PTU929 PAC7DD $PACUSERS/GY30DD929.txt~
export PAC7DD
PAC7EF=~BVPENV PTU929 PAC7EF $PACUSERS/GY30EF929.txt~
export PAC7EF
PAC7GY=~BVPENV PTU929 PAC7GY `dirname $PACUSERS\~/OLDGY~
export PAC7GY
PAC7ME=~BVPENV PTU929 PAC7ME $PACUSERS/GY30ME~
export PAC7ME
PAC7MV=~BVPENV PTU929 PAC7MV $PACUSERS/GY30MV~
export PAC7MV
BVPMSG 1009 "BVPTU929"
rtspac BVPTU929
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTU929"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

## Procedures - Summary Table of Changes

List of new procedures since the 2.5

Procedure	Comments
ARCH	Archiving Administration Database
ARPM	Archiving the QJ journal of SCM module
INAE	Initialization of the error messages file (AE)
INGU	Initialization of the user codes files (GU)
INQJ	Initialization of SCM Tools Interface archive journal
GPMC	Generation of MOVE CORRESPONDING
GPRC	Generation (COBOL API)
REOR	Re-organization of Administration Database

<b>Procedure</b>	<b>Comments</b>
REST	Restoration of Administration Database
PACS	Backup of Administration Database (SAVE option)
PAGX	Extraction of Administration Database
UKD1	Batch update of access keys and rights
VINS	Update of Administration Model
PACS	Management of Development Database
GY25	Retrieval of GY file for UPDP to 3.n
MB25	Retrieval of MB file for UPDT to 3.n
GY30	Retrieval of GY file for UPDP to 2.n
MB30	Retrieval of MB file for UPDT to 2.n
PC25	Retrieval of Development Database
PE25	Retrieval of user parameters (PE)
PG20	Retrieval of 2.0 generation-print commands (PG)
PG25	Retrieval of 2.5 generation-print commands (PG)
PJ25	Retrieval of 2.n journal
PP25	Retrieval of PP file
RPP2	Retrieval of PEI environment
UTMP	Retrieval of passwords
UV25	Retrieval of PacTransfer parameters (UV)
UTM1	Conversion of meta entities (step 1)
UTM2	Conversion of meta entities (step 2)
UTU1	Extraction of 'P' lines with 'UNS'
UTU2	Update of 'P' lines with 'UNS'
STAT	Database statistics
VINS	Update of Development Model
CHPM	Integrity control of environments/elements
CPPM	Comparison between Database and user configuration
EXPM	Extraction of environments
GPPM	Generation report written into QJ
HIPM	Database automatic freeze
PUPM	Purge of SCM entities
SIPM	Generation simulation
UPPM	Update of elements



Procedure	Comments
TRED	PacTransfer: print of parameters
UPGP	PAF update of Administration Database

List of procedures suppressed since 2.5 release

Procedure	Program	Comments
CPSN	PTU850 PTU855	Integrated into PACX procedure
EMSN	PTU810	
MESN	PTU815	
SASN	PTU130 PTU140	Integrated into PACS procedure
UXSR	UTIXSR	Integrated into PACS procedure
CRYP	PACU99	
PARM	PACU15 PACU80	
LOAE	PACU80	
REAG	PTU560	
SVAG	PTU550	
GET0	PACT11	
GET1	PACT41	
GET2	PACT41 PACT51	
GRPE	PACR40	
INPE	PACR01	
PP16	PACR90	
PRPE	PACR10	
RSPE	PACR61	
SVPE	PACR60	
RVDE	PREI00 PRE986	
RVKE	PREI40 PREI50	
STOP	PTUR00	
TRRT	REUV802 PTUG90	
VDWN	PVA100 PVA110	
VPUR	PVA400	
VPU1	PVA300 PVA305 PVA310	
VPU2	PVA320	

Procedure	Program	Comments
LVBL	PTULVB	
QREO	PTUN00 PTUN10 PTUN40	
RPPG	PTU908	
RPTD	PTAR20	

---

## Retrieval of VisualAge Pacbase 3.0

### Operations to be Performed

The 3.5 version can be installed in the same environment as the 3.0 version. This case is considered as a re-installation.

Before, it is recommended to save the Development and Administration Databases (SAVE, ARCH) in 3.0 version.

- If this version is installed in the same environment as the 3.0, refer to the 'Re-installation of Server' chapter in this manual.  
After the Administration Model update (VINS 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:
  - REST : restoration of the Administration Database,
  - VINS : update of the Administration Model,
  - Connection via the Administration workbench to enter and activate the new access key to the system,
  - REST : restoration of each Development Database,
  - VINS : update of the Development Model for each Development Database.
- In any case, the reorganization of Databases is required (ARCH, SAVE, REOR, REST).

---

## Chapter 8. RPP Utilities

---

### MIAM - Migration Help Function

#### MIAM - Introduction

##### Principle

This procedure provides the following functions:

- Search for special characters: loading of the special characters file (CS file).
- Search for entities whose code corresponds to a string not allowed (not compatible with Windows for example): loading of the special characters file (CS file).
- Search for non-existing Segments called in the -CD or -W.
- Search for non-existing Reports called in the -CD.
- Search for Segments renamed as 00 in the -CD or -W when the Segment 00 exists in the network, and also calls of different Data Structures for the same Segment code.
- Search for -CD with selection of Segments on continuation line whereas the first line does not contain any selection.
- Search for Reports with duplicate labels.
- Search for gaps in the sequence of label numbers of Reports.
- Search for structures called in categories of a Report and not defined in the description of the Report.
- Search for Report structure lines that call several Data Elements with the same position.
- Search for labels called in Report categories and not defined in the description of the Report.
- Search in the -GE: references to Segments or Data Elements that do not exist in the -CE or -CS of Screens, or reference to a Text that does not exist.
- Search for Programs with a generation variant different from N and with only a Definition.
- Search for Standard or Client Screens, other than Help screens, with a generation variant different from N and with only a Definition or -CE lines.
- Search in the Screen -CS for multiple uses of the same Segment in display or reception in the same category.
- Search in the Screen -CE for lines with an L nature and an erroneous length.

- Search for Macro working lines that declare a table whose name contains the \$ character.
- Search for working lines not to retrieve (with a type M, C, L or A).
- Search for obsolete generation variants.
- Search for generation variants or Block types that are not defined in the targets of the VA Pacbase access key.
- Search for Screens and Programs (not typed as Macros or not used as Macros) generated with the same external name.
- Search for duplicate map names for Standard or Client Screens that have a generation variant X0, X1, X2, X3, 00, 01, 02, 03, 4F, 80, 10, or 12.
- Search for the uses of Model entities in standard entities.
- Search for EL-type function lines with a level not compatible with a CO-DU- DW-type function that precedes them.
- Search for orphan conditions: condition lines with a type AN OR DU DW DC DI DV coming from a Macro and preceded by an IF-type condition line that does not come from a Macro.
- Search for duplicate P-lines with an N type.
- Search for P-lines of Macro with a function level lower than 99 associated with an operator code different from 'N', '\*', 'SUP' and '\$n'.
- Search for P entities to be transformed into Macros: loading of PM file.
- Search for Programs not yet taken into account (Type of COBOL C, or Type and structure D, F, S).
- Search for Programs coming from PacReverse.
- Search in standard Screens, Clients, or Servers, for P lines that contain 99BL, 99IT, 99DV, 99DI, 99DC preceded in the same function/subfunction by a comment line with an OR- or AN-type.
- Search, in Screens, for erroneous conditions for the P lines with a \*A \*P \*R type, when these lines are present in functions 20 25 30 35 60 65.
- Search in standard Screens, Clients, or Servers for subfunctions whose first valid line has a '00'-level and whose operator is different from SUP and COA.
- Search for entities not to retrieve: loading of the NR file used by the MIBR and MIBJ procedures. This applies to:
  - Data Elements with a usage not recognized in RPP (different from 0 1 2 3 5 6 7 8 9 C D F G H I J N O P Q R T U W X Y Z); Data Elements with a usage 4 and a Large Object type (L-type) are exceptions and are recognized,
  - Database Blocks with a type AR, D1, D3, QA, QD, QG, QI, QO, QV, SE, TI, TR
  - Reports for layouts.
  - Bulk-type Meta Entities and the associated User Entities

- Pacdesign Meta Entities and the associated User Entities as well as the Data Elements that define the 7M 7N 5Q Meta Entities if they have not been retrieved with the MT parameter in the BVPAMIAM file.
- F-type Dialogs or Screens (Folder Server) or FV (Folder View).
- Dialogs, Screens or Programs that contain PAF commands (EXP operator) if the PF parameter with a value NO was indicated in the BVPAMIAM parameter file.
- Volumes that call an Extraction Master Path.

For each case, a record is written in the RQ error file.

For each error with a type EC3 EC6 EC7 ET1 ET6 ET8 GE1 MEX NEX or SG4, a UPDP-formatted record will be generated in the GY file. So, the error can be corrected in batch mode with the UPDP procedure. The GE1-type error standardly generates the 'D' deletion code in the GY file. The other errors generate the 'X' update code.

Description of the CS file that contains the detected special characters or strings:

Pos.	Len.	Value	Meaning
1	2		Type of character
		WN	Character not compatible with WINDOWS
		CS	Special character
3	6		Detected character or string
9	6		Substitute character or string; this field must be filled in before the execution of the MIBA or MIBR procedures
15	66		FILLER

Description of the NR file (entities not to retrieve):

Pos.	Len.	Meaning
1	3	Library code
4	3	PAF type
7	30	Entity code
37	2	Block type
39	1	Data Element usage
40	6	Meta Entity
46	35	FILLER

Description of the NS file:

This file contains:

- Screens that have only a Definition and/or -CE lines,
- Programs that have only a definition,
- Screens with an N generation variant.

Pos.	Len.	Meaning
1	3	Library code
4	3	PAF type
7	30	Entity code

Description of the PM file that contains non-typed Macros

Pos.	Len.	Meaning
1	6	Entity code
7	44	FILLER

Description of the RQ error file:

Pos.	Len.	Value	Meaning
1	3		Library
4	3		PAF type
7	6		Entity code
13	24		FILLER
37	3		Error type
		BL	Block not to retrieve
		CS	Special character
		DI1	Dialog with an F type (Folder) or an FV type (Folder View)
		EC2	Screen with an F type (Folder) or an FV type (Folder View)
		EC3	Screen whose -CS contains multiple uses of the same Segment in display or reception in the same category
		EC4	Standard or Client Screen with a generation variant different from N, that contains only a definition or -CE lines
		EC5	P line with 99BL, 99IT, 99DV, 99DI, 99DC, preceded by a comment line with an OR- or AN-type

Pos.	Len.	Value	Meaning
		EC6	P line with a *A *P *R type, with an erroneous condition in functions 20 25 30 35 60 65
		EC7	Screen that contain L-lines with an erroneous length in its -CE
		EC8	Subfunction of Screen whose first valid line has a '00'-level and whose operator is different from SUP and COA
		ET1	Report with duplicate label
		ET3	Report for PDM layout
		ET4	Non existing label called in a category of the Report
		ET5	Non existing structure called in a category of the Report
		ET6	Structure that calls several Data Elements with the same position
		ET7	Missing label in the labels sequence of the Report
		ET8	Non-existing Report called in -CD
		EU1	Pacdesign User Entity not retrieved
		EU2	Bulk-type User Entity not retrieved
		GE1	Non-existing reference (-GE)
		MCN	Macro with no type (indicating PARAM or NO PARAM)
		MP4	EL-type function whose level is not compatible with a preceding CO- DU- or DW-type function
		MT1	Pacdesign Meta Entity not retrieved
		MT2	Bulk-type Meta Entity not retrieved
		MT3	Data Element of Meta Entity not retrieved
		NEX	Duplicate name of generated entity
		MEX	Duplicate name of generated MAP
		NV1	Function level not compatible with the operator
		OR1	Orphan conditions
		PA1	Presence of PAF operator
		RU1	Use of Model entity in standard entity
		PG1	Duplicate P-line with N type
		PG2	Program with an obsolete type and structure
		PG4	Program coming from PacReverse not taken into account

Pos.	Len.	Value	Meaning
		PG5	Program with a generation variant different from N, that contains a definition only
		SG1	Conflict of Segment naming in -CD or -W
		SG2	On -CD, no selection on first line but selection on continuation lines
		SG4	Non-existing Segment called in a -CD or in a -W
		UR	Data Element usage not to retrieve
		VAR	Obsolete generation variant
		VAK	Generation variant or Block type not defined in the access key targets
		VO1	Volume that calls an Extraction Master Path
		WK	Working line with a type M C L or A
		WK1	Macro working line that declares a table whose name contains a \$ character
		WN	Characters not compatible with WINDOWS
40	40		Error label
80	2		Section
82	2		Paragraph
84	3		Line number
87	2		File code
89	4		Segment code
93	2		Label number
95	6		Volume code
101	6		Data Element code
107	3		PAF type
110	6		Entity code
116	2		User Entity call type
118	3		Screen type (1)
121	30		FILLER

(1) The Screen type is specified only for the errors detected on the Screen Definition, with the value SRC for a standard Screen, CLI for a Client Screen, SRV for a Server Screen, and ECR for the other Screens.

Consequences and actions to be taken for the different error types.



<b>Code</b>	<b>Meaning</b>	<b>Consequence</b>	<b>Possible action</b>	<b>Consequence if no action</b>
CS	Special character, duplicate labels	Population of the CS file	(1)	TA2 import rejected. Generation error if the entity is used.
WN	Character not allowed (ex: not compatible with Windows)	Population of the CS file	(1)	TA2 import rejected. Generation error if the entity is used.
MCN	Non-typed Macro	Population of the PM file	(2)	
VAR	Obsolete generation variant	Error in the RQ file	Populate the NR file	Generation rejected
EC3	Multiple use of the same Segment in display or reception in the same category of the -CS of a Screen	Error in the RQ file	Correct in VA Pacbase (5)	Generation error
EC5	P line with 99BL, 99IT, 99DV, 99DI, 99DC preceded by a comment line with an OR- or AN-type	Error in the RQ file	Correct in VA Pacbase	Dot not generated before the line
EC6	P line with a *A *P *R type with an erroneous condition	Error in the RQ file	Correct in VA Pacbase (5)	Generation difference in the migration help
EC7	-CE line with an L type and an erroneous length	Error in the RQ file	Correct in VA Pacbase (5) : remove the line and create it again (5)	Generation difference in the migration help
EC8	Subfunction of Screen whose first valid line has a '00'-level and whose operator is different from SUP and COA	Error in the RQ file	Correct in VA Pacbase	Generation difference in the migration help

<b>Code</b>	<b>Meaning</b>	<b>Consequence</b>	<b>Possible action</b>	<b>Consequence if no action</b>
ET1	Report with duplicate label	Error in the RQ file	Correct in VA Pacbase (5)	Warning in RPP
ET4	Non-existing label called in a category of the Report	Error in the RQ file	Correct in VA Pacbase: remove the call to the label	Generation difference in the migration help
ET5	Non-existing structure called in a category of the Report	Error in the RQ file	Correct in VA Pacbase: remove the call to the structure	Generation difference in the migration help
ET6	Structure that calls several Data Elements with the same position	Error in the RQ file	Correct in VA Pacbase: correct the structure (5)	Generation difference in the migration help
ET7	Missing label in the labels sequence of the Report	Error in the RQ file	Correct in VA Pacbase	Generation difference in the migration help
ET8	Non-existing Report called in a -CD	Error in the RQ file	Correct in VA Pacbase (5)	Generation difference in the migration help
GE1	Non-existing reference (-GE)	Error in the RQ file	Correct in VA Pacbase: modify the -CE or -CS or the call to text reference (5)	Error indicated in the TA2 import (transformed into a comment)
MP4	EL-type function whose level is not compatible with a preceding CO- DU- or DW-type function	Error in the RQ file	Correct in VA Pacbase	Differences at generation
NEX	Duplicate name of generated entity in a library	Error in the RQ file	Correct in VA Pacbase: change the external names or select the N variant for programs to be kept with the same model, or populate the NR file (5)	To keep several entities that have the same external name, it is required to migrate manually

<b>Code</b>	<b>Meaning</b>	<b>Consequence</b>	<b>Possible action</b>	<b>Consequence if no action</b>
MEX	Duplicate name of generated MAP in a library	Error in the RQ file	Correct in VA Pacbase: change the external names	To keep several entities that have the same external name, it is required to migrate manually
NV1	Function level not compatible with the operator	Error in the RQ file	Correct in VA Pacbase: modify the level and/or the operator	Possible generation error
OR1	Orphan conditions	Error in the RQ file	Correct in VA Pacbase	Possible generation error for complex cases
RU1	Model entity used in standard entity	Error in the Q file		
PG1	Duplicate P-line with N type	Error in the RQ file	Correct in VA Pacbase	Possible generation error
PG4	Program coming from PacReverse not taken into account	Error in the RQ file	Wait for enhancements	Cannot be migrated
SG1	Conflicting Segment names in -CD or -W	Error in the RQ file	Correct in VA Pacbase	Generation differences in the migration help
SG2	On -CD: no selection on first line but selection on continuation line	Error in the RQ file	Correct in VA Pacbase	Generation differences in the migration help
SG4	Non-existing Segment called in a -CD or a -W	Error in the RQ file	Correct in VA Pacbase (5)	Generation differences in the migration help
WK	Working line with M C L or A type	Error in the RQ file		Not taken into account
WK1	Working line with a table name that contains a \$ character	Error in the RQ file	Manually correct in RPP or in the MIMA file or after dispatching	Erroneous index of the table
BL	Database Block not to retrieve	Population of NR file	(3)	

<b>Code</b>	<b>Meaning</b>	<b>Consequence</b>	<b>Possible action</b>	<b>Consequence if no action</b>
DI1	Dialog with an F type (Folder Server) or FV type (Folder view)	Population of NR file	(3)	
EC2	Screen with an F type (Folder Server) or FV type (Folder view)	Population of NR file	(3)	
ET3	Report for PDM layout	Population of NR file	(3)	
EU1	Pacdesign User Entity not retrieved	Population of NR file	(3) Caution: this is an option. The input of the procedure must be modified to retrieve it	
EU2	Bulk-type UE not retrieved	Population of NR file	(3)	
MT1	Pacdesign Meta Entity not retrieved	Population of NR file	(3) Caution: this is an option. The input of the procedure must be modified to retrieve it	
MT2	Bulk-type Meta Entity not retrieved	Population of NR file	(3)	
MT3	Data Element of Meta Entity not retrieved	Population of NR file except for a Data Element of 7N 7M 5Q Meta Entities if the MT parameter is positioned in the BVPAMIAM file	(3)	
PA1	Presence of PAF operator	Population of NR file	(3)	
PG2	Program with an obsolete type and structure	Population of NR file	(3)	

Code	Meaning	Consequence	Possible action	Consequence if no action
UR	Data Element usage not to retrieve	Population of NR file	(3)	
VO1	Volume that calls an Extraction Master Path	Population of NR file	(3)	
EC4	Screen with only a definition or -CE lines	Population of NS file	(4)	
PG5	Program with only a definition	Population of NS file	(4)	

(1) The CS file of special characters is used to replace characters or strings with valid values.

This file is used by the MIBA, MIBR, MIBJ, and MIMA procedures.

If there is no substitution value, the MIBA, MIBJ, and MIBR procedures stop.

(2) The PM file of Programs used as Macros (but that are not typed as Macros) allows the MIBA, MIBR, and MIBJ procedures to process them as Macros.

(3) The NR file contains the entities that are not retrieved after the processing.

This applies to the MIBR and MIBJ procedures.

This file can be edited and populated with obsolete entities.

(4) The NS file contains 'banner' Screens or Screens and Programs with a definition only, and Screens with an N type of COBOL to generate.

(5) The GY file contains the erroneous transactions in a UPDP format. You must correct the errors either in online mode, or after the UPDP batch update after the modification of the data in the GY file.

## MIAM - User Input

Pos.	Len.	Value	Meaning
2	1	'*	Line code
3	8	uuuuuuuu	User code

Pos.	Len.	Value	Meaning
11	8	pppppppp	User password
19	3		Extraction Library code
		***	All Libraries
		bbb	bbb Library
22	4	nnnn	Session number (blank = current session)
26	1		Session status
		'T'	If selection of frozen session
		' '	If selection of current or H session

This processing takes into account the parameter file BVPAMIAM, provided at installation with the following structure:

Pos.	Len.	Value	Meaning
1	2	'BL'	Type of block not retrieved
		'CS'	Special character
		'MT'	Forced retrieval of Meta Entity (1)
		'PF'	Indicates whether to retrieve the Programs or Screens that contain PAF operators. By default, they are retrieved. Add a PF line with the value NO in position 3 not to retrieve them.
		'UR'	Recognized Data Element usage
		'VO'	Authorized types of COBOL to generate for Screens (2)
		'VP'	Authorized types of COBOL to generate for Programs (2)
		'VS'	Authorized types of COBOL to generate for C/S entities (2)
		'WK'	Type of working line not to retrieve
		'WN'	String not allowed (not compatible with Windows for example)
3	78		Value of the parameter

This file contains the standard parameters provided at installation to allow the procedure to complete the necessary checks.

In this file, you can add special characters to be searched for. To do so, add a CS-type line with the character to be searched for.

(1) The MT parameter is used to force the retrieval of Meta Entities with a code 7N (Endevor), 7M (Environment) or 5Q (Quality) and the retrieval of Pacdesign Meta Entities (use the DS value). Only these four values on 2 characters are taken into account.

(2) By default, the authorized values of the COBOL types to generate are:

VO: 'NX013O456M7U8FIKQZ'

VP: 'N013458FIKOUXQZC'

VS: 'NX03457OU8FIRQ'.

You can replace them with the values indicated in each parameter. You must indicate all the COBOL types to be recognized in each parameter.

If several lines exist for the same type, only the last line is taken into account.

Note:

It is not necessary to sort the parameter file. Any unknown value is ignored.

Parameters can be removed.

## **MIAM - Description of Steps**

Migration Help Function : BVPLTPAM

Code	Physical name	Type	Label
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGR	Admin. Database - DBase dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - DBase dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - DBase dir.: GU	Input	Administration Database users
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7MB	User input	Input	User Input
PAC7CK	Skel dir.: BVPAMIAM	Input	Analysis parameters
PAC7CS	User dir.: MIAMCSPE	Output	Special characters
PAC7NR	User dir.: MIAMNR	Output	Entities not to retrieve
PAC7NS	User dir.: MIAMNMIG	Output	Programs or Screens with only a definition or -CE lines

Code	Physical name	Type	Label
PAC7PM	User dir.: MIAMPMAC	Output	Programs to be transformed into Macros
PAC7RQ	User dir.: MIAMRQER	Output	Detected errors
PAC7DX	Tmp dir.: WDX	Output	Index work file
PAC7DD	User dir.: MIAMDDPAM	Report	Error report

#### Generation of GY transactions for UPDP : BVPLTPAP

Code	Physical name	Type	Label
PAC7AR	DBase dir.: AR	Input	Development Database data
PAC7AN	DBase dir.: AN	Input	Development Database index
PAC7MB	User input	Input	User Input
PAC7DX	Tmp dir.: WDX	Input	Index work file
PAC7GY	User dir.: MIAMGY	Output	Resulting GY file

### MIAM - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) MIAM BATCH PROCEDURE
# * -----
# *     VISUALAGE PACBASE
# *
# * -----
# *     MIGRATION HELP
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MIAM"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
```



```

. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7MB=$PACINPUT
export PAC7MB
PAC7CK=~BVPENV PLTPAM PAC7CK $PACDIR/system/skel/BVPAMIAM~
export PAC7CK
PAC7CS=~BVPENV PLTPAM PAC7CS `dirname $PACUSERS~/MIAMCSPE`
export PAC7CS
PAC7NR=~BVPENV PLTPAM PAC7NR `dirname $PACUSERS~/MIAMNREP`
export PAC7NR
PAC7NS=~BVPENV PLTPAM PAC7NS `dirname $PACUSERS~/MIAMMIG`
export PAC7NS
PAC7PM=~BVPENV PLTPAM PAC7PM `dirname $PACUSERS~/MIAMPAC`
export PAC7PM
PAC7DX=~BVPENV PLTPAM PAC7DX $PACTMP/WDX~
export PAC7DX
PAC7RQ=~BVPENV PLTPAM PAC7RQ $PACUSERS/MIAMRQR~
export PAC7RQ
PAC7DD=~BVPENV PLTPAM PAC7DD $PACUSERS/MIAMDDPAM.txt~
export PAC7DD
BVPMSG 1009 "BVPLTPAM"
rtspac BVPLTPAM
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPLTPAM"
BVPMSG 1025
BVPERR
BVPRTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
PAC7MB=$PACINPUT
export PAC7MB
PAC7DX=~BVPENV PLTPAP PAC7DX $PACTMP/WDX~
export PAC7DX
PAC7GY=~BVPENV PLTPAP PAC7GY $PACUSERS/MIAMGY~
export PAC7GY
BVPMSG 1009 "BVPLTPAP"
rtspac BVPLTPAP
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPLTPAP"
BVPMSG 1025
BVPERR
BVPRTMP

```

```

    exit $RETURN
    ;;
  esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## UTOV - Analysis of Overrides

### UTOV - Overview

#### Principle

This procedure is a utility program that detects the overrides of the entity definitions and complete folders in the same library network. It detects the multiple presence of the definition and of its folder, or the existence of one or more elements of its folder in a library that is not the definition library. The overrides analysis is possible only in the current view of the Database.

#### Execution condition

None

#### Result

Each time an override is detected, the entity and library are loaded into the PAC7OV sequential file. Depending on the requested formatting, a file in a UPDP format and/or a file in a UPDT format are generated to purge the overrides. When the analysis of an entity family is complete, the total number of entities is indicated in the PAC7OV file.

Structure of the PAC7OV file

Pos.	Len.	Value	Meaning
1	3	RUB, SEG, SDO, PGM, FOG, ETA, DBD, TXT, ECR, etc.	Entity type
4	30		Entity code
34	24		Folder record identifier (part of the B3B9 index), blank for definitions
58	2		Data card code
60	3		Reference library
63	3		Override libraries

Pos.	Len.	Value	Meaning
66	1		Type of override
		'0'	For the definition
		'1'	For the folder itself
67	8		Total number of entities by type. When the counter is running, the type is filled in, the other fields are blank

Each time a pure override is detected (a Definition in relation to itself, or an element of the folder in relation to itself), a record, which represents the PR data, is loaded into the PAC7PU file of the entities to be purged.

#### Printed output

The total number of detected overrides is printed.

### **UTOV - User Input**

Pos.	Len.	Value	Meaning
2	1	'*	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password
33	1	'1'	Formatting for UPDT
		' '	No formatting for UPDTUPDT
34	1	'1'	Formatting for UPDP (PAF)
		' '	No formatting for UPDP

### **UTOV - Description of steps**

Detection of overrides: BVPTUOVR

Code	Physical name	Type	Label
PAC7MB	User input	Input	User input
PAC7AE	System - Skel dir.: AE	Input	Error labels
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7ET	User dir.: UTOVET	Report	Report
PAC7OV	User dir.: UTOVFILE	Output	List of detected overrides
PAC7PU	Tmp dir.: WPU	Output	Entities to be purged

## Extract : BVPACF

Code	Physical name	Type	Label
PAC7AE	System - Skel dir.: AE	Input	Error labels
PAC7MB	User input	Input	User transactions
PAC7WD	Tmp dir.: WPU	Input	Entities to be purged
PAC7MV	User dir.: UTOVMV	Output	Extracted transactions for UPDT
PAC7GY	User dir.: UTOVGY	Output	Extracted transactions for UPDP

## UTOV - Execution script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) UTOV BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      DETECTION OF OVERRIDES
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "UTOV"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
PAC7MB=$PACINPUT
export PAC7MB
PAC7ET=~BVPENV PTUOVR PAC7ET $PACUSERS/UTOVET.txt`
export PAC7ET
PAC7OV=~BVPENV PTUOVR PAC7OV $PACUSERS/UTOVFILE`
export PAC7OV
PAC7PU=~BVPENV PTUOVR PAC7PU $PACTMP/WPU`
export PAC7PU
BVPMSG 1009 "BVPTUOVR"
rtspac BVPTUOVR
RETURN=$?
case $RETURN in
```

```

0)
;;
*)
  BVPMSG 1012 "BVPTUOVR"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
PAC7MB=$PACINPUT
export PAC7MB
PAC7WD=~BVPENV PACF PAC7WD $PACTMP/WPU`
export PAC7WD
PAC7MV=~BVPENV PACF PAC7MV $PACUSERS/UTOVMV`
export PAC7MV
PAC7GY=~BVPENV PACF PAC7GY $PACUSERS/UTOVGY`
export PAC7GY
BVPMSG 1009 "BVPACF"
rtspac BVPACF
RETURN=$?
case $RETURN in
0)
;;
*)
  BVPMSG 1012 "BVPACF"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## MIBA - Batch Migration

### MIBA - Introduction

#### Principle

This procedure is a utility that prepares the batch migration after the extraction of entities in the Repository. It formats files that will be used by the migration tools.

### MIBA - User Input

It is the user input of the PACX procedure, with the following specific values:

One '\*' line as follows:

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password
19	3	bbb	Extraction Library code
22	4	nnnn	Session number (Blank=current session)
26	1	'T'	Session status if Test session
29	4	EXTR	Extractor code
34	1	'1'	Formatting for UPDP (PAF)
55	1	'1'	Timestamp request indicator

'O'-line: Control cards in front/back of the generation commands

Pos.	Len.	Value	Meaning
2	1	'O'	Line code
3	3	bbb	Generation command
			'GCP': Program
			'GCO': Dialog
			'GGC': Client
			'GGS': Server
7	2	be	Control card in front
9	2	af	Control card in back

You must add the following command line:

Pos.	Len.	Value	Meaning
2	4	'W'	Line code
3	1	'1'	Line number
4	2	'EX'	
6	1	'+'	Library selection code:
			Library and its upper-libraries with the generation of identification lines (* lines)
7	33	Choice	Entity to be extracted, coded in the same way as the 'Choice' field in online mode.
40	4		Extraction type:
		'ALL '	Entity and used entities

## Principle of migration

For a given entity, the extraction is performed from each library of each element of its folder, within the same network.

### First step: PACX extraction in view '+'

When the definition of an entity is extracted, the Library of each element in its folder is searched for.

The highest-level library is the reference library. The folder of the entity is created later (next step) in each lower-level library found.

In a network, all the libraries that contain an element of the folder are detected.

For each library, a command line in view 'C' of the extracted entity, and an appropriate assign card are formatted and sorted. All these lines make up the input file of the second step.

### Second step: PACX extraction in view 'C'

The entities extraction is performed in the extraction library and in the higher-level libraries. An entity folder is created in each extraction library. It is inherited from the higher or equal level libraries.

The PACX extraction has been enhanced:

- When a Segment is extracted, its Data Structure is also extracted.
- When a Screen is extracted, the Definition of its Dialog is also extracted.

Only the erroneous requests are included in the PAC7EZ report.

This procedure requires the PAC7PM file as input to the BVPACS96 program.

This file, defined with 50-character records, contains, in position 1, the VA Pac codes of the Programs used as Macrostructures but not defined as such in the Repository.

This file is produced by the MIAM procedure.

This procedure also allows to replace unknown special characters in an entity code with other characters or to replace unauthorized words (Windows reserved words for example) with other codes. The matching table is the

PAC7CS file used as input to the BVPACS94 and BVPACS96 programs (optional file, created by the MIAM procedure).

This procedure also generates the input transactions for the procedures:

- MIMA (migration of macrostructures): GCM and GMO commands.
- GPRT (PRINT - GENERATION): GCP, GCO, GGC and GGS commands
- MIA1 (migration of Programs): GCP commands
- MIA2 (migration of Screens): GCO commands
- MIA3 (migration of Clients): GGC commands
- MIA4 (migration of Servers): GGS commands
- The control cards in front/back of these records come from the 'O'-lines of user input.

**.Notes:** GMO commands: creation of high priority Macros

All the specific lines of a Screen that cause the move of a Macro function or subfunction are gathered in the high priority Macro.

When the repository is migrated, the Screens that contain specific relative positions (\*A, \*P, \*C, \*R) are detected. A GMO command line is created for each of these Screens, which will be transformed into high priority Macros.

These Macros will be generated by the MIMA procedure under the name: Screen code suffixed by 'SP'.

## **MIBA - Description of Steps**

Extraction: PACX

This step extracts transactions according to user input.

<b>Code</b>	<b>Physical name</b>	<b>Type</b>	<b>Label</b>
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7AN	Database dir. : AN	Input	Development Database index
PAC7AR	Database dir. : AR	Input	Development Database data
PAC7AY	Database dir. : AY	Input	Development Database extension data
PACGGN	Admin Database - DBase dir. : AN	Input	Administration Database index
PACGGR	Admin Database - DBase dir. : AR	Input	Administration Database data



Code	Physical name	Type	Label
PACGGU	Admin Database - DBase dir. : GU	Input	Administration Database users
PAC7MB	User Input	Input	User input
PAC7MA	/dev/null	Input	Work file
PAC7ES	/dev/null	Input	Work file
PAC7BM	Tmp dir.: WBM	Input/Output	User input
PAC7MM	Tmp dir.: WMM	Input/Output	Work file
PAC7MJ	Tmp dir.: WMJ	Input/Output	Work file
PAC7TE	Tmp dir.: WTE	Input/Output	Work file
PAC7RE	Tmp dir.: WRE	Input/Output	Work file
PAC7RM	Tmp dir.: WRM	Input/Output	Work file
PAC7WD	Tmp dir.: WWD	Input/Output	Extracted transactions
SYSEXT	Tmp dir.: WSY	Input/Output	Work file
PAC7MV	Tmp dir.: WMV	Output	Work file
PAC7CP	/dev/null	Output	Work file
PAC7MR	Tmp dir.: WMR	Output	Work file
PAC7MX	Tmp dir.: WMX	Output	Entities not extracted (PACX)
PAC7GY	/dev/null	Output	Extracted transactions for UPDP
PAC7RQ	Tmp dir.: WQR	Output	Matching Entity/Library
PAC7TD	Tmp dir.: WTD	Output	Work file
PAC7UE	Tmp dir.: WUE	Output	Work file
PAC7IA	User dir.: PACXIA	Report	General printout of the program stream
PAC7DD	User dir.: PACXDD	Report	Errors on input transactions
PAC7ED	Tmp dir.: WED	Report	Extractions report
PAC7EE	User dir.: PACXEE	Report	Extractions report
PAC7EG	Tmp dir.: WEG	Report	Extractions report
PAC7EM	Tmp dir.: WEM	Report	Extractions report
PAC7EP	User dir.: PACXEP	Report	Extractions report
PAC7EQ	User dir.: PACXEQ	Report	Extractions report
PAC7EU	Tmp dir.: WEU	Report	Extractions report
PAC7EZ	User dir.: PACXEZ	Report	Extractions report

Return codes:

- 0: No error
- 4: Error in user input (detailed in PAC7EE) or in extractions (detailed in PAC7EZ)
- 8: Error in '\*' line (detailed in PAC7DD)

Sort and formatting of command lines: BVPACS92

Code	Physical name	Type	Label
PAC7QR	Tmp dir.: WQR	Input	Matching Entity/Library
PAC7RQ	Tmp dir.: WRQ	Output	Matching Entity/Library after sort
PAC7MZ	Tmp dir.: WMB	Output	Command lines for PACX input
PAC7ER	Tmp dir.: NUL	Output	List of duplicated entities
PAC7EE	Tmp dir.: NUL	Output	Entities not retrieved, produced by MIBR

Extraction: PACX2

This step extracts the transactions according to the user input generated by the BVPACS92 program.

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7AN	Database dir. : AN	Input	Development Database index
PAC7AR	Database dir. : AR	Input	Development Database data
PAC7AY	Database dir. : AY	Input	Development Database extension data
PACGGN	Admin Database - DBase dir. : AN	Input	Administration Database index
PACGGR	Admin Database - DBase dir. : AR	Input	Administration Database data
PACGGU	Admin Database - DBase dir. : GU	Input	Administration Database users
PAC7MB	Tmp dir. : WMB	Input	User input
PAC7MA	/dev/null	Input	Work file
PAC7ES	/dev/null	Input	Work file
PAC7BM	Tmp dir. : WBM	Input/Output	User input
PAC7MM	Tmp dir. : WMM	Input/Output	Work file

Code	Physical name	Type	Label
PAC7MJ	Tmp dir. : WMJ	Input/Output	Work file
PAC7TE	Tmp dir. : WTE	Input/Output	Work file
PAC7RE	Tmp dir. : WRE	Input/Output	Work file
PAC7RM	Tmp dir. : WRM	Input/Output	Work file
PAC7WD	Tmp dir. : WWD	Input/Output	Extracted transactions
SYSEXT	Tmp dir. : WSY2	Input/Output	Work file
PAC7MV	Tmp dir. : WMV	Output	Work file
PAC7MR	Tmp dir. : WMR	Output	Work file
PAC7MX	Tmp dir. : WMX	Output	Entities not extracted (PACX)
PAC7CP	Tmp dir. : WCP	Output	Work file
PAC7GY	Tmp dir. : WGY	Output	Extracted transactions for UPDP
PAC7RQ	/dev/null	Output	Matching Entity/Library
PAC7TD	Tmp dir. : WTD	Output	Work file
PAC7UE	Tmp dir. : WUE	Output	Work file
PAC7IA	User dir. : PACX2IA	Report	General printout of the program stream
PAC7DD	User dir. : PACX2DD	Report	Errors on input transactions
PAC7ED	Tmp dir. : WED	Report	Extractions report
PAC7EE	User dir. : PACX2EE	Report	Extractions report
PAC7EG	Tmp dir. : WEG	Report	Extractions report
PAC7EM	Tmp dir. : WEM	Report	Extractions report
PAC7EP	User dir. : PACX2EP	Report	Extractions report
PAC7EQ	User dir. : PACX2EQ	Report	Extractions report
PAC7EU	Tmp dir. : WEU	Report	Extractions report
PAC7EZ	User dir. : PACX2EZ	Report	Extractions report

Return codes:

- 0: No error
- 4: Error in user input (detailed in PAC7EE) or in extractions (detailed in PAC7EZ)
- 8: Error in '\*' line (detailed in PAC7DD)

Sort and formatting of command lines: BVPACS92

Code	Physical name	Type	Label
PAC7QR	Tmp dir.: WQR	Input	Matching Entity/Library
PAC7RQ	Tmp dir.: WRQ	Output	Matching Entity/Library after sort
PAC7MZ	Tmp dir.: WMB	Output	Command lines for PACX input
PAC7ER	Tmp dir.: NUL	Output	List of duplicated entities
PAC7EE	Tmp dir.: NUL	Output	Entities not retrieved, produced by MIBR

#### Batch migration : BVPACS96

Code	Physical name	Type	Label
PAC7MB	User input	Input	User input
PAC7GY	Tmp dir.: WGY	Input	File resulting from PACX extraction
PAC7PM	User dir.: MIAMPMAC	Input	File with the list of Pgms to be transformed into PMS
PAC7CS	User dir.: MIAMCSPE	Input	Special characters matching file
PAC7TA	Tmp dir.: WTA	Output	File containing transactions grouped by type
PAC7MM	User dir.: INPUTMIMA	Output	File containing MIMA commands
PAC7MI	User dir.: MIA1	Output	File containing GCP commands
PAC7MO	User dir.: MIA2	Output	File containing GCO commands
PAC7MC	User dir.: MIA3	Output	File containing GGC commands
PAC7MS	User dir.: MIA4	Output	File containing GGS commands

#### Reorganization of transactions : BVPACS97

Code	Physical name	Type	Label
PAC7TA	Tmp dir.: WTA	Input	File containing transactions grouped by type
PAC7AT	Tmp dir.: WAT	Output	File with transactions grouped by type, sorted again

#### Sort and formatting of import file: BVPACS91

Code	Physical name	Type	Label
PAC7AT	Tmp dir.: WAT	Input	File with transactions grouped by type

Code	Physical name	Type	Label
PAC7TI	Tmp dir.: WTI	Output	File with transactions grouped by type, sorted again

Global sort: BVPACS98

Code	Physical name	Type	Label
PAC7AR	Base dir.: AR	Output	Development Database data
PAC7AE	System - Skel dir.: AE	Input	Error messages
PAC7CP	Tmp dir.: WCP	Input	Counter of extracted entities
PAC7RQ	Tmp dir.: WQR	Input	Matching Entity/lowest Library
PAC7TI	Tmp dir.: WTI	Input	File with transactions grouped by type, sorted again
PAC7TG	User dir.: MIBA	Output	Result file with global sort

## MIBA - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) MIBA BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      BATCH MIGRATION
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MIBA"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
```

```

. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7BM=`BVPENV PACX PAC7BM $PACTMP/WBM`
export PAC7BM
PAC7CP=`BVPENV PACX PAC7CP /dev/null`
export PAC7CP
PAC7DD=`BVPENV PACX PAC7DD $PACUSERS/PACXDD.txt`
export PAC7DD
PAC7ED=`BVPENV PACX PAC7ED $PACTMP/WED`
export PAC7ED
PAC7EE=`BVPENV PACX PAC7EE $PACUSERS/PACXEE.txt`
export PAC7EE
PAC7EG=`BVPENV PACX PAC7EG $PACTMP/WEG`
export PAC7EG
PAC7EM=`BVPENV PACX PAC7EM $PACTMP/WEM`
export PAC7EM
PAC7EP=`BVPENV PACX PAC7EP $PACUSERS/PACXEP.txt`
export PAC7EP
PAC7EQ=`BVPENV PACX PAC7EQ $PACUSERS/PACXEQ.txt`
export PAC7EQ
PAC7ES=`BVPENV PACX PAC7ES /dev/null`
export PAC7ES
PAC7EU=`BVPENV PACX PAC7EU $PACTMP/WEU`
export PAC7EU
PAC7EZ=`BVPENV PACX PAC7EZ $PACUSERS/PACXEZ.txt`
export PAC7EZ
PAC7GY=`BVPENV PACX PAC7GY /dev/null`
export PAC7GY
PAC7IA=`BVPENV PACX PAC7IA $PACUSERS/PACXIA.txt`
export PAC7IA
PAC7MA=`BVPENV PACX PAC7MA /dev/null`
export PAC7MA
PAC7MB=$PACINPUT
export PAC7MB
PAC7MM=`BVPENV PACX PAC7MM $PACTMP/WMM`
export PAC7MM
PAC7MJ=`BVPENV PACX PAC7MJ $PACTMP/WMJ`
export PAC7MJ
PAC7MR=`BVPENV PACX PAC7MR $PACTMP/WMR`
export PAC7MR
PAC7MX=`BVPENV PACX PAC7MX $PACTMP/WMX`
export PAC7MX
PAC7RE=`BVPENV PACX PAC7RE $PACTMP/WRE`
export PAC7RE
PAC7RM=`BVPENV PACX PAC7RM $PACTMP/WRM`
export PAC7RM
PAC7RQ=`BVPENV PACX PAC7RQ $PACTMP/WQR`
export PAC7RQ
PAC7TD=`BVPENV PACX PAC7TD $PACTMP/WTD`
export PAC7TD
PAC7TE=`BVPENV PACX PAC7TE $PACTMP/WTE`
export PAC7TE
PAC7UE=`BVPENV PACX PAC7UE $PACTMP/WUE`
export PAC7UE
PAC7WD=`BVPENV PACX PAC7WD $PACTMP/WD`

```

```

export PAC7WD
SYSEXT=~BVPENV PACX SYSEXT $PACTMP/WSY`
export SYSEXT
BVPMSG 1009 "BVPACX"
rtspac BVPACX
RETURN=?
case $RETURN in
0)
;;
4)
BVPMSG 1012 "BVPACX"
;;
8)
BVPMSG 1012 "BVPACX"
BVPMSG 1014
BVPERR
BVPRMTMP
exit $RETURN
;;
*)
BVPMSG 1012 "BVPACX"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7QR=~BVPENV PACS92 PAC7QR $PACTMP/WQR`
export PAC7QR
PAC7RQ=~BVPENV PACS92 PAC7RQ $PACTMP/WRQ`
export PAC7RQ
PAC7MZ=~BVPENV PACS92 PAC7MZ $PACTMP/WMB`
export PAC7MZ
PAC7ER=~BVPENV PACS92 PAC7ER /dev/null`
export PAC7ER
PAC7EE=~BVPENV PACS92 PAC7EE /dev/null`
export PAC7EE
BVPMSG 1009 "BVPACS92"
rtspac BVPACS92
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS92"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini

```

```

. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7BM=`BVPENV PACX PAC7BM $PACTMP/WBM`
export PAC7BM
PAC7CP=`BVPENV PACX PAC7CP $PACTMP/WCP`
export PAC7CP
PAC7DD=`BVPENV PACX PAC7DD $PACUSERS/PACX2DD.txt`
export PAC7DD
PAC7ED=`BVPENV PACX PAC7ED $PACTMP/WED`
export PAC7ED
PAC7EE=`BVPENV PACX PAC7EE $PACUSERS/PACX2EE.txt`
export PAC7EE
PAC7EG=`BVPENV PACX PAC7EG $PACTMP/WEG`
export PAC7EG
PAC7EM=`BVPENV PACX PAC7EM $PACTMP/WEM`
export PAC7EM
PAC7EP=`BVPENV PACX PAC7EP $PACUSERS/PACX2EP.txt`
export PAC7EP
PAC7EQ=`BVPENV PACX PAC7EQ $PACUSERS/PACX2EQ.txt`
export PAC7EQ
PAC7ES=`BVPENV PACX PAC7ES /dev/null`
export PAC7ES
PAC7EU=`BVPENV PACX PAC7EU $PACTMP/WEU`
export PAC7EU
PAC7EZ=`BVPENV PACX PAC7EZ $PACUSERS/PACX2EZ.txt`
export PAC7EZ
PAC7GY=`BVPENV PACX PAC7GY $PACTMP/WGY`
export PAC7GY
PAC7IA=`BVPENV PACX PAC7IA $PACUSERS/PACX2IA.txt`
export PAC7IA
PAC7MA=`BVPENV PACX PAC7MA /dev/null`
export PAC7MA
PAC7MB=`BVPENV PACX PAC7MB $PACTMP/WMB`
export PAC7MB
PAC7MM=`BVPENV PACX PAC7MM $PACTMP/WMM`
export PAC7MM
PAC7MJ=`BVPENV PACX PAC7MJ $PACTMP/WMJ`
export PAC7MJ
PAC7MR=`BVPENV PACX PAC7MR $PACTMP/WMR`
export PAC7MR
PAC7MX=`BVPENV PACX PAC7MX $PACTMP/WMX`
export PAC7MX
PAC7RE=`BVPENV PACX PAC7RE $PACTMP/WRE`
export PAC7RE
PAC7RM=`BVPENV PACX PAC7RM $PACTMP/WRM`
export PAC7RM
PAC7RQ=`BVPENV PACX PAC7RQ /dev/null`
export PAC7RQ
PAC7TD=`BVPENV PACX PAC7TD $PACTMP/WTD`
export PAC7TD
PAC7TE=`BVPENV PACX PAC7TE $PACTMP/WTE`
export PAC7TE

```



```

PAC7UE=~BVPENV PACX PAC7UE $PACTMP/WUE`
export PAC7UE
PAC7WD=~BVPENV PACX PAC7WD $PACTMP/WWD`
export PAC7WD
SYSEXT=~BVPENV PACX SYSEXT $PACTMP/WSY2`
export SYSEXT
BVPMSG 1009 "BVPACX"
rtspac BVPACX
RETURN=?
case $RETURN in
0)
;;
4)
BVPMSG 1012 "BVPACX"
;;
8)
BVPMSG 1012 "BVPACX"
BVPMSG 1014
BVPERR
BVPRMTMP
exit $RETURN
;;
*)
BVPMSG 1012 "BVPACX"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7CS=~BVPENV PACS94 PAC7CS `dirname $PACUSERS\~/MIAMCSPE`
export PAC7CS
PAC7RQ=~BVPENV PACS94 PAC7RQ $PACTMP/WRQ`
export PAC7RQ
PAC7QR=~BVPENV PACS94 PAC7QR $PACTMP/WQR`
export PAC7QR
BVPMSG 1009 "BVPACS94"
rtspac BVPACS94
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS94"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7MB=$PACINPUT
export PAC7MB
PAC7GY=~BVPENV PACS96 PAC7GY $PACTMP/WGY`

```

```

export PAC7GY
PAC7CS=~BVPENV PACS96 PAC7CS `dirname $PACUSERS~/MIAMCSPE`
export PAC7CS
PAC7PM=~BVPENV PACS96 PAC7PM `dirname $PACUSERS~/MIAMPAC`
export PAC7PM
PAC7TA=~BVPENV PACS96 PAC7TA $PACTMP/WTA`
export PAC7TA
PAC7MM=~BVPENV PACS96 PAC7MM $PACUSERS/INPUTMIMA`
export PAC7MM
PAC7MI=~BVPENV PACS96 PAC7MI $PACUSERS/INPUTMIA1`
export PAC7MI
PAC7MO=~BVPENV PACS96 PAC7MO $PACUSERS/INPUTMIA2`
export PAC7MO
PAC7MC=~BVPENV PACS96 PAC7MC $PACUSERS/INPUTMIA3`
export PAC7MC
PAC7MS=~BVPENV PACS96 PAC7MS $PACUSERS/INPUTMIA4`
export PAC7MS
BVPMSG 1009 "BVPACS96"
rtspac BVPACS96
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS96"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7AT=~BVPENV PACS97 PAC7AT $PACTMP/WAT`
export PAC7AT
PAC7TA=~BVPENV PACS97 PAC7TA $PACTMP/WTA`
export PAC7TA
BVPMSG 1009 "BVPACS97"
rtspac BVPACS97
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS97"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7AT=~BVPENV PACS91 PAC7AT $PACTMP/WAT`
export PAC7AT
PAC7TI=~BVPENV PACS91 PAC7TA $PACTMP/WTI`
export PAC7TI

```

```

BVPMSG 1009 "BVPACS91"
rtspac BVPACS91
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS91"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AR.ini
PAC7CP=~BVPENV PACS98 PAC7CP $PACTMP/WCP`
export PAC7CP
PAC7TI=~BVPENV PACS98 PAC7TI $PACTMP/WTI`
export PAC7TI
PAC7RQ=~BVPENV PACS98 PAC7RQ $PACTMP/WQR`
export PAC7RQ
PAC7TG=~BVPENV PACS98 PAC7TG $PACUSERS/${BVPPROC}.ta2`
export PAC7TG
BVPMSG 1009 "BVPACS98"
rtspac BVPACS98
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS98"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## MIBR - Batch Migration of the Context

### MIBR - Introduction

#### Principle

This procedure is a utility that prepares the batch migration after the extraction of entities from the Repository in a given context (session and ascending or descending network of a library). It formats files that will be used by the migration tools.

## MIBR - User Input

Pos.	Len.	Value	Meaning
2	1	'*	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password
22	4	nnnn	Session number (Blank = current session)
26	1		Session status
		'T'	If selection of frozen session
		' '	If current or H session
33	1		Code of library extraction
		'A'	Extraction of a lower level library and its higher level libraries
		'D'	Extraction of a library and its depending libraries
		'U'	Extraction of only one library

As many lines as Libraries to be extracted.

Pos.	Len.	Value	Meaning
3	3	bbb	Code of the library to be extracted

'O'-line: Control cards in front/back of generation commands

Pos.	Len.	Value	Meaning
2	1	'O'	Line code
3	3	bbb	Generation command
			'GCP': Program
			'GCO': Dialog
			'GGC': Client
			'GGS': Server
7	2	be	Control card in front
9	2	af	Control card in back

'P' line: project created after the libraries split

Pos.	Len.	Value	Meaning
2	1	'P'	Line code

Pos.	Len.	Value	Meaning
3	3	bbb	Code of library to split
6	3	ccc	Type of Pacbase entity to move
			'E ': Data Element
			'S ': Data Structure and Segment
			'R ': Report
			'B ': Database Block
			'P ': Program
			'O ': Dialog and Screen
			'F ': Client Meta Entity
			'\$tt': Client User Entity (tt = call type)
			'T': Text
			'V': Volume
9	15		Code of the new project

### Principle of migration

An extraction context is selected. The session and the library, from which the ascending or descending network will be extracted, are specified.

#### First step: Extraction of entities present in the context.

All the indexes in the database are read sequentially.

The selection is made on the primary indexes of all the entity families. The highest level library of the entity definition is the reference library. If an element of the folder is detected in a lower level library, the entity folder will be created later in this library (next step).

The overrides of the entity definitions and complete folders are thus detected in a libraries network (it means the multiple presence of the definition or the existence of one or more elements of its folder in a library different from the definition library).

In a network, all the libraries that contain an element of the folder are detected.

For each library, a command line in view 'C' of the extracted entity, with an appropriate assign card, is formatted and sorted. All these lines make up the input file of the third step.

### Second step: recognition of entities not retrieved

This step allows not to retrieve in output all the entities listed in the PAC7NR file.

Then, it requires the presence of the MIAMNR the entities that are not retrieved. These files are provided by MIAM (NRFILE) and by the user (NTFILE).

### Third step: PACX extraction in view 'C'

The entities are extracted in the extraction library and in its higher-level libraries. An entity folder is created in each extraction library. It is inherited from the higher or equal level libraries.

The PACX extraction has been enhanced:

- When a Segment is extracted, its Data Structure is also extracted.
- When a Screen is extracted, the Definition of its Dialog is also extracted.

Erroneous requests only are printed in the PAC7EZ report.

This procedure requires the PAC7PM file as input to the BVPACS96 program.

This file, defined with 50-character records, contains in position 1 the VA Pacbase codes of the Programs used as Macrostructures but not defined as such in the Repository.

This file is produced by the MIAM procedure.

This procedure also allows to replace unknown special characters in an entity code with another character, or to replace Windows reserved words with another code.

The matching table is represented by the PAC7CS file used as input to the BVPACS94 and BVPACS96 programs (optional file, created by the MIAM procedure).

This procedure also generates the input transactions for the following procedures:

- MIMA (migration of macrostructures): GCM and GMO commands.
- MIA1 (migration of Programs): GCP commands
- MIA2 (migration of Screens): GCO commands
- MIA3 (migration of Clients): GGC commands
- MIA4 (migration of Servers): GGS commands

- The control cards in front/back of these records come from the 'O'-lines of the user input. (See subchapter "MIAX - Optional control cards")

**.Warning::** If the value of the control card before the map is \$ in a Screen Definition, it will be carried over to the GCO and GGC commands.

**.Notes:** GMO commands: creation of high priority Macros

All the specific lines of a Screen that cause the move of a Macro function or subfunction are gathered in the high priority Macro.

When the repository is migrated, the Screens that contain specific relative positions (\*A, \*P, \*C, \*R) are detected. A GMO command line is created for each of these Screens, which will be transformed into high priority Macros.

These Macros will be generated by the MIMA procedure under the name: Screen code suffixed by 'SP'.

The MODE option of the migration help comes from the MIAMNS (MIAM) and NMFILE (user) files (see chapter "Migration perimeter")

This procedure also produces the following lists:

- The OUTDUPL file contains the list of the duplicated entities.  
When one or more elements of an entity folder exist in a Library that is not the Definition Library (in the same Library network), the entity is duplicated in the Library of the override.
- The OUTEXCL file contains the list of the entities that are excluded from the migration:  
The entities that are not retrieved by the MIAM procedure (MIAMNR), the user entities that are not retrieved (NTFILE), and the entities that are not retrieved by the MIBR procedure (Model entities).

## **MIBR - Libraries splitting**

Some very large libraries can be reduced by the MIBR procedure because this procedure splits them.

The library to be reduced is divided into N new projects.

Using P lines, you must specify the new project where each relevant Pacbase entity will be moved to. All the projects are dependent and their hierarchy depends on the associated Pacbase entity type.

The order is described in the input table of the P line.

However, you can put the projects of the User Entities wherever you want to.

The same project can be associated with several Pacbase entity types if their types are directly dependent (immediate hierarchy).

To ensure that the list of the new projects created by the library split is coherent, a control verifies that all the Pacbase entity types (except the Meta Entities) are present in the P lines.

Limits of P input:

- 5 libraries to split
- 40 projects by library

It means 29 projects for the User Entities and one project by type for all the other Pacbase entities. The generic code `$**` can be used to group all the User Entities in the same project. You can create one project for one given User Entity and another project for all the other UE (`$**`).

- The project code cannot contain the special characters ' \ / : % ? < > " | ' or be the reserved word 'INTER'.

Rules of use:

To use this option, the migration request is made in descending mode 'D'.

Order of MIBR user input:

- All the cards of libraries networks extraction.
- All the optional cards in front/back.
- All the projects cards.

Respect the hierarchy of the libraries to split by sorting the P lines from the highest to the lowest level libraries.

The MIBR procedure saves the dispatching user requests. Thus, they can be taken into account by the MIBJ procedure.

The SPLITLIB file produced by MIBR will be used as input to the MIBJ procedure.

It contains all the projects coming from the libraries split and their hierarchy.



## MIBR - Migration perimeters

All the VA Pacbase Programs and Screens are not in production. A migration help is proposed for these entities. It determines if the migration must be effective, standard or partial. To prevent manual modifications in the repository (deletion of the "Type of COBOL to generate", ...) or in the MIAn.txt files (deletion of entities..), the MIBR procedure automates these actions.

This procedure enables you to constitute filters from the MIAMNR and MIAMNS files (produced by the MIAM procedure), and from the NTFILE and NMFILE user files.

You can select a list of entities not to be migrated.

You can assign a migration help MODE to the entities.

Filter of the model:

You can update the NTFILE file by indicating a list of entities not to be migrated to RPP.

This file has the following structure:

Pos.	Len.	Meaning
1	3	Library code
4	3	PAF type
7	30	Entity code

Filter of the entities to be generated:

A MODE option is created for the migration help.

It can take the following values:

N: No migration of the source code (the design is migrated)

S: Standard migration

You can update the MIAMNS file by assigning a migration help MODE to the Program and Screen entities that are not to undergo a standard migration.

This file has the following structure:

Pos.	Len.	Meaning
1	3	Library code

Pos.	Len.	Meaning
4	3	PAF type
7	30	Entity code
49	1	Migration help mode

The MIAMNS file that is produced by the MIAM procedure contains the Screens or Programs whose source code is not to be migrated (Screens with an N type of COBOL to generate, Screens with a Definition only or with Descriptions only, or Programs with a Definition only). It is concatenated with the NMFILE file and transformed into an indexed file.

When the command files of the MIAM procedures are created, the migration help MODE option is deduced from the indexed file. If the source of entity is not to be migrated, the entity is not included in the MIAM.txt files.

Sample MIA2 command line:

Z90GCO COECRAC9 MODE=S

## MIBR - Description of Steps

Loading the NR file: entities not retrieved: BVPACS9B

Code	Physical name	Type	Label
PAC7NT	User dir.: NTFIL	Input	Entities not retrieved, produced by user file
PAC7RN	User dir.: MIAMNR	Input	Entities not retrieved, produced by MIAM
PAC7NR	Tmp dir.: WNR	Output	Entities not retrieved, produced by MIAM, formatted

Loading entities not migrated and not standard: BVPACS9C

Code	Physical name	Type	Label
PAC7NM	User dir.: NMFILE	Input	Entities with a non-standard migration mode
PAC7NS	User dir.: MIAMNS	Input	Entities not migrated, produced by MIAM
PAC7NO	Tmp dir.: WNO	Output	Entities not migrated and not standard, formatted

Network extraction: BVPACS21

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PACGGR	Admin Database - DBase dir. : AR	Input	Administration Database data
PACGGN	Admin Database - DBase dir. : AN	Input	Administration Database index
PACGGU	Admin Database - DBase dir. : GU	Input	Administration Database users
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir. : AN	Input	Development Database index
PAC7AY	Database dir. : AY	Input	Development Database extension data
PAC7MB	User input	Input	User transactions
PAC7RQ	Tmp dir. : WQR	Output	Matching Entity/lowest Library
PAC7DD	User dir. : MIBRDDS21	Report	Error report

Processing of entities not retrieved: BVPACS9A

Code	Physical name	Type	Label
PAC7NR	Tmp dir.: WNR	Input	Entities not retrieved, produced by MIAM
PAC7QR	Tmp dir.: WQR	Input	Matching Entity / lowest level library
PAC7RQ	Tmp dir.: WRQ	Output	Matching Entity / refined library

Sort and formatting of command lines: BVPACS92

Code	Physical name	Type	Label
PAC7QR	Tmp dir.: WQR	Input	Matching Entity/Library
PAC7RQ	Tmp dir.: WRQ	Output	Matching Entity/Library after sort
PAC7MZ	Tmp dir.: WMB	Output	Command lines for PACX input
PAC7ER	User dir.: OUTDUPL	Output	List of duplicated entities
PAC7EE	Tmp dir.: WEE	Output	Entities not retrieved, produced by MIBR

Extraction: PACX

This step extracts the transactions according to the user input generated by the BVPACS92 program.

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7AN	Database dir. : AN	Input	Development Database index
PAC7AR	Database dir. : AR	Input	Development Database data
PAC7AY	Database dir. : AY	Input	Development Database extension data
PACGGN	Admin Database - DBase dir. : AN	Input	Administration Database index
PACGGR	Admin Database - DBase dir. : AR	Input	Administration Database data
PACGGU	Admin Database - DBase dir. : GU	Input	Administration Database users
PAC7MB	User input	Input	User input
PAC7MA	/dev/null	Input	Work file
PAC7ES	/dev/null	Input	Work file
PAC7BM	Tmp dir.: WBM	Input/Output	User input
PAC7MM	Tmp dir.: WMM	Input/Output	Work file
PAC7MJ	Tmp dir.: WMJ	Input/Output	Work file
PAC7TE	Tmp dir.: WTE	Input/Output	Work file
PAC7RE	Tmp dir.: WRE	Input/Output	Work file
PAC7RM	Tmp dir.: WRM	Input/Output	Work file
PAC7WD	Tmp dir.: WWD	Input/Output	Extracted transactions
SYSEXT	Tmp dir.: WSY	Input/Output	Work file
PAC7MV	Tmp dir.: WMV	Output	Work file
PAC7MR	Tmp dir.: WMR	Output	Work file
PAC7MX	Tmp dir.: WMX	Output	Non extracted entities (PACX)
PAC7GY	Tmp dir.: WGY	Output	Extracted transactions for UPDP
PAC7RQ	/dev/null	Output	Matching Entity/Library
PAC7TD	Tmp dir.: WTD	Output	Work file
PAC7UE	Tmp dir.: WUE	Output	Work file
PAC7CP	Tmp dir. : WCP	Output	Work file

Code	Physical name	Type	Label
PAC7IA	User dir.: PACXIA	Report	General printout of the program stream
PAC7DD	User dir.: PACXDD	Report	Errors on input transactions
PAC7ED	Tmp dir.: WED	Report	Extractions report
PAC7EE	User dir.: PACXEE	Report	Extractions report
PAC7EG	Tmp dir.: WEG	Report	Extractions report
PAC7EM	Tmp dir.: WEM	Report	Extractions report
PAC7EP	User dir.: PACXEP	Report	Extractions report
PAC7EQ	User dir.: PACXEQ	Report	Extractions report
PAC7EU	Tmp dir.: WEU	Report	Extractions report
PAC7EZ	User dir.: PACXEZ	Report	Extractions report

Return codes:

- 0: No error
- 4: Error in user input (detailed in PAC7EE) or in extractions (detailed in PAC7EZ)
- 8: Error in '\*' line (detailed in PAC7DD)

Batch migration: BVPACS94

Code	Physical name	Type	Label
PAC7RQ	Tmp dir.: WRQ	Input	Matching Entity/lowest Library
PAC7CS	User dir.: MIAMCSPE	Input	Special characters matching file
PAC7QR	User dir.: SPLITLIB	Output	Matching Entity/lowest Library

Batch migration : BVPACS96

Code	Physical name	Type	Label
PAC7NO	Tmp dir.: WNO	Input	Entities with migration mode
PAC7MB	User input	Input	User input
PAC7GY	Tmp dir.: WGY	Input	File resulting from PACX extraction
PAC7PM	User dir.: MIAMPMAC	Input	File with the list of Pgms to be transformed into PMS
PAC7CS	User dir.: MIAMCSPE	Input	Special characters matching file

Code	Physical name	Type	Label
PAC7TA	Tmp dir.: WTA	Output	File containing transactions grouped by type
PAC7MM	User dir.: INPUTMIMA	Output	File containing MIMA commands
PAC7MI	User dir.: MIA1	Output	File containing GCP commands
PAC7MO	User dir.: MIA2	Output	File containing GCO commands
PAC7MC	User dir.: MIA3	Output	File containing GGC commands
PAC7MS	User dir.: MIA4	Output	File containing GGS commands

Reorganization of transactions : BVPACS97

Code	Physical name	Type	Label
PAC7TA	Tmp dir.: WTA	Input	File containing transactions grouped by type
PAC7AT	Tmp dir.: WAT	Output	File with transactions grouped by type, sorted again

Sort and formatting of import file: BVPACS91

Code	Physical name	Type	Label
PAC7AT	Tmp dir.: WAT	Input	File with transactions grouped by type
PAC7TI	Tmp dir.: WTI	Output	File with transactions grouped by type, sorted again

Global sort : BVPACS98

Code	Physical name	Type	Label
PAC7AR	Database dir. : AR	Output	Development Database data
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7CP	Tmp dir. : WCP	Input	Counter of extracted entities
PAC7RQ	User dir.: SPLITLIB	Input	Matching Entity/Lowest level Library
PAC7TI	Tmp dir. : WAT	Input	File containing the sorted transactions
PAC7TG	User dir. : MIBR	Output	Result file of global sort

Excluded entities from migration : BVPACS9F

Code	Physical name	Type	Label
PAC7NT	User dir.: NTFILE	Input	Entities not retrieved, produced by user file
PAC7EE	Tmp dir.: WEE	Input	Entities not retrieved, produced by MIBR
PAC7NR	User dir.: MIAMNR	Input	Entities not retrieved, produced by MIAM
PAC7EX	User dir.: OUTEXCL	Output	List of excluded entities

## MIBR - Execution Script

```

#!/bin/sh
#@(#)VA Pac xxx xxx (R) MIBR BATCH PROCEDURE
# * -----
# *          VISUALAGE PACBASE
# *
# * -----
# *          BATCH MIGRATION
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MIBR"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
PAC7RN=~BVPENV PACS9B PAC7RN `dirname $PACUSERS`/MIAMNREP`
export PAC7RN
PAC7NT=~BVPENV PACS9B PAC7NT /dev/null`
export PAC7NT
PAC7NR=~BVPENV PACS9B PAC7NR $PACTMP/WNR`
export PAC7NR
BVPMSG 1009 "BVPACS9B"
rtspac BVPACS9B
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS9B"
BVPMSG 1025

```

```

BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7NS=`BVPENV PACS9C PAC7NS `dirname $PACUSERS`/MIAMMIG`
export PAC7NS
PAC7NM=`BVPENV PACS9C PAC7NM /dev/null`
export PAC7NM
PAC7NO=`BVPENV PACS9C PAC7NO $PACTMP/WNO`
export PAC7NO
BVPMSG 1009 "BVPACS9C"
rtspac BVPACS9C
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS9C"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7DD=`BVPENV PACS21 PAC7DD $PACUSERS/MIBRDDSDS21.txt`
export PAC7DD
PAC7MB=$PACINPUT
export PAC7MB
PAC7RQ=`BVPENV PACS21 PAC7RQ $PACTMP/WQR`
export PAC7RQ
BVPMSG 1009 "BVPACS21"
rtspac BVPACS21
RETURN=$?
case $RETURN in
0)
;;
4)
BVPMSG 1012 "BVPACS21"
;;
8)
BVPMSG 1012 "BVPACS21"
BVPMSG 1014
BVPERR
BVPRMTMP
exit $RETURN

```



```

;;
*)
  BVPMSG 1012 "BVPACS21"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
;;
esac
# -----
PAC7NR=~BVPENV PACS9A PAC7NR $PACTMP/WNR`
export PAC7NR
PAC7QR=~BVPENV PACS9A PAC7QR $PACTMP/WQR`
export PAC7QR
PAC7RQ=~BVPENV PACS9A PAC7RQ $PACTMP/WRQ`
export PAC7RQ
BVPMSG 1009 "BVPACS9A"
rtspac BVPACS9A
RETURN=$?
case $RETURN in
0)
  ;;
*)
  BVPMSG 1012 "BVPACS9A"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
;;
esac
# -----
PAC7QR=~BVPENV PACS92 PAC7QR $PACTMP/WRQ`
export PAC7QR
PAC7RQ=~BVPENV PACS92 PAC7RQ $PACTMP/WQR`
export PAC7RQ
PAC7ER=~BVPENV PACS92 PAC7ER `dirname $PACUSERS\`MIBRDUPL`
export PAC7ER
PAC7EE=~BVPENV PACS92 PAC7EE $PACTMP/WEE`
export PAC7EE
PAC7MZ=~BVPENV PACS92 PAC7MZ $PACTMP/WMB`
export PAC7MZ
BVPMSG 1009 "BVPACS92"
rtspac BVPACS92
RETURN=$?
case $RETURN in
0)
  ;;
*)
  BVPMSG 1012 "BVPACS92"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
;;
esac

```

```

# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7BM=`BVPENV PACX PAC7BM $PACTMP/WBM`
export PAC7BM
PAC7CP=`BVPENV PACX PAC7CP $PACTMP/WCP`
export PAC7CP
PAC7DD=`BVPENV PACX PAC7DD $PACUSERS/PACXDD.txt`
export PAC7DD
PAC7ED=`BVPENV PACX PAC7ED $PACTMP/WED`
export PAC7ED
PAC7EE=`BVPENV PACX PAC7EE $PACUSERS/PACXEE.txt`
export PAC7EE
PAC7EG=`BVPENV PACX PAC7EG $PACTMP/WEG`
export PAC7EG
PAC7EM=`BVPENV PACX PAC7EM $PACTMP/WEM`
export PAC7EM
PAC7EP=`BVPENV PACX PAC7EP $PACUSERS/PACXEP.txt`
export PAC7EP
PAC7EQ=`BVPENV PACX PAC7EQ $PACUSERS/PACXEQ.txt`
export PAC7EQ
PAC7ES=`BVPENV PACX PAC7ES /dev/null`
export PAC7ES
PAC7EU=`BVPENV PACX PAC7EU $PACTMP/WEU`
export PAC7EU
PAC7EZ=`BVPENV PACX PAC7EZ $PACUSERS/PACXEZ.txt`
export PAC7EZ
PAC7GY=`BVPENV PACX PAC7GY $PACTMP/WGY`
export PAC7GY
PAC7IA=`BVPENV PACX PAC7IA $PACUSERS/PACXIA.txt`
export PAC7IA
PAC7MA=`BVPENV PACX PAC7MA /dev/null`
export PAC7MA
PAC7MB=`BVPENV PACX PAC7MB $PACTMP/WMB`
export PAC7MB
PAC7MM=`BVPENV PACX PAC7MM $PACTMP/WMM`
export PAC7MM
PAC7MJ=`BVPENV PACX PAC7MJ $PACTMP/WMJ`
export PAC7MJ
PAC7MR=`BVPENV PACX PAC7MR $PACTMP/WMR`
export PAC7MR
PAC7MX=`BVPENV PACX PAC7MX $PACTMP/WMX`
export PAC7MX
PAC7RE=`BVPENV PACX PAC7RE $PACTMP/WRE`
export PAC7RE
PAC7RM=`BVPENV PACX PAC7RM $PACTMP/WRM`
export PAC7RM
PAC7RQ=`BVPENV PACX PAC7RQ /dev/null`
export PAC7RQ
PAC7TD=`BVPENV PACX PAC7TD $PACTMP/WTD`

```

```

export PAC7TD
PAC7TE=~BVPENV PACX PAC7TE $PACTMP/WTE~
export PAC7TE
PAC7UE=~BVPENV PACX PAC7UE $PACTMP/WUE~
export PAC7UE
PAC7WD=~BVPENV PACX PAC7WD $PACTMP/WWD~
export PAC7WD
SYSEXT=~BVPENV PACX SYSEXT $PACTMP/WSY~
export SYSEXT
BVPMSG 1009 "BVPACX"
rtspac BVPACX
RETURN=?
case $RETURN in
0)
;;
4)
BVPMSG 1012 "BVPACX"
;;
8)
BVPMSG 1012 "BVPACX"
BVPMSG 1014
BVPERR
BVPRMTMP
exit $RETURN
;;
*)
BVPMSG 1012 "BVPACX"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7CS=~BVPENV PACS94 PAC7CS ~dirname $PACUSERS~/MIAMCSPE~
export PAC7CS
PAC7RQ=~BVPENV PACS94 PAC7RQ $PACTMP/WQR~
export PAC7RQ
PAC7QR=~BVPENV PACS94 PAC7QR ~dirname $PACUSERS~/SPLITLIB~
export PAC7QR
BVPMSG 1009 "BVPACS94"
rtspac BVPACS94
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS94"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----

```

```

PAC7MB=$PACINPUT
export PAC7MB
PAC7GY=~BVPENV PACS96 PAC7GY $PACTMP/WGY`
export PAC7GY
PAC7NO=~BVPENV PACS96 PAC7NO $PACTMP/WNO`
export PAC7NO
PAC7CS=~BVPENV PACS96 PAC7CS `dirname $PACUSERS~/MIAMCSPE`
export PAC7CS
PAC7PM=~BVPENV PACS96 PAC7PM `dirname $PACUSERS~/MIAMPAC`
export PAC7PM
PAC7TA=~BVPENV PACS96 PAC7TA $PACTMP/WTA`
export PAC7TA
PAC7MM=~BVPENV PACS96 PAC7MM $PACUSERS/INPUTMIMA`
export PAC7MM
PAC7MI=~BVPENV PACS96 PAC7MI $PACUSERS/INPUTMIA1`
export PAC7MI
PAC7MO=~BVPENV PACS96 PAC7MO $PACUSERS/INPUTMIA2`
export PAC7MO
PAC7MC=~BVPENV PACS96 PAC7MC $PACUSERS/INPUTMIA3`
export PAC7MC
PAC7MS=~BVPENV PACS96 PAC7MS $PACUSERS/INPUTMIA4`
export PAC7MS
BVPMSG 1009 "BVPACS96"
rtspac BVPACS96
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS96"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7AT=~BVPENV PACS97 PAC7AT $PACTMP/WAT`
export PAC7AT
PAC7TA=~BVPENV PACS97 PAC7TA $PACTMP/WTA`
export PAC7TA
BVPMSG 1009 "BVPACS97"
rtspac BVPACS97
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS97"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac

```

```

# -----
PAC7AT=~BVPENV PACS91 PAC7AT $PACTMP/WAT`
export PAC7AT
PAC7TI=~BVPENV PACS91 PAC7TI $PACTMP/WTI`
export PAC7TI
BVPMSG 1009 "BVPACS91"
rtspac BVPACS91
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS91"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AR.ini
PAC7CP=~BVPENV PACS98 PAC7CP $PACTMP/WCP`
export PAC7CP
PAC7TI=~BVPENV PACS98 PAC7TI $PACTMP/WTI`
export PAC7TI
PAC7RQ=~BVPENV PACS98 PAC7RQ `dirname $PACUSERS~/SPLITLIB`
export PAC7RQ
PAC7TG=~BVPENV PACS98 PAC7TG $PACUSERS/`${BVPPROC}.ta2`
export PAC7TG
BVPMSG 1009 "BVPACS98"
rtspac BVPACS98
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS98"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7NR=$PAC7RN
export PAC7NR
PAC7NT=~BVPENV PACS9F PAC7NT /dev/null`
export PAC7NT
PAC7EE=~BVPENV PACS9F PAC7EE $PACTMP/WEE`
export PAC7EE
PAC7EX=~BVPENV PACS9F PAC7EX `dirname $PACUSERS~/MIBREXCL`
export PAC7EX
BVPMSG 1009 "BVPACS9F"
rtspac BVPACS9F

```

```

RETURN=$?
case $RETURN in
0)
  ;;
*)
  BVPMSG 1012 "BVPACS9F"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
  ;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## MIBJ - Migration of the journal

### MIBJ - Introduction

#### Principle

The procedure for the journal transactions migration (MIBJ) applies to the archived journal file of the repository. It formats files used by the migration tools.

- It makes it possible to select transactions in the journal in a range of dates, sessions, libraries, or in a given frozen session.
- It makes it possible to extract, from the repository, the entities of the selected transactions.

The extraction is performed in the library and session of the transaction, and in all its lower-level libraries where overrides of the definition or of an element in the entity folder are detected.

For each entity, the highest-level library in the repository where the entity is detected (source library) is indicated.

The created or modified entities are extracted, the deleted entities are listed.

### MIBJ - User input

A '\*' line with user code and password.

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password

A 'J' line with the extraction criteria :

Pos.	Len.	Value	Meaning
2	1	'J'	Line code
24	4	ssss	Beginning session number
28	4	ssss	End session number
32	8	ccyymmdd	Beginning date
40	8	ccyymmdd	End date
48	1		Version of the selected transactions
		' '	All sessions
		'Z'	Current session only
		'T'	Frozen session only
49	3	bbb	Code of the selected library
52	5	ssssT	Selection of T-type session (test version of frozen session: 'ssssT')

'O'-line: Control cards in front/back of the generation commands

Pos.	Len.	Value	Meaning
2	1	'O'	Line code
3	3	bbb	Generation command
			'GCP': Program
			'GCO': Dialog
			'GGC': Client
			'GGS': Server
7	2	be	Control card in front
9	2	af	Control card in back

### Principle of migration

For each journal transaction, entity definition or folder, the extraction is performed from the library and session of the transaction and from each library of each element of its folder, in the lower network.

### First step: journal analysis

For each transaction, definition or folder, an RQ record is formatted with the entity type, entity code, the transaction library and session.

When a user entity is processed, its meta entity is extracted.

A deleted entity is noted in the RQ file.

The list of frozen sessions is specified in the RQ file.

For each entity, the procedure searches in the repository for its highest-level library and all the libraries higher and lower than the journal transaction library where the entity is overridden (the multiple presence of the definition or the existence or one or more parts of its folder in a library different from the definition library).

The highest-level library is the reference library. In each lower library found, the folder of the entity will be created (next step).

For each library, a command line in 'C' view of the extracted entity, and an appropriate assign card are formatted and sorted.

All these lines make up the input file of the third step.

Second step: take into account the entities not retrieved

This step allows not to transfer in output all the entities that are listed in the PAC7NR file.

Then, it requires the presence of the MIAMNR and NTFILF files of the entities not retrieved. These files are provided by MIAM and by the user.

Third step: PACX extraction in 'C' view

The entities are extracted in the extraction library and in the higher-level libraries.

In each extraction library, an entity folder is created, inherited from its higher or equal level libraries.

Only the erroneous requests are included in the PAC7EZ report.

Split of libraries

The MIBR procedure saves the user requests of libraries split. They are taken into account in the MIBJ procedure. The SPLITLIB file, produced by MIBR, is used as input to MIBJ. It contains all the projects created by the libraries split and their hierarchy. Each entity extracted by MIBJ and present in the PAC7RQ



file is processed to verify whether it must be moved to a new project, i.e. if its target library is a library to split. If so, the new project specific to its entity type is assigned to this entity.

## MIBJ - Description of steps

Loading the NR file: entities not retrieved: BVPACS9B

Code	Physical name	Type	Label
PAC7NT	User dir.: NTFILE	Input	Entities not retrieved, produced by user file
PAC7RN	User dir.: MIAMNR	Input	Entities not retrieved, produced by MIAM
PAC7NR	Tmp dir.: WNR	Output	Entities not retrieved, produced by MIAM, formatted

Loading entities not migrated and not standard: BVPACS9C

Code	Physical name	Type	Label
PAC7NM	User dir.: NMFILE	Input	Entities with a non-standard migration mode
PAC7NS	User dir.: MIAMNS	Input	Entities not migrated, produced by MIAM
PAC7NO	Tmp dir.: WNO	Output	Entities not migrated and not standard, formatted

Journal extraction : BVPACSJR

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PACGGR	Admin Database - DBase dir. : AR	Input	Administration Database data
PACGGN	Admin Database - DBase dir. : AN	Input	Administration Database index
PACGGU	Admin Database - DBase dir. : GU	Input	Administration Database users
PAC7AR	DBase dir. : AR	Input	Development Database data
PAC7AN	DBase dir. : AN	Input	Development Database index
PAC7AY	DBase dir. : AY	Input	Development Database extension data
PAC7MB	User Input	Input	User transactions
PAC7PJ	Save dir. : PJ	Output	Archived transactions

Code	Physical name	Type	Label
PAC7RQ	Tmp dir. : WRQ	Output	Matching Entity/lowest Library
PAC7DD	User dir. : MIBJDDSJR	Report	Error report
PAC7EE	User dir. : MIBJEESJR	Report	Extractions report

override detection : BVPACS93

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7AR	DBase dir. : AR	Input	Development Database data
PAC7AN	DBase dir. : AN	Input	Development Database index
PAC7SL	User dir.: SPLITLIB	Input	Splitting of Libraries
PAC7RQ	Tmp dir. : WRQ	Input	Matching Entity/Library
PAC7QR	Tmp dir. : WQR	Output	Matching Entity/Library after sort

Processing of entities not retrieved: BVPACS9A

Code	Physical name	Type	Label
PAC7NR	Tmp dir.: WNR	Input	Entities not retrieved, produced by MIAM
PAC7QR	Tmp dir.: WQR	Input	Matching Entity / lowest level library
PAC7RQ	Tmp dir.: WRQ	Output	Matching Entity / refined library

Sort and formatting of command lines: BVPACS92

Code	Physical name	Type	Label
PAC7QR	Tmp dir.: WRQ	Input	Matching Entity/Library
PAC7RQ	Tmp dir.: WQR	Output	Matching Entity/Library after sort
PAC7MZ	Tmp dir.: WMB	Output	Command lines for PACX input
PAC7ER	Tmp dir.: NUL	Output	List of duplicated entities
PAC7EE	Tmp dir.: NUL	Output	Entities not retrieved, produced by MIBR

Extraction: PACX

This step extracts the transactions according to the user input generated by the BVPACS92 program.

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7AN	Database dir. : AN	Input	Development Database index
PAC7AR	Database dir. : AR	Input	Development Database data
PAC7AY	Database dir. : AY	Input	Development Database extension data
PACGGN	Admin Database - DBase dir. : AN	Input	Administration Database index
PACGGR	Admin Database - DBase dir. : AR	Input	Administration Database data
PACGGU	Admin Database - DBase dir. : GU	Input	Administration Database users
PAC7MB	User input	Input	User input
PAC7MA	/dev/null	Input	Work file
PAC7ES	/dev/null	Input	Work file
PAC7BM	Tmp dir.: WBM	Input/Output	User input
PAC7MM	Tmp dir.: WMM	Input/Output	Work file
PAC7MJ	Tmp dir.: WMJ	Input/Output	Work file
PAC7TE	Tmp dir.: WTE	Input/Output	Work file
PAC7RE	Tmp dir.: WRE	Input/Output	Work file
PAC7RM	Tmp dir.: WRM	Input/Output	Work file
PAC7WD	Tmp dir.: WWD	Input/Output	Extracted transactions
SYSEXT	Tmp dir.: WSY	Input/Output	Work file
PAC7MV	Tmp dir.: WMV	Output	Work file
PAC7MR	Tmp dir.: WMR	Output	Work file
PAC7MX	Tmp dir.: WMX	Output	Non extracted entities (PACX)
PAC7GY	Tmp dir.: WGY	Output	Extracted transactions for UPDP
PAC7RQ	/dev/null	Output	Matching Entity/Library
PAC7TD	Tmp dir.: WTD	Output	Work file
PAC7UE	Tmp dir.: WUE	Output	Work file
PAC7CP	Tmp dir. : WCP	Output	Work file

Code	Physical name	Type	Label
PAC7IA	User dir.: PACXIA	Report	General printout of the program stream
PAC7DD	User dir.: PACXDD	Report	Errors on input transactions
PAC7ED	Tmp dir.: WED	Report	Extractions report
PAC7EE	User dir.: PACXEE	Report	Extractions report
PAC7EG	Tmp dir.: WEG	Report	Extractions report
PAC7EM	Tmp dir.: WEM	Report	Extractions report
PAC7EP	User dir.: PACXEP	Report	Extractions report
PAC7EQ	User dir.: PACXEQ	Report	Extractions report
PAC7EU	Tmp dir.: WEU	Report	Extractions report
PAC7EZ	User dir.: PACXEZ	Report	Extractions report

Return codes:

- 0: No error
- 4: Error in user input (detailed in PAC7EE) or in extractions (detailed in PAC7EZ)
- 8: Error in '\*' line (detailed in PAC7DD)

Batch migration: BVPACS94

Code	Physical name	Type	Label
PAC7RQ	Tmp dir.: WRQ	Input	Matching Entity/lowest Library
PAC7CS	User dir.: MIAMCSPE	Input	Special characters matching file
PAC7QR	Tmp dir.: WQR	Output	Matching Entity/lowest Library

Batch migration : BVPACS96

Code	Physical name	Type	Label
PAC7NO	Tmp dir.: WNO	Input	Entities with migration mode
PAC7MB	User input	Input	User input
PAC7GY	Tmp dir.: WGY	Input	File resulting from PACX extraction
PAC7PM	User dir.: MIAMPMAC	Input	File with the list of Pgms to be transformed into PMS
PAC7CS	User dir.: MIAMCSPE	Input	Special characters matching file

Code	Physical name	Type	Label
PAC7TA	Tmp dir.: WTA	Output	File containing transactions grouped by type
PAC7MM	User dir.: INPUTMIMA	Output	File containing command MIMA
PAC7MI	User dir.: MIA1	Output	File containing GCP commands
PAC7MO	User dir.: MIA2	Output	File containing GCO commands
PAC7MC	User dir.: MIA3	Output	File containing GGC commands
PAC7MS	User dir.: MIA4	Output	File containing GGS commands

#### Reorganization of transactions : BVPACS97

Code	Physical name	Type	Label
PAC7TA	Tmp dir.: WTA	Input	File containing transactions grouped by type
PAC7AT	Tmp dir.: WAT	Output	File with transactions grouped by type, sorted again

#### Sort and formatting of import file: BVPACS91

Code	Physical name	Type	Label
PAC7AT	Tmp dir.: WAT	Input	File with transactions grouped by type
PAC7TI	Tmp dir.: WTI	Output	File with transactions grouped by type, sorted again

#### Tri global : BVPACS98

Code	Physical name	Type	Label
PAC7AR	Database dir.: AR	Output	Development Database data
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PAC7RQ	Tmp dir.: WQR	Input	Matching Entity/lowest Library
PAC7TI	Tmp dir.: WAT	Input	File with transactions grouped by type, sorted again
PAC7TG	User dir.: MIBJ	Output	Result file with global sort

### **MIBJ - Execution Script**

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) MIBJ BATCH PROCEDURE
# * -----
```

```

# *      VISUALAGE PACBASE
# *
# * -----
# *      ARCHIVED JOURNAL MIGRATION
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MIBJ"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
PAC7RN=`BVPENV PACS9B PAC7RN `dirname $PACUSERS`/MIAMNREP`
export PAC7RN
PAC7NT=`BVPENV PACS9B PAC7NT /dev/null`
export PAC7NT
PAC7NR=`BVPENV PACS9B PAC7NR $PACTMP/WNR`
export PAC7NR
BVPMSG 1009 "BVPACS9B"
rtspac BVPACS9B
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS9B"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7NS=`BVPENV PACS9C PAC7NS `dirname $PACUSERS`/MIAMNMIG`
export PAC7NS
PAC7NM=`BVPENV PACS9C PAC7NM /dev/null`
export PAC7NM
PAC7NO=`BVPENV PACS9C PAC7NO $PACTMP/WNO`
export PAC7NO
BVPMSG 1009 "BVPACS9C"
rtspac BVPACS9C
RETURN=$?
case $RETURN in
0)

```

```

;;
*)
BVPMSG 1012 "BVPACS9C"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/PACSAVPJ.ini
PAC7DD=~BVPENV PACSJR PAC7DD $PACUSERS/MIBJDDSJR.txt`
export PAC7DD
PAC7EE=~BVPENV PACSJR PAC7EE $PACUSERS/MIBJEESJR.txt`
export PAC7EE
PAC7MB=$PACINPUT
export PAC7MB
PAC7PJ=~BVPENV PACSJR PAC7PJ $PACSAVPJ`
export PAC7PJ
PAC7RQ=~BVPENV PACSJR PAC7RQ $PACTMP/WRQ`
export PAC7RQ
BVPMSG 1009 "BVPACSJR"
rtspac BVPACSJR
RETURN=?
case $RETURN in
0)
;;
4)
BVPMSG 1012 "BVPACSJR"
;;
8)
BVPMSG 1012 "BVPACSJR"
BVPMSG 1014
BVPERR
BVPRMTMP
exit $RETURN
;;
*)
BVPMSG 1012 "BVPACSJR"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini

```

```

. $PACDIR/config/$1/PAC7AR.ini
PAC7RQ=~BVPENV PACS93 PAC7RQ $PACTMP/WRQ`
export PAC7RQ
PAC7QR=~BVPENV PACS93 PAC7QR $PACTMP/WQR`
export PAC7QR
PAC7SL=~BVPENV PACS93 PAC7SL `dirname $PACUSERS`/SPLITLIB`
export PAC7SL
BVPMSG 1009 "BVPACS93"
rtspac BVPACS93
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS93"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7NR=~BVPENV PACS9A PAC7NR $PACTMP/WNR`
export PAC7NR
PAC7QR=~BVPENV PACS9A PAC7QR $PACTMP/WQR`
export PAC7QR
PAC7RQ=~BVPENV PACS9A PAC7RQ $PACTMP/WRQ`
export PAC7RQ
BVPMSG 1009 "BVPACS9A"
rtspac BVPACS9A
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS9A"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7QR=~BVPENV PACS92 PAC7QR $PACTMP/WQR`
export PAC7QR
PAC7RQ=~BVPENV PACS92 PAC7RQ $PACTMP/WRQ`
export PAC7RQ
PAC7MZ=~BVPENV PACS92 PAC7MZ $PACTMP/WMB`
export PAC7MZ
PAC7ER=~BVPENV PACS92 PAC7ER /dev/null`
export PAC7ER
PAC7EE=~BVPENV PACS92 PAC7EE /dev/null`
export PAC7EE
BVPMSG 1009 "BVPACS92"
rtspac BVPACS92

```



```

RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS92"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7BM=~BVPENV PACX PAC7BM $PACTMP/WBM`
export PAC7BM
PAC7CP=~BVPENV PACX PAC7CP $PACTMP/WCP`
export PAC7CP
PAC7DD=~BVPENV PACX PAC7DD $PACUSERS/PACXDD.txt`
export PAC7DD
PAC7ED=~BVPENV PACX PAC7ED $PACTMP/WED`
export PAC7ED
PAC7EE=~BVPENV PACX PAC7EE $PACUSERS/PACXEE.txt`
export PAC7EE
PAC7EG=~BVPENV PACX PAC7EG $PACTMP/WEG`
export PAC7EG
PAC7EM=~BVPENV PACX PAC7EM $PACTMP/WEM`
export PAC7EM
PAC7EP=~BVPENV PACX PAC7EP $PACUSERS/PACXEP.txt`
export PAC7EP
PAC7EQ=~BVPENV PACX PAC7EQ $PACUSERS/PACXEQ.txt`
export PAC7EQ
PAC7ES=~BVPENV PACX PAC7ES /dev/null`
export PAC7ES
PAC7EU=~BVPENV PACX PAC7EU $PACTMP/WEU`
export PAC7EU
PAC7EZ=~BVPENV PACX PAC7EZ $PACUSERS/PACXEZ.txt`
export PAC7EZ
PAC7GY=~BVPENV PACX PAC7GY $PACTMP/WGY`
export PAC7GY

PAC7IA=~BVPENV PACX PAC7IA $PACUSERS/PACXIA.txt`
export PAC7IA
PAC7MA=~BVPENV PACX PAC7MA /dev/null`
export PAC7MA
PAC7MB=~BVPENV PACX PAC7MB $PACTMP/WMB`
export PAC7MB
PAC7MM=~BVPENV PACX PAC7MM $PACTMP/WMM`
export PAC7MM

```

```

PAC7MJ=~BVPENV PACX PAC7MJ $PACTMP/WMJ`
export PAC7MJ
PAC7MR=~BVPENV PACX PAC7MR $PACTMP/WMR`
export PAC7MR
PAC7MX=~BVPENV PACX PAC7MX $PACTMP/WMX`
export PAC7MX
PAC7RE=~BVPENV PACX PAC7RE $PACTMP/WRE`
export PAC7RE
PAC7RM=~BVPENV PACX PAC7RM $PACTMP/WRM`
export PAC7RM
PAC7RQ=~BVPENV PACX PAC7RQ /dev/null`
export PAC7RQ
PAC7TD=~BVPENV PACX PAC7TD $PACTMP/WTD`
export PAC7TD
PAC7TE=~BVPENV PACX PAC7TE $PACTMP/WTE`
export PAC7TE
PAC7UE=~BVPENV PACX PAC7UE $PACTMP/WUE`
export PAC7UE
PAC7WD=~BVPENV PACX PAC7WD $PACTMP/WWD`
export PAC7WD
SYSEXT=~BVPENV PACX SYSEXT $PACTMP/WSY`
export SYSEXT
BVPMSG 1009 "BVPACX"
rtspac BVPACX
RETURN=$?
case $RETURN in
0)
;;
4)
BVPMSG 1012 "BVPACX"
;;
8)
BVPMSG 1012 "BVPACX"
BVPMSG 1014
BVPERR
BVPRMTMP
exit $RETURN
;;
*)
BVPMSG 1012 "BVPACX"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7CS=~BVPENV PACS94 PAC7CS `dirname $PACUSERS`/MIAMCSPE`
export PAC7CS
PAC7RQ=~BVPENV PACS94 PAC7RQ $PACTMP/WRQ`
export PAC7RQ
PAC7QR=~BVPENV PACS94 PAC7QR $PACTMP/WQR`
export PAC7QR
BVPMSG 1009 "BVPACS94"
rtspac BVPACS94

```

```

RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS94"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7MB=$PACINPUT
export PAC7MB
PAC7GY=~BVPENV PACS96 PAC7GY $PACTMP/WGY~
export PAC7GY
PAC7NO=~BVPENV PACS96 PAC7NO $PACTMP/WNO~
export PAC7NO
PAC7CS=~BVPENV PACS96 PAC7CS ~dirname $PACUSERS~/MIAMCSPE~
export PAC7CS
PAC7PM=~BVPENV PACS96 PAC7PM ~dirname $PACUSERS~/MIAMPAC~
export PAC7PM
PAC7TA=~BVPENV PACS96 PAC7TA $PACTMP/WTA~
export PAC7TA
PAC7MM=~BVPENV PACS96 PAC7MM $PACUSERS/INPUTMIMA~
export PAC7MM
PAC7MI=~BVPENV PACS96 PAC7MI $PACUSERS/INPUTMIA1~
export PAC7MI
PAC7MO=~BVPENV PACS96 PAC7MO $PACUSERS/INPUTMIA2~
export PAC7MO
PAC7MC=~BVPENV PACS96 PAC7MC $PACUSERS/INPUTMIA3~
export PAC7MC
PAC7MS=~BVPENV PACS96 PAC7MS $PACUSERS/INPUTMIA4~
export PAC7MS
BVPMSG 1009 "BVPACS96"
rtspac BVPACS96
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS96"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7AT=~BVPENV PACS97 PAC7AT $PACTMP/WAT~
export PAC7AT
PAC7TA=~BVPENV PACS97 PAC7TA $PACTMP/WTA~
export PAC7TA
BVPMSG 1009 "BVPACS97"

```

```

rtspac BVPACS97
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS97"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7AT=`BVPENV PACS91 PAC7AT $PACTMP/WAT`
export PAC7AT
PAC7TI=`BVPENV PACS91 PAC7TA $PACTMP/WTI`
export PAC7TI
BVPMSG 1009 "BVPACS91"
rtspac BVPACS91
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS91"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
PAC7CP=`BVPENV PACS98 PAC7CP $PACTMP/WCP`
export PAC7CP
PAC7TI=`BVPENV PACS98 PAC7TI $PACTMP/WTI`
export PAC7TI
PAC7RQ=`BVPENV PACS98 PAC7RQ $PACTMP/WQR`
export PAC7RQ
PAC7TG=`BVPENV PACS98 PAC7TG $PACUSERS/${BVPPROC}.ta2`
export PAC7TG
BVPMSG 1009 "BVPACS98"
rtspac BVPACS98
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS98"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;

```

```
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN
```

---

## MIBU - User migration

### MIBU - Introduction

#### Principle

The user migration procedure (MIBU) opens the migration to your specific needs.

For example, in a Program, you can modify the selection of Segments in a Data Structure call.

A TA2 file is created from an external user file that contains the appropriate modifications or creations. The TA2 file contains a complete folder for each entity.

The TA2 file that is created by MIBU must be imported after a complete import with the MIBR procedure. The new folder will replace the existing folder. The import is run in batch mode with the 'importJournal' command lines.

### MIBU - User input

#### User file

The user file must have a UPDP format. It can come from an EXTR or PAF extraction for example.

Constraints: The folder of each entity must be complete in a given context (definition, and folder elements (description, comments)). An assign line must be created for each context.

When a Segment is created, its Data Structure must be created too (if it does not already exist in RPP).

If a Segment is modified, only the Segment records must be supplied.

If a Screen is created, the Dialog, the common area and the help Screens must also be created (if they do not already exist in RPP).

If a Screen is modified, only the Screen records must be supplied.

If a Library is created, you must supply the LIBDEF (definition) and LIBNET (hierarchical order) records.

### Processing of the user file

For each record, definition or folder, an RQ record is formatted with the entity type and code, the Library and session of the record. The RQ file and the UPDP-formatted user file (sorted and reformatted) will constitute the TA2 migration file.

### Libraries splitting

The MIBR procedure saves the result of the Libraries splitting requested by the user in a file. This result is then taken into account by MIBU.

The file that is produced by MIBR will constitute an input to MIBU. It contains all the projects that are produced by the Libraries splitting, sorted according to their hierarchy. Each entity extracted by MIBU and present in the PAC7RQ file will be moved to another project if its target Library is a Library to be split. The new project that is specific to its entity type is then assigned to it.

## **MIBU - Description of steps**

### RQ file creation : BVPACS9D

Code	Physical name	Type	Label
PAC7GY	User input	Input	User File
PAC7QR	Tmp dir.: WQR	Output	Matching Entity/Library

### Sort of RQ file : BVPACS9E

Code	Physical name	Type	Label
PAC7SL	User dir.: SPLITLIB	Input	Splitting of Libraries
PAC7QR	Tmp dir.: WQR	Input	Matching Entity/Library
PAC7RQ	Tmp dir.: WRQ	Output	Matching Entity/Library after sort

### Batch migration: BVPACS94

Code	Physical name	Type	Label
PAC7RQ	Tmp dir.: WRQ	Input	Matching Entity/lowest Library
PAC7CS	User dir.: MIAMCSPE	Input	Special characters matching file
PAC7QR	Tmp dir.: WPAC7QR	Output	Matching Entity/lowest Library

### Batch migration : BVPACS96

<b>Code</b>	<b>Physical name</b>	<b>Type</b>	<b>Label</b>
PAC7MB	Tmp dir.: NUL	Input	User input
PAC7GY	User input	Input	File resulting from PACX extraction
PAC7PM	User dir.: MIAMPMAC	Input	File with the list of Pgms to be transformed into PMS
PAC7CS	User dir.: MIAMCSPE	Input	Special characters matching file
PAC7TA	Tmp dir.: WTA	Output	File containing transactions grouped by type
PAC7MM	Tmp dir.: NUL	Output	File containing MIMA commands
PAC7MI	Tmp dir.: NUL	Output	File containing GCP commands
PAC7MO	Tmp dir.: NUL	Output	File containing GCO commands
PAC7MC	Tmp dir.: NUL	Output	File containing GGC commands
PAC7MS	Tmp dir.: NUL	Output	File containing GGS commands

### Reorganization of transactions : BVPACS97

<b>Code</b>	<b>Physical name</b>	<b>Type</b>	<b>Label</b>
PAC7TA	Tmp dir.: WTA	Input	File containing transactions grouped by type
PAC7AT	Tmp dir.: WAT	Output	File with transactions grouped by type, sorted again

### Sort and formatting of import file: BVPACS91

<b>Code</b>	<b>Physical name</b>	<b>Type</b>	<b>Label</b>
PAC7AT	Tmp dir.: WAT	Input	File with transactions grouped by type
PAC7TI	Tmp dir.: WTI	Output	File with transactions grouped by type, sorted again

### Global sort : BVPACS98

<b>Code</b>	<b>Physical name</b>	<b>Type</b>	<b>Label</b>
PAC7AR	Database dir.: AR	Output	Development Database data
PAC7AE	System - Skel dir.: AE	Input	Error messages
PAC7CP	Tmp dir.: WCP	Input	Counter of extracted entities

Code	Physical name	Type	Label
PAC7RQ	Tmp dir.: WQR	Input	Matching Entity/lowest Library
PAC7TI	Tmp dir.: WTI	Input	File with transactions type, sorted again
PAC7TG	User dir.: MIBU	Output	Result file with global sort

## MIBU - Execution Script

```

#!/bin/sh
#@(#)VA Pac xxx xxx (R) MIBU BATCH PROCEDURE
# * -----
# *     VISUALAGE PACBASE
# *
# * -----
# *     BATCH MIGRATION
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MIBU"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
PAC7GY=$PACINPUT
export PAC7GY
PAC7QR=~BVPENV PACS9D PAC7QR $PACTMP/WQR`
export PAC7QR
BVPMSG 1009 "BVPACS9D"
rtspac BVPACS9D
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS9D"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac

```



```

# -----
PAC7QR=~BVPENV PACS9E PAC7QR $PACTMP/WQR~
export PAC7QR
PAC7SL=~BVPENV PACS9E PAC7SL ~dirname $PACUSERS~/SPLITLIB~
export PAC7SL
PAC7RQ=~BVPENV PACS9E PAC7RQ $PACTMP/WRQ~
export PAC7RQ
BVPMSG 1009 "BVPACS9E"
rtspac BVPACS9E
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS9E"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7CS=~BVPENV PACS94 PAC7CS ~dirname $PACUSERS~/MIAMCSPE~
export PAC7CS
PAC7RQ=~BVPENV PACS94 PAC7RQ $PACTMP/WRQ~
export PAC7RQ
PAC7QR=~BVPENV PACS94 PAC7QR $PACTMP/WQR~
export PAC7QR
BVPMSG 1009 "BVPACS94"
rtspac BVPACS94
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS94"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7GY=$PACINPUT
export PAC7GY
PAC7MB=~BVPENV PACS96 PAC7MB /dev/null~
export PAC7MB
PAC7CS=~BVPENV PACS96 PAC7CS ~dirname $PACUSERS~/MIAMCSPE~
export PAC7CS
PAC7PM=~BVPENV PACS96 PAC7PM /dev/null~
export PAC7PM
PAC7TA=~BVPENV PACS96 PAC7TA $PACTMP/WTA~
export PAC7TA
PAC7MM=~BVPENV PACS96 PAC7MM /dev/null~
export PAC7MM

```

```

PAC7MI=`BVPENV PACS96 PAC7MI /dev/null`
export PAC7MI
PAC7MO=`BVPENV PACS96 PAC7MO /dev/null`
export PAC7MO
PAC7MC=`BVPENV PACS96 PAC7MC /dev/null`
export PAC7MC
PAC7MS=`BVPENV PACS96 PAC7MS /dev/null`
export PAC7MS
BVPMSG 1009 "BVPACS96"
rtspac BVPACS96
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS96"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7AT=`BVPENV PACS97 PAC7AT $PACTMP/WAT`
export PAC7AT
PAC7TA=`BVPENV PACS97 PAC7TA $PACTMP/WTA`
export PAC7TA
BVPMSG 1009 "BVPACS97"
rtspac BVPACS97
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS97"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7AT=`BVPENV PACS91 PAC7AT $PACTMP/WAT`
export PAC7AT
PAC7TI=`BVPENV PACS91 PAC7TI $PACTMP/WTI`
export PAC7TI
BVPMSG 1009 "BVPACS91"
rtspac BVPACS91
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS91"
BVPMSG 1025

```

```

BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AR.ini
PAC7CP=~BVPENV PACS98 PAC7CP /dev/null`
export PAC7CP
PAC7TI=~BVPENV PACS98 PAC7TI $PACTMP/WTI`
export PAC7TI
PAC7RQ=~BVPENV PACS98 PAC7RQ $PACTMP/WQR`
export PAC7RQ
PAC7TG=~BVPENV PACS98 PAC7TG $PACUSERS/${BVPPROC}.ta2`
export PAC7TG
BVPMSG 1009 "BVPACS98"
rtspac BVPACS98
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACS98"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## MIMA - Migration of the Macros

### MIMA - Introduction

This procedure allows to simultaneously generate and tag one or more Macrostructures.

You can indicate the input of this procedure in two ways:

- Either indicate a '\*' line (user code, password, and Library) as input, as well as one or more GMC command lines for each Macrostructure to be generated.
- Or use the INPUTMIMA file produced by the MIBA, MIBR or MIBJ procedures. This file contains one or more GCM command lines for each Macrostructure to be generated. It may also contain GMO command lines if high priority Macrostructures have been generated (1).

Caution: You must not modify the command lines of the INPUTMIMA file.

(1) These Macrostructures, which are on 6 characters (Screen code), will be generated on 8 characters with an 'SP' suffix (SCREENSP). They will contain only the N-type lines with the relative positions.

### MIMA - User Input

A '\*' line with the user code, password and Library code is required.

Pos.	Lon.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	3	bbb	Library code
22	4	nnnn	Session number (blank=current ses.)
26	1	'T'	Session status if frozen session

Then you must enter a line for the GCM command, and enter parameters (optional).

Pos.	Lon.	Value	Meaning
2	1	'Z'	Line code
3	2	'90'	Printing order criterion (1)
5	4	'GCM '	Command code (1)
9	6	cccccc	Macrostructure code (1)
15	1	'C'	Selection indicator (1)
16	1	'1'	Option to be printed (1)
28	1		Presence of a continuation line
		' '	No continuation line
		'*'	Continuation line
31	50		Command parameters

(1) Parameters to be entered on the first line only, not on the continuation lines.

This procedure also allows to replace unknown special characters in a Macrostructure code with other characters or to replace unauthorized words (Windows reserved words for example) with other codes. The matching table is the PAC7CS file used as input to the BVPACP87 program (optional file, created by the MIAM procedure and updated by the client if necessary).

## MIMA - Description of Steps

Generation/Print commands : BVPACA10

Code	Physical name	Type	Label
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7AY	Database dir.: AY	Input	Development Database extension
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin. Database - DBase dir.: AN	Input	Administration Database index
PACGGR	Admin. Database - DBase dir.: AR	Input	Administration Database data
PACGGU	Admin. Database - DBase dir.: GU	Input	Administration Database users
PAC7ME	User Input	Input	User transactions
PAC7MV	Tmp dir.: WMV	Output	Update transactions
PAC7MG	Tmp dir.: WMG	Output	Generation/Print commands

GCM specific preparation : BVPACA30

Code	Physical name	Type	Label
PAC7MG	Tmp dir.: WMG	Input	Generation/Print commands
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7AE	System - Skel dir.: AE	Input	Error messages
PAC7JG	Tmp dir.: WKC	Output	Extractor command
PAC7KU	Tmp dir.: WKU	Output	Report

Macro generation: BVPACMM

Code	Physical name	Type	Label
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PACGGR	Admin. Database - DBase dir.: AN	Input	Administration Database data
PACGGN	Admin. Database - DBase dir.: AR	Input	Administration Database index
PACGGU	Admin. Database - DBase dir.: GU	Input	Administration Database users

Code	Physical name	Type	Label
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7AY	Database dir.: AY	Input	Development Database extension data
PAC7SC	System - Skel. dir.: SC	Input	Generation skeleton
PAC7CS	User dir.: MIAMCSPE	Input	Special characters matching file
PAC7EP	Tmp dir.: WEP	Output	Work file
PAC7GI	Tmp dir.: WGI	Output	Work file
PAC7GP	Tmp dir.: WGP	Output	Work file
PAC7JG	Tmp dir.: WJG	Output	Work file
PAC7KC	Tmp dir.: WKC	Output	Work file
PAC7KP	Tmp dir.: WKP	Output	Work file
PAC7RQ	Tmp dir.: WRQ	Output	Work file
PAC7AT	Tmp dir.: WAT	Output	Work file
PAC7TA	Tmp dir.: WTA	Output	Work file
PAC7TT	User dir.: MIMA	Output	Generated Macros file
PAC7WA	Tmp dir.: WWA	Output	Work file
PAC7WC	Tmp dir.: WWC	Output	Work file
PAC7W1	Tmp dir.: WW1	Output	Work file
PAC7W2	Tmp dir.: WW2	Output	Work file
PAC7W3	Tmp dir.: WW3	Output	Work file
PAC7W4	Tmp dir.: WW4	Output	Work file
PAC7W5	Tmp dir.: WW5	Output	Work file
PAC7IA	User dir.: MIMAIID	Report	General printout of the program stream

## MIMA - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) MIMA BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      MACRO-STRUCTURES MIGRATION
# *
# * -----
# *
# Parameter control
```

```

. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MIMA"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7ME=$PACINPUT
export PAC7ME
PAC7MG=~BVPENV PACA10 PAC7MG $PACTMP/WMG~
export PAC7MG
PAC7MV=~BVPENV PACA10 PAC7MV $PACTMP/WMV~
export PAC7MV
BVPMSG 1009 "BVPACA10"
rtspac BVPACALL BVPACA10
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACA10"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
PAC7JG=~BVPENV PACA30 PAC7JG $PACTMP/WKC~
export PAC7JG
PAC7KU=~BVPENV PACA30 PAC7KU $PACTMP/WKU~
export PAC7KU
PAC7MG=~BVPENV PACA30 PAC7MG $PACTMP/WMG~
export PAC7MG
BVPMSG 1009 "BVPACA30"
rtspac BVPACALL BVPACA30
RETURN=$?

```

```

case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACA30"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/SQUEL.ini
PAC7CS=`BVPENV PACMM PAC7CS `dirname $PACUSERS`~/MIAMCSPE`
export PAC7CS
PAC7EP=`BVPENV PACMM PAC7EP $PACTMP/WEP`
export PAC7EP
PAC7GI=`BVPENV PACMM PAC7GI $PACTMP/WGI`
export PAC7GI
PAC7GP=`BVPENV PACMM PAC7KC $PACTMP/WGP`
export PAC7GP
PAC7JG=`BVPENV PACMM PAC7JG $PACTMP/WJG`
export PAC7JG
PAC7KC=`BVPENV PACMM PAC7KC $PACTMP/WKC`
export PAC7KC
PAC7KP=`BVPENV PACMM PAC7KP $PACTMP/WKP`
export PAC7KP
PAC7RQ=`BVPENV PACMM PAC7RQ $PACTMP/WRQ`
export PAC7RQ
PAC7AT=`BVPENV PACMM PAC7AT $PACTMP/WAT`
export PAC7AT
PAC7TA=`BVPENV PACMM PAC7TA $PACTMP/WTA`
export PAC7TA
PAC7TT=`BVPENV PACMM PAC7TT $PACUSERS/MIMA.cb1gen`
export PAC7TT
PAC7WA=`BVPENV PACMM PAC7WA $PACTMP/WWA`
export PAC7WA
PAC7WC=`BVPENV PACMM PAC7WC $PACTMP/WWC`
export PAC7WC
PAC7W1=`BVPENV PACMM PAC7W1 $PACTMP/WW1`
export PAC7W1
PAC7W2=`BVPENV PACMM PAC7W2 $PACTMP/WW2`
export PAC7W2
PAC7W3=`BVPENV PACMM PAC7W3 $PACTMP/WW3`
export PAC7W3
PAC7W4=`BVPENV PACMM PAC7W4 $PACTMP/WW4`
export PAC7W4
PAC7W5=`BVPENV PACMM PAC7W5 $PACTMP/WW5`

```



```

export PAC7W5
PAC7IA=`BVPENV PACMM PAC7IA $PACUSERS/MIMAIA.txt`
export PAC7IA
BVPMSG 1009 "BVPACMM"
rtspac BVPACMM
RETURN=$?
case $RETURN in
12)
  BVPMSG 1012 "BVPACMM"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
;;
*)
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## MITH - Migration of the Thesaurus

### MITH - Introduction

#### Principle

This procedure is a utility program that migrates the thesaurus in batch mode. After the extraction of the entities in inter-library mode in the repository, an XML-formatted file that contains the thesaurus will be exported to the SDP.

### MITH - User Input

The user input of the MITH procedure is identical to that of the PACX procedure, with the following specific values:

One '\*' line as follows:

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password
19	3	***	Extraction inter-library code
22	4	nnnn	Session number (Blank=current session)
26	1	'T'	Session status if frozen session
29	4	EXLI	Extractor code
34	1	'1'	Formatting for UPDP (PAF)

Pos.	Len.	Value	Meaning
55	1	'1'	Convergence plan flag

The EXLI extraction is executed in inter-library, because the thesaurus entities are created in inter-library within the repository.

The GY file resulting from PACX extraction is then filtered, the thesaurus records are selected and a new XML-formatted file is created.

## MITH - Description of Steps

Extraction: PACX

This step extracts transactions according to user input.

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7AN	Database dir. : AN	Input	Development Database index
PAC7AR	Database dir. : AR	Input	Development Database data
PAC7AY	Database dir. : AY	Input	Development Database extension data
PACGGN	Admin Database - DBase dir. : AN	Input	Administration Database index
PACGGR	Admin Database - DBase dir. : AR	Input	Administration Database data
PACGGU	Admin Database - DBase dir. : GU	Input	Administration Database users
PAC7MB	User input	Input	User input
PAC7MA	/dev/null	Input	Work file
PAC7ES	/dev/null	Input	Work file
PAC7BM	Tmp dir.: WBM	Input/Output	User input
PAC7MM	Tmp dir.: WMM	Input/Output	Work file
PAC7MJ	Tmp dir.: WMJ	Input/Output	Work file
PAC7TE	Tmp dir.: WTE	Input/Output	Work file
PAC7RE	Tmp dir.: WRE	Input/Output	Work file
PAC7RM	Tmp dir.: WRM	Input/Output	Work file
PAC7WD	Tmp dir.: WWD	Input/Output	Extracted transactions
SYSEXT	Tmp dir.: WSY	Input/Output	Work file
PAC7MV	Tmp dir.: WMV	Output	Work file

Code	Physical name	Type	Label
PAC7MR	Tmp dir.: WMR	Output	Work file
PAC7MX	Tmp dir.: WMX	Output	Entities not extracted (PACX)
PAC7GY	Tmp dir.: : WGY	Output	Extracted transactions for UPDP
PAC7RQ	/dev/null	Output	Matching Entity/initial Library
PAC7TD	Tmp dir.: WTD	Output	Work file
PAC7UE	Tmp dir.: WUE	Output	Work file
PAC7CP	/dev/null	Output	
PAC7IA	User dir.: PACXIA	Report	General printout of the program stream
PAC7DD	User dir.: PACXDD	Report	Errors on input transactions
PAC7ED	Tmp dir.: WED	Report	Extraction report
PAC7EE	User dir.: PACXEE	Report	Extraction report
PAC7EG	Tmp dir.: WEG	Report	Extraction report
PAC7EM	Tmp dir.: WEM	Report	Extraction report
PAC7EP	User dir.: PACXEP	Report	Extraction report
PAC7EQ	User dir.: PACXEQ	Report	Extraction report
PAC7EU	Tmp dir.: WEU	Report	Extraction report
PAC7EZ	User dir.: PACXEZ	Report	Extraction report

Return codes:

- 0: No error
- 4: Error in user input (detailed in PAC7EE) or in extractions (detailed in PAC7EZ)
- 8: Error in '\*' line (detailed in PAC7DD)

Selection of thesaurus transactions and formatting of an XML file :  
BVPACTH1

Code	Physical name	Type	Label
PAC7GY	Tmp dir.: WGY	Input	File resulting from PACX extraction
PAC7RQ	User dir.: MITHFILE	Output	Thesaurus file in XML format

## MITH - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) MITH BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      THESAURUS  MIGRATION
# *
# * -----
# *
# Parameter control
# . $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MITH"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
# . $PACDIR/config/$1/PAC7AE.ini
# . $PACDIR/config/$1/PAC7AN.ini
# . $PACDIR/config/$1/PAC7AR.ini
# . $PACDIR/config/$1/PAC7AY.ini
# . $PACDIR/config/$1/PACGGN.ini
# . $PACDIR/config/$1/PACGGR.ini
# . $PACDIR/config/$1/PACGGU.ini
PAC7BM=`BVPENV PACX PAC7BM $PACTMP/WBM`
export PAC7BM
PAC7CP=`BVPENV PACX PAC7CP /dev/null`
export PAC7CP
PAC7DD=`BVPENV PACX PAC7DD $PACUSERS/PACXDD.txt`
export PAC7DD
PAC7ED=`BVPENV PACX PAC7ED $PACTMP/WED`
export PAC7ED
PAC7EE=`BVPENV PACX PAC7EE $PACUSERS/PACXEE.txt`
export PAC7EE
PAC7EG=`BVPENV PACX PAC7EG $PACTMP/WEG`
export PAC7EG
PAC7EM=`BVPENV PACX PAC7EM $PACTMP/WEM`
export PAC7EM
PAC7EP=`BVPENV PACX PAC7EP $PACUSERS/PACXEP.txt`
export PAC7EP
PAC7EQ=`BVPENV PACX PAC7EQ $PACUSERS/PACXEQ.txt`
export PAC7EQ
PAC7ES=`BVPENV PACX PAC7ES /dev/null`
export PAC7ES
PAC7EU=`BVPENV PACX PAC7EU $PACTMP/WEU`
```

```

export PAC7EU
PAC7EZ=~BVPENV PACX PAC7EZ $PACUSERS/PACXEZ.txt^
export PAC7EZ
PAC7GY=~BVPENV PACX PAC7GY $PACTMP/WGY^
export PAC7GY
PAC7IA=~BVPENV PACX PAC7IA $PACUSERS/PACXIA.txt^
export PAC7IA
PAC7MA=~BVPENV PACX PAC7MA /dev/null^
export PAC7MA
PAC7MB=$PACINPUT
export PAC7MB
PAC7MM=~BVPENV PACX PAC7MM $PACTMP/WMM^
export PAC7MM
PAC7MJ=~BVPENV PACX PAC7MJ $PACTMP/WMJ^
export PAC7MJ
PAC7MR=~BVPENV PACX PAC7MR $PACTMP/WMR^
export PAC7MR
PAC7MX=~BVPENV PACX PAC7MX $PACTMP/WMX^
export PAC7MX
PAC7RE=~BVPENV PACX PAC7RE $PACTMP/WRE^
export PAC7RE
PAC7RM=~BVPENV PACX PAC7RM $PACTMP/WRM^
export PAC7RM
PAC7RQ=~BVPENV PACX PAC7RQ /dev/null^
export PAC7RQ
PAC7TD=~BVPENV PACX PAC7TD $PACTMP/WTD^
export PAC7TD
PAC7TE=~BVPENV PACX PAC7TE $PACTMP/WTE^
export PAC7TE
PAC7UE=~BVPENV PACX PAC7UE $PACTMP/WUE^
export PAC7UE
PAC7WD=~BVPENV PACX PAC7WD $PACTMP/WWD^
export PAC7WD
SYSEXT=~BVPENV PACX SYSEXT $PACTMP/WSY^
export SYSEXT
BVPMSG 1009 "BVPACX"
rtspac BVPACX
RETURN=$?
case $RETURN in
0)
;;
4)
BVPMSG 1012 "BVPACX"
;;
8)
BVPMSG 1012 "BVPACX"
BVPMSG 1014
BVPERR
BVPRTMP
exit $RETURN
;;
*)
BVPMSG 1012 "BVPACX"
BVPMSG 1025
BVPERR

```

```

BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7GY=`BVPENV PACTH1 PAC7GY $PACTMP/WGY`
export PAC7GY
PAC7RQ=`BVPENV PACTH1 PAC7RQ $PACUSERS/MITHFILE`
export PAC7RQ
BVPMSG 1009 "BVPACTH1"
rtspac BVPACTH1
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACTH1"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## MIUS - Migration of the Users

### MIUS - Introduction

#### Principle

Transformation of users into create user.

This procedure is a utility that transforms Users into Create users. After the extraction of the users declared in the administration database, a file that contains the characteristics of each user is created. This file contains a list of user IDs, email addresses, names, license IDs and administration level, separated by commas. This file is used as input to the RTC reptools tool.

### MIUS - User Input

The user input is the one of the PACX procedure with the following specific values:

One '\*' line as follows:

Pos.	Len.	Value	Meaning
2	1	'*'	Line code

Pos.	Len.	Value	Meaning
3	8	uuuuuuuu	User code
11	8	pppppppp	User password
19	3	***	Extraction inter-library code
22	4		Session number (Blank=current)
26	1		Session status
29	4	EXTR	Extractor code
34	1	'1'	Formatting for UPDP (PAF)
55	1	'1'	Convergence plan flag

A command line:

Pos.	Len.	Value	Meaning
2	1	'W'	Line code
3	1	'1'	Line number
4	2	'EX'	
6	1		Library selection code
		'C'	Library and its upper-libraries
7	33	1USE	Users Meta-entity
40	4		Extraction type (1):
		'ALL '	Entity and used entities

The EXTR extraction is executed in inter-libraries, in the Administration Database.

The GY file resulting from PACX is then filtered, the users records are selected and a new file, used as input to the RTC repotools tool, is created.

Note:

The commas delimit the fields. When they are inside a text field, they are replaced with semi-colons in order to be compatible with RTC.

## **MIUS - Description of Steps**

### Extraction : PACX

This step extracts transactions according to user input.

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7AN	Admin Database - DBase dir. : AN	Input	Administration Database index
PAC7AR	Admin Database - DBase dir. : AR	Input	Administration Database data
PAC7AY	Admin Database - DBase dir. : AY	Input	Administration Database extension data
PACGGN	Admin Database - DBase dir. : AN	Input	Administration Database index
PACGGR	Admin Database - DBase dir. : AR	Input	Administration Database data
PACGGU	Admin Database - DBase dir. : GU	Input	Administration Database users
PAC7PJ	Admin Database - Save dir. : PJ	Input	Archived transactions
PAC7MB	User input	Input	User input
PAC7BM	Tmp dir. : WBM	Input/Output	User input
PAC7MM	Tmp dir. : WMM	Input/Output	
SYSEXT	Tmp dir. : SY	Input/Output	Work file
PAC7MJ	Tmp dir. : WMJ	Input/Output	
PAC7TE	Tmp dir. : WTE	Input/Output	
PAC7RE	Tmp dir. : WRE	Input/Output	
PAC7RM	Tmp dir. : WRM	Input/Output	
PAC7RQ	Tmp dir. : WRQ	Input/Output	Work file
PAC7WD	Tmp dir. : WWD	Input/Output	Extracted transactions
PAC7MV	Tmp dir. : WMV	Input/Output	
PAC7MR	Tmp dir. : WMR	Input/Output	
PAC7TD	Tmp dir. : WTD	Input/Output	
PAC7MX	Tmp dir. : WMX	Input/Output	
PAC7GY	Tmp dir. : WGY	Output	Extracted transactions for UPGP
PAC7UE	Tmp dir. : WUE	Input/Output	
PAC7IA	User dir. : PACXIA	Report	General printout of the program stream
PAC7DD	User dir. : PACXDD	Report	Errors on input transactions
PAC7ED	Tmp dir. : WED	Report	Extraction report



Code	Physical name	Type	Label
PAC7EE	User dir. : PACXEE	Report	Extraction report
PAC7EG	Tmp dir. : WEG	Report	Extraction report
PAC7EM	Tmp dir. : WEM	Report	Extraction report
PAC7EP	User dir. : PACXEP	Report	Extraction report
PAC7EQ	User dir. : PACXEQ	Report	Extraction report
PAC7ES	/dev/null		
PAC7EU	Tmp dir. : WEU	Report	Extraction report
PAC7EZ	User dir. : PACXEZ	Report	Extraction report
PAC7MA	/dev/null		
PAC7CP	/dev/null		

Return codes:

- 0 : No error
- 4 : Error in user input (detailed in PAC7EE) or in the extraction
- 8 : Error in '\*' line (detailed in PAC7DD)

Transformation of users into create user : BVPLTYAU

Code	Physical name	Type	Label
PAC7GY	Tmp dir. : WGY	Input	File resulting from PACX extraction
PAC7US	User dir. : MIUSFILE	Output	Users file: input of repotools tool

## MIUS - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) MIUS BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      USERS  MIGRATION
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MIUS"
echo "
=====
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
```

```

BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7BM=~BVPENV PACX PAC7BM $PACTMP/WBM`
export PAC7BM
PAC7CP=~BVPENV PACX PAC7CP /dev/null`
export PAC7CP
PAC7DD=~BVPENV PACX PAC7DD $PACUSERS/PACXDD.txt`
export PAC7DD
PAC7ED=~BVPENV PACX PAC7ED $PACTMP/WED`
export PAC7ED
PAC7EE=~BVPENV PACX PAC7EE $PACUSERS/PACXEE.txt`
export PAC7EE
PAC7EG=~BVPENV PACX PAC7EG $PACTMP/WEG`
export PAC7EG
PAC7EM=~BVPENV PACX PAC7EM $PACTMP/WEM`
export PAC7EM
PAC7EP=~BVPENV PACX PAC7EP $PACUSERS/PACXEP.txt`
export PAC7EP
PAC7EQ=~BVPENV PACX PAC7EQ $PACUSERS/PACXEQ.txt`
export PAC7EQ
PAC7ES=~BVPENV PACX PAC7ES /dev/null`
export PAC7ES
PAC7EU=~BVPENV PACX PAC7EU $PACTMP/WEU`
export PAC7EU
PAC7EZ=~BVPENV PACX PAC7EZ $PACUSERS/PACXEZ.txt`
export PAC7EZ
PAC7GY=~BVPENV PACX PAC7GY $PACTMP/WGY`
export PAC7GY
PAC7IA=~BVPENV PACX PAC7IA $PACUSERS/PACXIA.txt`
export PAC7IA
PAC7MA=~BVPENV PACX PAC7MA /dev/null`
export PAC7MA
PAC7MB=$PACINPUT
export PAC7MB
PAC7MM=~BVPENV PACX PAC7MM $PACTMP/WMM`
export PAC7MM
PAC7MJ=~BVPENV PACX PAC7MJ $PACTMP/WMJ`
export PAC7MJ
PAC7MR=~BVPENV PACX PAC7MR $PACTMP/WMR`
export PAC7MR
PAC7MX=~BVPENV PACX PAC7MX $PACTMP/WMX`
export PAC7MX

```

```

PAC7RE=~BVPENV PACX PAC7RE $PACTMP/WRE`
export PAC7RE
PAC7RM=~BVPENV PACX PAC7RM $PACTMP/WRM`
export PAC7RM
PAC7RQ=~BVPENV PACX PAC7RQ $PACTMP/WRQ`
export PAC7RQ
PAC7TD=~BVPENV PACX PAC7TD $PACTMP/WTD`
export PAC7TD
PAC7TE=~BVPENV PACX PAC7TE $PACTMP/WTE`
export PAC7TE
PAC7UE=~BVPENV PACX PAC7UE $PACTMP/WUE`
export PAC7UE
PAC7WD=~BVPENV PACX PAC7WD $PACTMP/WWD`
export PAC7WD
SYSEXT=~BVPENV PACX SYSEXT $PACTMP/WSY`
export SYSEXT
BVPMSG 1009 "BVPACX"
rtspac BVPACX
RETURN=?
case $RETURN in
0)
;;
4)
BVPMSG 1012 "BVPACX"
;;
8)
BVPMSG 1012 "BVPACX"
BVPMSG 1014
BVPERR
BVPRMTMP
exit $RETURN
;;
*)
BVPMSG 1012 "BVPACX"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7GY=~BVPENV PLTYAU PAC7GY $PACTMP/WGY`
export PAC7GY
PAC7US=~BVPENV PLTYAU PAC7US $PACUSERS/MIUSFILE`
export PAC7US
BVPMSG 1009 "BVPLTYAU"
rtspac BVPLTYAU
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPLTYAU"
BVPMSG 1025
BVPERR

```

```

BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMMSG 1010
BVPRMTMP
exit $RETURN

```

---

## MILA - Migration of Administration Error Messages

### MILA - Introduction

#### Principle

Extraction of the customized error messages of the administration database.

This procedure is a utility that formats an error messages file. This file contains all the standard error messages. An extraction of customized error messages in the Administration Database allows to override the corresponding standard error messages. The output file contains all the error messages for all languages, each set is separated by a comment line that indicates the language.

### MILA - User Input

The user input is the one of the PACX procedure with the following specific values:

One '\*' line as follows:

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password
19	3	***	Extraction inter-library code
22	4		Session number (Blank=current)
26	1		Session status
29	4	EXTR	Extractor code
34	1	'1'	Formatting for UPDP (PAF)
55	1	'1'	Convergence plan flag

A command line:

Pos.	Len.	Value	Meaning
2	1	'W'	Line code
3	1	'1'	Line number
4	2	'EX'	
6	1		Library selection code
		'C'	Library and its upper-libraries
7	33	YATTABLES	User entity of administration tables

The EXTR extraction is executed in inter-library mode, in the Administration Database.

The GY file resulting from PACX is then filtered, the error messages records are selected (-D02 description) and formatted again in a PAC7LI file.

## MILA - Description of Steps

### Extraction : PACX

This step extracts transactions according to user input.

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7AN	Admin Database - DBase dir. : AN	Input	Administration Database index
PAC7AR	Admin Database - DBase dir. : AR	Input	Administration Database data
PAC7AY	Admin Database - DBase dir. : AY	Input	Administration Database extension data
PACGGN	Admin Database - DBase dir. : AN	Input	Administration Database index
PACGGR	Admin Database - DBase dir. : AR	Input	Administration Database data
PACGGU	Admin Database - DBase dir. : GU	Input	Administration Database users
PAC7PJ	Admin Database - Save dir. : PJ	Input	Archived transactions
PAC7MB	User input	Input	User input
PAC7BM	Tmp dir. : WBM	Input/Output	User input
PAC7MM	Tmp dir. : WMM	Input/Output	
SYSEXT	Tmp dir. : SY	Input/Output	Work file

Code	Physical name	Type	Label
PAC7MJ	Tmp dir. : WMJ	Input/Output	
PAC7TE	Tmp dir. : WTE	Input/Output	
PAC7RE	Tmp dir. : WRE	Input/Output	
PAC7RM	Tmp dir. : WRM	Input/Output	
PAC7RQ	Tmp dir. : WRQ	Input/Output	Work file
PAC7WD	Tmp dir. : WWD	Input/Output	Extracted transactions
PAC7MV	Tmp dir. : WMV	Input/Output	
PAC7MR	Tmp dir. : WMR	Input/Output	
PAC7TD	Tmp dir. : WTD	Input/Output	
PAC7MX	Tmp dir. : WMX	Input/Output	
PAC7GY	Tmp dir. : WGY	Output	Extracted transactions for UPGP
PAC7UE	Tmp dir. : WUE	Input/Output	
PAC7IA	User dir. : PACXIA	Report	General printout of the program stream
PAC7DD	User dir. : PACXDD	Report	Errors on input transactions
PAC7ED	Tmp dir. : WED	Report	Extraction report
PAC7EE	User dir. : PACXEE	Report	Extraction report
PAC7EG	Tmp dir. : WEG	Report	Extraction report
PAC7EM	Tmp dir. : WEM	Report	Extraction report
PAC7EP	User dir. : PACXEP	Report	Extraction report
PAC7EQ	User dir. : PACXEQ	Report	Extraction report
PAC7ES	NUL		
PAC7EU	Tmp dir. : WEU	Report	Extraction report
PAC7EZ	User dir. : PACXEZ	Report	Extraction report
PAC7MA	/dev/null		
PAC7CP	/dev/null		

Return codes:

- 0 : No error
- 4 : Error in user input (detailed in PAC7EE) or in the extraction
- 8 : Error in '\*' line (detailed in PAC7DD)

Formatting of error messages: BVPLTYAT

Code	Physical name	Type	Label
PAC7GY	Tmp dir. : WGY	Input	File resulting from PACX extraction
PAC7LI	User dir. : MILAFILE	Output	Users file: input of repotools tool

## MILA - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) MILA BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      ERROR LABEL MIGRATION
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MILA"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7BM=~BVPENV PACX PAC7BM $PACTMP/WBM`
export PAC7BM
PAC7CP=~BVPENV PACX PAC7CP /dev/null`
export PAC7CP
PAC7DD=~BVPENV PACX PAC7DD $PACUSERS/PACXDD.txt`
export PAC7DD
PAC7ED=~BVPENV PACX PAC7ED $PACTMP/WED`
export PAC7ED
PAC7EE=~BVPENV PACX PAC7EE $PACUSERS/PACXEE.txt`
export PAC7EE
PAC7EG=~BVPENV PACX PAC7EG $PACTMP/WEG`
export PAC7EG
PAC7EM=~BVPENV PACX PAC7EM $PACTMP/WEM`
```

```

export PAC7EM
PAC7EP=~BVPENV PACX PAC7EP $PACUSERS/PACXEP.txt~
export PAC7EP
PAC7EQ=~BVPENV PACX PAC7EQ $PACUSERS/PACXEQ.txt~
export PAC7EQ
PAC7ES=~BVPENV PACX PAC7ES /dev/null~
export PAC7ES
PAC7EU=~BVPENV PACX PAC7EU $PACTMP/WEU~
export PAC7EU
PAC7EZ=~BVPENV PACX PAC7EZ $PACUSERS/PACXEZ.txt~
export PAC7EZ
PAC7GY=~BVPENV PACX PAC7GY $PACTMP/WGY~
export PAC7GY
PAC7IA=~BVPENV PACX PAC7IA $PACUSERS/PACXIA.txt~
export PAC7IA
PAC7MA=~BVPENV PACX PAC7MA /dev/null~
export PAC7MA
PAC7MB=$PACINPUT
export PAC7MB
PAC7MM=~BVPENV PACX PAC7MM $PACTMP/WMM~
export PAC7MM
PAC7MJ=~BVPENV PACX PAC7MJ $PACTMP/WMJ~
export PAC7MJ
PAC7MR=~BVPENV PACX PAC7MR $PACTMP/WMR~
export PAC7MR
PAC7MX=~BVPENV PACX PAC7MX $PACTMP/WMX~
export PAC7MX
PAC7RE=~BVPENV PACX PAC7RE $PACTMP/WRE~
export PAC7RE
PAC7RM=~BVPENV PACX PAC7RM $PACTMP/WRM~
export PAC7RM
PAC7RQ=~BVPENV PACX PAC7RQ $PACTMP/WRQ~
export PAC7RQ
PAC7TD=~BVPENV PACX PAC7TD $PACTMP/WTD~
export PAC7TD
PAC7TE=~BVPENV PACX PAC7TE $PACTMP/WTE~
export PAC7TE
PAC7UE=~BVPENV PACX PAC7UE $PACTMP/WUE~
export PAC7UE
PAC7WD=~BVPENV PACX PAC7WD $PACTMP/WWD~
export PAC7WD
SYSEXT=~BVPENV PACX SYSEXT $PACTMP/WSY~
export SYSEXT
BVPMSG 1009 "BVPACX"
rtspac BVPACX
RETURN=$?
case $RETURN in
0)
;;
4)
BVPMSG 1012 "BVPACX"
;;
8)
BVPMSG 1012 "BVPACX"
BVPMSG 1014

```



```

BVPERR
BVPRMTMP
exit $RETURN
;;
*)
BVPMSG 1012 "BVPACX"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
PAC7GY=`BVPENV PLTYAT PAC7GY $PACTMP/WGY`
export PAC7GY
PAC7LI=`BVPENV PLTYAT PAC7LI $PACUSERS/MILAFILE`
export PAC7LI
BVPMSG 1009 "BVPLTYAT"
rtspac BVPLTYAT
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPLTYAT"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## MERT - Transformation of Model entities

### MERT - Introduction

#### Principle

The Model entities (M entities with an Object-, Relation- or Functional Integrity Constraint-type) are not retrieved into RPP. These entities are used in the Pacdesign module only. They may be used to store other information that is not managed with Pacbase.

This procedure extracts the Model entities and transforms them into User entities that can be exported to the SDP.

This procedure produces a file that contains the update transactions to be used as input to the UPDP procedure.

This procedure is not required.

## MERT - User input

A '\*' with the following information:

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	3	***	Inter-Library extraction
22	4	nnnn	Session number (blank=current)
26	1	'T'	Session status if frozen session

This procedure processes the following lines only:

- Definition of the Merise entities (Object, Relationship, and FIC).
- Comment lines: -GC.
- Properties call lines: -CE.
- Comment lines: -GC under -CE.
- Merise objects call lines: -CM.
- Comment lines: -GC under -CM.

The following lines are not processed:

- Input Aid call lines in -GC.
- Merise entities cross-reference lines.

### Transformation of the Model entities into User Entities

- Merise objects are transformed into User Entities with a \$9O call type.
- Merise relationships are transformed into User Entities with a \$9R call type.
- Merise FICs are transformed into User Entities with a \$9C call type.

## MERT - Description of steps

### Definition of the new Meta Entities

- Create the new Meta Entities by running the VINS procedure with the BVPMETHOD file.
- Run the MERT procedure.
- Run the UPDP procedure to update the Pacbase database with the new User Entities created by the MERT procedure.

- Apply the new format to the Pacdesign User Entities associated with the model used by running the VINS procedure with the BVPMERF2 file, if the model used is MERISE.
- Reorganize the database with the REOR procedure to take the index file into account.  
CAUTION: After this update, the modified entities cannot be used anymore by Pacdesign.

You can obtain the BVPMETHOD and BVPMERF2 file from the VisualAge Pacbase support.

#### Extraction of entities: PAFMER

Code	Physical name	Type	Label
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin database - DBase dir.: AN	Input	Administration Database index
PACGGR	Admin database - DBase dir.: AR	Input	Administration Database data
PACGGU	Admin database - DBase dir.: GU	Input	Administration Database users
PAC7AR	DBase dir.: AR	Input	Development Database data
PAC7AN	DBase dir.: AN	Input	Development Database index
PAC7MB	User input	Input	User input
SYSPAF	Tmp dir.: WSY	Input/Output	PAF indexed file
PAC7UR	Tmp dir.: WUR	Input/Output	Work file
PAC7EJ	User dir.: MERT1EJ	Report	Check lists
PAC7EI	User dir.: MERT1ET	Report	PAF access report
PAC7DD	User dir.: MERT1DD	Report	Error list

#### Writing of entities: BVPTUMER

Code	Physical name	Type	Label
PAC7UR	Tmp. dir.: WUR	Input	Work file
PAC7GY	User dir.: MERTGY	Output	Merise entities file
PAC7EJ	User dir.: MERT2EJ	Report	Integrity check lists
PAC7ET	User dir.: MERT2ET	Report	PAF access file
PAC7DD	User dir.: MERT2DD	Report	Error list

## MERT - Execution JCL

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) MERT BATCH PROCEDURE
# * -----
# *     VISUALAGE PACBASE
# *
# * -----
# *           - MERISE ENTITY TRANSFORMATION -
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MERT"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7MB=$PACINPUT
export PAC7MB
SYSPAF=`BVPENV PAFMER SYSPAF $PACTMP/WSY`
export SYSPAF
PAC7UR=`BVPENV PAFMER PAC7UR $PACTMP/WUR`
export PAC7UR
PAC7EJ=`BVPENV PAFMER PAC7EJ $PACUSERS/MERT1EJ.txt`
export PAC7EJ
PAC7ET=`BVPENV PAFMER PAC7ET $PACUSERS/MERT1ET.txt`
export PAC7ET
PAC7DD=`BVPENV PAFMER PAC7DD $PACUSERS/MERT1DD.txt`
export PAC7DD
BVPMSG 1009 "BVPAFMER"
rtspac BVPAFMER
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPAFMER"
BVPMSG 1025
BVPERR
BVPRMTMP
```

```

        exit $RETURN
        ;;
    esac
# -----
PAC7UR=~BVPENV PTUMER PAC7UR $PACTMP/WUR`
export PAC7UR
PAC7GY=~BVPENV PTUMER PAC7GY $PACUSERS/MERTGY`
export PAC7GY
PAC7EJ=~BVPENV PTUMER PAC7EJ $PACUSERS/MERT2EJ.txt`
export PAC7EJ
PAC7ET=~BVPENV PTUMER PAC7ET $PACUSERS/MERT2ET.txt`
export PAC7ET
PAC7DD=~BVPENV PTUMER PAC7DD $PACUSERS/MERT2DD.txt`
export PAC7DD
BVPMSG 1009 "BVPTUMER"
rtspac BVPTUMER
RETURN=$?
case $RETURN in
0)
    ;;
*)
    BVPMSG 1012 "BVPTUMER"
    BVPMSG 1025
    BVPERR
    BVPRMTMP
    exit $RETURN
    ;;
esac
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## MIAX - Optional control cards

You must define commands in the Generation Manager to split the generated Programs, Screens, Servers, or "COPY" clauses into separate files and into directories that you specify.

### Definition of the command lines IN FRONT.

These lines contain the character strings specific to these lines, but also information on the file to be produced: its name, extension, and the directory in which it is expected.

The first command line IN FRONT must contain:

Value	Meaning
*++++*	Delimiter, always in columns 1 to 7
PGMCOD	Name of the file to be produced
ext	Extension, on 3 characters maximum

Value	Meaning
INTCOD	Name of the entity in the repository

The values are separated by a blank.

Example:

```
***** MYPROG cb1 INTPRG
```

The second command line IN FRONT must contain:

Value	Meaning
*&&&&&&*	Delimiter, always in columns 1 to 7
path	Path for the writing of files

The values are separated by a blank.

Example:

```
*&&&&&& /vapac/cobol
```

Another set of lines must be created for the maps. To do so, duplicate the preceding set of lines and change the extension.

## MIA1 - Program Generation

### MIA1 - Introduction

This procedure generates the programs in two files: a file that contains the generated COBOL code and another file that contains the control COBOL code.

It generates the micropatterns which do not come from Macros.

The generation is carried out without line numbers.

### MIA1 - User Input

A '\*' line with the user code, password and Library code is required.

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	3	bbb	Library code

You must then specify a GCP command line as described in the input of the GPRT procedure for each program to be generated.

In this migration procedure, errors on user input line are not printed.

## MIA1 - Description of Steps

Generation/Print commands : BVPACA10

Code	Physical name	Type	Label
PAC7AR	DBase dir.: AR	Input	Development Database data
PAC7AN	DBase dir.: AN	Input	Development Database index
PAC7AY	DBase dir.: AY	Input	Development Database extension
PAC7AJ	DBase dir.: AJ	Input	Development Database journal
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin Database - DBase dir.: AN	Input	Administration Database index
PACGGR	Admin Database - DBase dir.: AR	Input	Administration Database data
PACGGU	Admin Database - DBase dir.: GU	Input	Administration Database users
PAC7ME	User Input	Input	User transactions
PAC7MV	Tmp dir.: WMV	Output	Update transactions
PAC7MG	Tmp dir.: WMG	Output	Generation/Print commands

Dispatch of command lines : BVPACA20

Code	Physical name	Type	Label
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin. Database - DBase dir.: AN	Input	Administration Database index
PACGGR	Admin. Database - DBase dir.: AR	Input	Administration Database data
PACGGU	Admin. Database - DBase dir.: GU	Input	Administration Database users
PACGGK	Admin. Database - DBase dir.: GK	Input/Output	Generation rights
PAC7JG	Tmp dir.: WJG	Output	Extractor command

Code	Physical name	Type	Label
PAC7KF	Tmp dir.: WKF	Output	Work file
PAC7MG	Tmp dir.: WMG	Input	Generation/Print commands
PAC7W1	/dev/null	Input/ Output	Work file
PAC7KU	Tmp dir.: WKU	Output	Output report

Program generation : BVPACMM1

Code	Physical name	Type	Label
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PACGGR	Admin. Database - DBase dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - DBase dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - DBase dir.: GU	Input	Administration Database users
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7AY	Database dir.: AY	Input	Development Database extension data
PAC7SC	System - Skel. dir.: SC	Input	Generation skeleton
PAC7EP	Tmp dir.: WEP	Output	Work file
PAC7GI	Tmp dir.: NUL	Output	Work file
PAC7GP	Tmp dir.: WGP	Output	Work file
PAC7JG	Tmp dir.: WJG	Output	Work file
PAC7KC	Tmp dir.: WKC	Output	Work file
PAC7KP	Tmp dir.: WKP	Output	Work file
PAC7G1	Tmp dir.: WG1	Output	Work file
PAC7G2	User dir.: COBOL_MIA1	Output	C9 COBOL file
PAC7G3	User dir.: CONTROL_COBOL_MIA1	Output	Control COBOL file
PAC7WB	Tmp dir.: WWB	Output	Work file
PAC7WC	Tmp dir.: WWC	Output	Work file
PAC7WM	Tmp dir.: WWM	Output	Work file
PAC7WP	Tmp dir.: WWP	Output	Work file



Code	Physical name	Type	Label
PAC7W1	Tmp dir.: WW1	Output	Work file
PAC7W2	Tmp dir.: WW2	Output	Work file
PAC7W3	Tmp dir.: WW3	Output	Work file
PAC7W4	Tmp dir.: WW4	Output	Work file
PAC7W5	Tmp dir.: WW5	Output	Work file
PAC7W6	Tmp dir.: WW6	Output	Work file
PAC7CA	Tmp dir.: WCA	Output	Work file
PAC7CM	Tmp dir.: WCM	Output	Work file
PAC7IA	User dir.: MIA1IA	Report	General printout of the program stream

## MIA1 - Execution Script

```

#!/bin/sh
#@(#)VA Pac xxx xxx (R) MIA1 BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      PROGRAM GENERATION
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MIA1"
echo "======"
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7ME=$PACINPUT
export PAC7ME

```

```

PAC7MG=`BVPENV PACA10 PAC7MG $PACTMP/WMG`
export PAC7MG
PAC7MV=`BVPENV PACA10 PAC7MV $PACTMP/WMV`
export PAC7MV
BVPMSG 1009 "BVPACA10"
rtspac BVPACALL BVPACA10
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACA10"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGK.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7JG=`BVPENV PACA20 PAC7JG $PACTMP/WKC`
export PAC7JG
PAC7KF=`BVPENV PACA20 PAC7KF $PACTMP/WKF`
export PAC7KF
PAC7KU=`BVPENV PACA20 PAC7KU $PACTMP/WKU`
export PAC7KU
PAC7MG=`BVPENV PACA20 PAC7MG $PACTMP/WMG`
export PAC7MG
PAC7W1=`BVPENV PACA20 PAC7W1 /dev/null`
export PAC7W1
BVPMSG 1009 "BVPACA20"
rtspac BVPACALL BVPACA20
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACA20"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini

```

```

. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/SQUEL.ini
PAC7CA=~BVPENV PACMM1 PAC7CA $PACTMP/WCA`
export PAC7CA
PAC7CM=~BVPENV PACMM1 PAC7CM $PACTMP/WCM`
export PAC7CM
PAC7EP=~BVPENV PACMM1 PAC7EP $PACTMP/WEP`
export PAC7EP
PAC7GI=~BVPENV PACMM1 PAC7GI /dev/null`
export PAC7GI
PAC7GP=~BVPENV PACMM1 PAC7GP $PACTMP/WGP`
export PAC7GP
PAC7JG=~BVPENV PACMM1 PAC7JG $PACTMP/WJG`
export PAC7JG
PAC7KC=~BVPENV PACMM1 PAC7KC $PACTMP/WKC`
export PAC7KC
PAC7KP=~BVPENV PACMM1 PAC7KP $PACTMP/WKP`
export PAC7KP
PAC7G1=~BVPENV PACMM1 PAC7G1 $PACTMP/WG1`
export PAC7G1
PAC7G2=~BVPENV PACMM1 PAC7G2 $PACUSERS/COBOL_MIA1.txt`
export PAC7G2
PAC7G3=~BVPENV PACMM1 PAC7G3 $PACUSERS/CONTROL_COBOL_MIA1.txt`
export PAC7G3
PAC7WB=~BVPENV PACMM1 PAC7WB $PACTMP/WWB`
export PAC7WB
PAC7WC=~BVPENV PACMM1 PAC7WC $PACTMP/WWC`
export PAC7WC
PAC7WM=~BVPENV PACMM1 PAC7WM $PACTMP/WWM`
export PAC7WM
PAC7WP=~BVPENV PACMM1 PAC7WP $PACTMP/WWP`
export PAC7WP
PAC7W1=~BVPENV PACMM1 PAC7W1 $PACTMP/WW1`
export PAC7W1
PAC7W2=~BVPENV PACMM1 PAC7W2 $PACTMP/WW2`
export PAC7W2
PAC7W3=~BVPENV PACMM1 PAC7W3 $PACTMP/WW3`
export PAC7W3
PAC7W4=~BVPENV PACMM1 PAC7W4 $PACTMP/WW4`
export PAC7W4
PAC7W5=~BVPENV PACMM1 PAC7W5 $PACTMP/WW5`
export PAC7W5
PAC7W6=~BVPENV PACMM1 PAC7W6 $PACTMP/WW6`
export PAC7W6
PAC7IA=~BVPENV PACMM1 PAC7IA $PACUSERS/MIA1IA.txt`
export PAC7IA
BVPMSG 1009 "BVPACMM1"
rtspac BVPACMM1
RETURN=$?
case $RETURN in
12)
BVPMSG 1012 "BVPACMM1"
BVPMSG 1025

```

```

BVPERR
BVPRMTMP
exit $RETURN
;;
*)
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## MIA2 - Screen Generation

### MIA2 - Introduction

This procedure enables you to generate the Screens in two files: a file that contains the generated COBOL code and another file that contains the control COBOL code.

It generates the micropatterns which do not come from Macros.

The generation is carried out without line numbers.

### MIA2 - User Input

A '\*' line with the user code, password and Library code is required.

Pos.	Len.	Value	Meaning
2	1	*	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	3	bbb	Library code

You must then specify a GCO command line as described in the input of the GPRT procedure for each screen to be generated.

In this migration procedure, errors on user input line are not printed.

### MIA2 - Description of Steps

Generation/Print commands : BVPACA10

Code	Physical name	Type	Label
PAC7AR	DBase dir.: AR	Input	Development Database data
PAC7AN	DBase dir.: AN	Input	Development Database index
PAC7AY	DBase dir.: AY	Input	Development Database extension

Code	Physical name	Type	Label
PAC7AJ	DBase dir.: AJ	Input	Development Database journal
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin Database - DBase dir.: AN	Input	Administration Database index
PACGGR	Admin Database - DBase dir.: AR	Input	Administration Database data
PACGGU	Admin Database - DBase dir.: GU	Input	Administration Database users
PAC7ME	User Input	Input	User transactions
PAC7MV	Tmp dir.: WMV	Output	Update transactions
PAC7MG	Tmp dir.: WMG	Output	Generation/Print commands

Dispatch of command lines : BVPACA20

Code	Physical name	Type	Label
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin. Database - DBase dir.: AN	Input	Administration Database index
PACGGR	Admin. Database - DBase dir.: AR	Input	Administration Database data
PACGGU	Admin. Database - DBase dir.: GU	Input	Administration Database users
PACGGK	Admin. Database - DBase dir.: GK	Input/ Output	Generation rights
PAC7JG	Tmp dir.: WJG	Output	Extractor command
PAC7KF	Tmp dir.: WKF	Output	Work file
PAC7MG	Tmp dir.: WMG	Input	Generation/Print commands
PAC7W1	/dev/null	Input/ Output	Work file
PAC7KU	Tmp dir.: WKU	Output	Output report

Screen generation : BVPACMM2

Code	Physical name	Type	Label
PAC7AE	System - Skel. dir.: AE	Input	Error messages

Code	Physical name	Type	Label
PACGGR	Admin. Database - DBase dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - DBase dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - DBase dir.: GU	Input	Administration Database users
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7AY	Database dir.: AY	Input	Development Database extension data
PAC7SG	System - Skel. dir.: SG	Input	Generation skeleton
PAC7EE	Tmp dir.: WEE	Input	Work file
PAC7GE	Tmp dir.: WGE	Output	Work file
PAC7JG	Tmp dir.: WJG	Output	Work file
PAC7KC	Tmp dir.: WKC	Output	Work file
PAC7KE	Tmp dir.: WKE	Output	Work file
PAC7G1	Tmp dir.: WG1	Output	Work file
PAC7G2	User dir.: COBOL_MIA2	Output	C9 COBOL file
PAC7G3	User dir.: CONTROL_COBOL_MIA2	Output	Control COBOL file
PAC7W1	Tmp dir.: WW1	Output	Work file
PAC7W2	Tmp dir.: WW2	Output	Work file
PAC7EZ	Tmp dir.: WEZ	Output	Work file
PACM2W	Tmp dir.: W2W	Output	Work file
PACM2P	Tmp dir.: W2P	Output	Work file
PAC2GW	Tmp dir.: WGW	Output	Work file
PAC2GP	Tmp dir.: WGP	Output	Work file
PAC780	Tmp dir.: W80	Output	Work file
PAC7IA	User dir.: MIA2IA	Report	General printout of the program stream

## MIA2 - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) MIA2 BATCH PROCEDURE
# * -----
# *     VISUALAGE PACBASE
# *
```

```

# * -----
# *          SCREEN GENERATION
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MIA2"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7ME=$PACINPUT
export PAC7ME
PAC7MG=~BVPENV PACA10 PAC7MG $PACTMP/WMG`
export PAC7MG
PAC7MV=~BVPENV PACA10 PAC7MV $PACTMP/WMV`
export PAC7MV
BVPMSG 1009 "BVPACA10"
rtspac BVPACALL BVPACA10
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACA10"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGK.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini

```

```

. $PACDIR/config/$1/PACGGU.ini
PAC7JG=~BVPENV PACA20 PAC7JG $PACTMP/WKC`
export PAC7JG
PAC7KF=~BVPENV PACA20 PAC7KF $PACTMP/WKF`
export PAC7KF
PAC7KU=~BVPENV PACA20 PAC7KU $PACTMP/WKU`
export PAC7KU
PAC7MG=~BVPENV PACA20 PAC7MG $PACTMP/WMG`
export PAC7MG
PAC7W1=~BVPENV PACA20 PAC7W1 /dev/null`
export PAC7W1
BVPMSG 1009 "BVPACA20"
rtspac BVPACALL BVPACA20
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACA20"
BVPMSG 1025
BVPERR
BVPRMTP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/SQUEL.ini
PAC7EE=~BVPENV PACMM2 PAC7EE $PACTMP/WEE`
export PAC7EE
PAC7EZ=~BVPENV PACMM2 PAC7EZ $PACTMP/WEZ`
export PAC7EZ
PAC7GE=~BVPENV PACMM2 PAC7GE $PACTMP/WGE`
export PAC7GE
PAC7JG=~BVPENV PACMM2 PAC7JG $PACTMP/WJG`
export PAC7JG
PAC7KC=~BVPENV PACMM2 PAC7KC $PACTMP/WKC`
export PAC7KC
PAC7KE=~BVPENV PACMM2 PAC7KE $PACTMP/WKE`
export PAC7KE
PAC7G1=~BVPENV PACMM2 PAC7G1 $PACTMP/WG1`
export PAC7G1
PAC7G2=~BVPENV PACMM2 PAC7G2 $PACUSERS/COBOL_MIA2.txt`
export PAC7G2
PAC7G3=~BVPENV PACMM2 PAC7G3 $PACUSERS/CONTROL_COBOL_MIA2.txt`
export PAC7G3
PAC7W1=~BVPENV PACMM2 PAC7W1 $PACTMP/WW1`
export PAC7W1
PAC7W2=~BVPENV PACMM2 PAC7W2 $PACTMP/WW2`

```



```

export PAC7W2
PACM2P=~BVPENV PACMM2 PACM2P $PACTMP/W2P`
export PACM2P
PACM2W=~BVPENV PACMM2 PACM2W $PACTMP/W2W`
export PACM2W
PAC2GP=~BVPENV PACMM2 PAC2GP $PACTMP/WGP`
export PAC2GP
PAC2GW=~BVPENV PACMM2 PAC2GW $PACTMP/WGW`
export PAC2GW
PAC780=~BVPENV PACMM2 PAC780 $PACTMP/W80`
export PAC780
PAC7IA=~BVPENV PACMM2 PAC7IA $PACUSERS/MIA2IA.txt`
export PAC7IA
BVPMSG 1009 "BVPACMM2"
rtspac BVPACMM2
RETURN=$?
case $RETURN in
12)
  BVPMSG 1012 "BVPACMM2"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
;;
*)
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## MIA3 - Client Generation

### MIA3 - Introduction

This procedure generates the Clients in two files: a file that contains the generated COBOL code and another file that contains the control COBOL code.

It generates the micropatterns which do not come from Macros.

The generation is carried out without line numbers.

### MIA3 - User Input

A '\*' line with the user code, password and Library code is required.

Pos.	Lon.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password

Pos.	Lon.	Value	Meaning
19	3	bbb	Library code

You must then specify a GGC command line as described in the input of the GPRT procedure for each client to be generated.

In this migration procedure, errors on user input line are not printed.

### MIA3 - Description of Steps

Generation/Print commands : BVPACA10

Code	Physical name	Type	Label
PAC7AR	DBase dir.: AR	Input	Development Database data
PAC7AN	DBase dir.: AN	Input	Development Database index
PAC7AY	DBase dir.: AY	Input	Development Database extension
PAC7AJ	DBase dir.: AJ	Input	Development Database journal
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin Database - DBase dir.: AN	Input	Administration Database index
PACGGR	Admin Database - DBase dir.: AR	Input	Administration Database data
PACGGU	Admin Database - DBase dir.: GU	Input	Administration Database users
PAC7ME	User Input	Input	User transactions
PAC7MV	Tmp dir.: WMV	Output	Update transactions
PAC7MG	Tmp dir.: WMG	Output	Generation/Print commands

Dispatch of command lines : BVPACA20

Code	Physical name	Type	Label
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin. Database - DBase dir.: AN	Input	Administration Database index
PACGGR	Admin. Database - DBase dir.: AR	Input	Administration Database data
PACGGU	Admin. Database - DBase dir.: GU	Input	Administration Database users

Code	Physical name	Type	Label
PACGGK	Admin. Database - DBase dir.: GK	Input/Output	Generation rights
PAC7JG	Tmp dir.: WJG	Output	Extractor command
PAC7KF	Tmp dir.: WKF	Output	Work file
PAC7MG	Tmp dir.: WMG	Input	Generation/Print commands
PAC7W1	/dev/null	Input/Output	Work file
PAC7KU	Tmp dir.: WKU	Output	Output report

### Client generation : BVPACMM3

Code	Physical name	Type	Label
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PACGGR	Admin. Database - DBase dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - DBase dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - DBase dir.: GU	Input	Administration Database users
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7AY	Database dir.: AY	Input	Development Database extension data
PAC7SS	System - Skel. dir.: SS	Input	Generation skeleton
PAC7EG	Tmp dir.: WEG	Input	Work file
PAC7GG	Tmp dir.: WGG	Output	Work file
PAC7JG	Tmp dir.: WJG	Output	Work file
PAC7KC	Tmp dir.: WKC	Output	Work file
PAC7KG	Tmp dir.: WKG	Output	Work file
PAC7G1	Tmp dir.: WG1	Output	Work file
PAC7G2	User dir.: COBOL_MIA3	Output	C9 COBOL file
PAC7G3	User dir.: CONTROL_COBOL_MIA3	Output	Control COBOL file
PAC7W1	Tmp dir.: WW1	Output	Work file
PAC7W2	Tmp dir.: WW2	Output	Work file
PAC7EZ	Tmp dir.: WEZ	Output	Work file

Code	Physical name	Type	Label
PACM2W	Tmp dir.: W2W	Output	Work file
PACM2P	Tmp dir.: W2P	Output	Work file
PAC2GW	Tmp dir.: WGW	Output	Work file
PAC2GP	Tmp dir.: WGP	Output	Work file
PAC780	Tmp dir.: W80	Output	Work file
PAC7IA	User dir.: MIA3IA	Report	General printout of the program stream

## MIA3 - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) MIA3 BATCH PROCEDURE
# * -----
# *     VISUALAGE PACBASE
# *
# * -----
# *     CLIENT GENERATION
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MIA3"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7ME=$PACINPUT
export PAC7ME
PAC7MG=`BVPENV PACA10 PAC7MG $PACTMP/WMG`
export PAC7MG
PAC7MV=`BVPENV PACA10 PAC7MV $PACTMP/WMV`
export PAC7MV
BVPMSG 1009 "BVPACA10"
```

```

rtspac BVPACALL BVPACA10
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACA10"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGK.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7JG=~BVPENV PACA20 PAC7JG $PACTMP/WKC~
export PAC7JG
PAC7KF=~BVPENV PACA20 PAC7KF $PACTMP/WKF~
export PAC7KF
PAC7KU=~BVPENV PACA20 PAC7KU $PACTMP/WKU~
export PAC7KU
PAC7MG=~BVPENV PACA20 PAC7MG $PACTMP/WMG~
export PAC7MG
PAC7W1=~BVPENV PACA20 PAC7W1 /dev/null~
export PAC7W1
BVPMSG 1009 "BVPACA20"
rtspac BVPACALL BVPACA20
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACA20"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/SQUEL.ini
PAC7EG=~BVPENV PACMM3 PAC7EG $PACTMP/WEG~
export PAC7EG

```

```

PAC7EZ=`BVPENV PACMM3 PAC7EZ $PACTMP/WEZ`
export PAC7EZ
PAC7GG=`BVPENV PACMM3 PAC7GG $PACTMP/WGG`
export PAC7GG
PAC7JG=`BVPENV PACMM3 PAC7JG $PACTMP/WJG`
export PAC7JG
PAC7KC=`BVPENV PACMM3 PAC7KC $PACTMP/WKC`
export PAC7KC
PAC7KG=`BVPENV PACMM3 PAC7KG $PACTMP/WKG`
export PAC7KG
PAC7G1=`BVPENV PACMM3 PAC7G1 $PACTMP/WG1`
export PAC7G1
PAC7G2=`BVPENV PACMM3 PAC7G2 $PACUSERS/COBOL_MIA3.txt`
export PAC7G2
PAC7G3=`BVPENV PACMM3 PAC7G3 $PACUSERS/CONTROL_COBOL_MIA3.txt`
export PAC7G3
PAC7W1=`BVPENV PACMM3 PAC7W1 $PACTMP/WW1`
export PAC7W1
PAC7W2=`BVPENV PACMM3 PAC7W2 $PACTMP/WW2`
export PAC7W2
PACM2P=`BVPENV PACMM3 PACM2P $PACTMP/W2P`
export PACM2P
PACM2W=`BVPENV PACMM3 PACM2W $PACTMP/W2W`
export PACM2W
PAC2GP=`BVPENV PACMM3 PAC2GP $PACTMP/WGP`
export PAC2GP
PAC2GW=`BVPENV PACMM3 PAC2GW $PACTMP/WGW`
export PAC2GW
PAC780=`BVPENV PACMM3 PAC780 $PACTMP/W80`
export PAC780
PAC7IA=`BVPENV PACMM3 PAC7IA $PACUSERS/MIA3IA.txt`
export PAC7IA
BVPMSG 1009 "BVPACMM3"
rtspac BVPACMM3
RETURN=$?
case $RETURN in
12)
    BVPMSG 1012 "BVPACMM3"
    BVPMSG 1025
    BVPERR
    BVPRMTMP
    exit $RETURN
;;
*)
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## MIA4 - Server Generation

### MIA4 - Introduction

This procedure generates the Servers in two files: a file that contains the generated COBOL code and another file that contains the control COBOL code.

It generates the micropatterns which do not come from Macros.

The generation is carried out without line numbers.

### MIA4 - User Input

A '\*' line with the user code, password and Library code is required.

Pos.	Lon.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password
19	3	bbb	Library code

You must then specify a GGS command line as described in the input of the GPRT procedure for each server to be generated.

In this migration procedure, errors on user input line are not printed.

### MIA4 - Description of Steps

Generation/Print commands : BVPACA10

Code	Physical name	Type	Label
PAC7AR	DBase dir.: AR	Input	Development Database data
PAC7AN	DBase dir.: AN	Input	Development Database index
PAC7AY	DBase dir.: AY	Input	Development Database extension
PAC7AJ	DBase dir.: AJ	Input	Development Database journal
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin Database - DBase dir.: AN	Input	Administration Database index
PACGGR	Admin Database - DBase dir.: AR	Input	Administration Database data
PACGGU	Admin Database - DBase dir.: GU	Input	Administration Database users
PAC7ME	User Input	Input	User transactions

Code	Physical name	Type	Label
PAC7MV	Tmp dir.: WMV	Output	Update transactions
PAC7MG	Tmp dir.: WMG	Output	Generation/Print commands

Dispatch of command lines : BVPACA20

Code	Physical name	Type	Label
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index
PAC7AE	System - Skel dir.: AE	Input	Error messages
PACGGN	Admin. Database - DBase dir.: AN	Input	Administration Database index
PACGGR	Admin. Database - DBase dir.: AR	Input	Administration Database data
PACGGU	Admin. Database - DBase dir.: GU	Input	Administration Database users
PACGGK	Admin. Database - DBase dir.: GK	Input/Output	Generation rights
PAC7JG	Tmp dir.: WJG	Output	Extractor command
PAC7KF	Tmp dir.: WKF	Output	Work file
PAC7MG	Tmp dir.: WMG	Input	Generation/Print commands
PAC7W1	/dev/null	Input/Output	Work file
PAC7KU	Tmp dir.: WKU	Output	Output report

Server generation : BVPACMM4

Code	Physical name	Type	Label
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PACGGR	Admin. Database - DBase dir.: AR	Input	Administration Database data
PACGGN	Admin. Database - DBase dir.: AN	Input	Administration Database index
PACGGU	Admin. Database - DBase dir.: GU	Input	Administration Database users
PAC7AR	Database dir.: AR	Input	Development Database data
PAC7AN	Database dir.: AN	Input	Development Database index



Code	Physical name	Type	Label
PAC7AY	Database dir.: AN	Input	Development Database extension data
PAC7SS	System - Skel. dir.: SS	Input	Generation skeleton
PAC7EV	Tmp dir.: WEV	Input	Work file
PAC7GV	Tmp dir.: WGV	Output	Work file
PAC7JG	Tmp dir.: WJG	Output	Work file
PAC7KC	Tmp dir.: WKC	Output	Work file
PAC7KV	Tmp dir.: WKV	Output	Work file
PAC7G1	Tmp dir.: WG1	Output	Work file
PAC7G2	User dir.: COBOL_MIA4	Output	C9 COBOL file
PAC7G3	User dir.: CONTROL_COBOL_MIA4	Output	Control COBOL file
PAC7W1	Tmp dir.: WW1	Output	Work file
PAC7W2	Tmp dir.: WW2	Output	Work file
PAC7EZ	Tmp dir.: WEZ	Output	Work file
PACM2W	Tmp dir.: W2W	Output	Work file
PACM2P	Tmp dir.: W2P	Output	Work file
PAC2GW	Tmp dir.: WGW	Output	Work file
PAC2GP	Tmp dir.: WGP	Output	Work file
PAC780	Tmp dir.: W80	Output	Work file
PAC7IA	User dir.: MIA2IA	Report	General printout of the program stream

## MIA4 - Execution Script

```

#!/bin/sh
#@(#)VA Pac xxx xxx (R) MIA4 BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      SERVER GENERATION
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "MIA4"
echo "
=====
BVPMSG 1047 "$BVPBASE"

```

```

BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7ME=$PACINPUT
export PAC7ME
PAC7MG=`BVPENV PACA10 PAC7MG $PACTMP/WMG`
export PAC7MG
PAC7MV=`BVPENV PACA10 PAC7MV $PACTMP/WMV`
export PAC7MV
BVPMSG 1009 "BVPACA10"
rtspac BVPACALL BVPACA10
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACA10"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGK.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7JG=`BVPENV PACA20 PAC7JG $PACTMP/WKC`
export PAC7JG
PAC7KF=`BVPENV PACA20 PAC7KF $PACTMP/WKF`
export PAC7KF
PAC7KU=`BVPENV PACA20 PAC7KU $PACTMP/WKU`
export PAC7KU
PAC7MG=`BVPENV PACA20 PAC7MG $PACTMP/WMG`
export PAC7MG
PAC7W1=`BVPENV PACA20 PAC7W1 /dev/null`
export PAC7W1
BVPMSG 1009 "BVPACA20"

```

```

rtspac BVPACALL BVPACA20
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPACA20"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/SQUEL.ini
PAC7EV=~BVPENV PACMM4 PAC7EV $PACTMP/WEV`
export PAC7EV
PAC7EZ=~BVPENV PACMM4 PAC7EZ $PACTMP/WEZ`
export PAC7EZ
PAC7GV=~BVPENV PACMM4 PAC7GV $PACTMP/WGV`
export PAC7GV
PAC7JG=~BVPENV PACMM4 PAC7JG $PACTMP/WJG`
export PAC7JG
PAC7KC=~BVPENV PACMM4 PAC7KC $PACTMP/WKC`
export PAC7KC
PAC7KV=~BVPENV PACMM4 PAC7KV $PACTMP/WKV`
export PAC7KV
PAC7G1=~BVPENV PACMM4 PAC7G1 $PACTMP/WG1`
export PAC7G1
PAC7G2=~BVPENV PACMM4 PAC7G2 $PACUSERS/COBOL_MIA4.txt`
export PAC7G2
PAC7G3=~BVPENV PACMM4 PAC7G3 $PACUSERS/CONTROL_COBOL_MIA4.txt`
export PAC7G3
PAC7W1=~BVPENV PACMM4 PAC7W1 $PACTMP/WW1`
export PAC7W1
PAC7W2=~BVPENV PACMM4 PAC7W2 $PACTMP/WW2`
export PAC7W2
PACM2P=~BVPENV PACMM4 PACM2P $PACTMP/W2P`
export PACM2P
PACM2W=~BVPENV PACMM4 PACM2W $PACTMP/W2W`
export PACM2W
PAC2GP=~BVPENV PACMM4 PAC2GP $PACTMP/WGP`
export PAC2GP
PAC2GW=~BVPENV PACMM4 PAC2GW $PACTMP/WGW`
export PAC2GW
PAC780=~BVPENV PACMM4 PAC780 $PACTMP/W80`
export PAC780
PAC7IA=~BVPENV PACMM4 PAC7IA $PACUSERS/MIA4IA.txt`
export PAC7IA

```

```

BVPMSG 1009 "BVPACMM4"
rtspac BVPACMM4
RETURN=$?
case $RETURN in
12)
  BVPMSG 1012 "BVPACMM4"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
;;
*)
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## TRDQ - Conversion of DBD Blocks into SQL Blocks

### TRDQ - Introduction

#### Principle

The TRDQ utility transforms DB2 Database Blocks (DB type) into SQL DBD Blocks (Q2 type).

#### First step

From the command lines, input lines of RMEN are formatted with the RENAME option (RN).

#### Second step

RMEN renames the DB-type Block codes into new Block codes that are specified in the command line.

RMEN creates a sequential file that contains:

- Creation and modification transactions with the new Block code, sorted by:
  - ascending library hierarchical level,
  - library,
  - record type (definitions, descriptions, uses).
- Deletion transactions with the old Block code, sorted by:
  - descending library hierarchical level,
  - library,
  - record type (uses, descriptions, definitions).

### Third step

Transformation of DB-type Blocks into Q2-type Blocks.

From the output file of RMEN and the command lines, transformation of records:

- Definition of new Blocks: the DB-type is transformed into Q2-type. The external name and the label can be modified.
- Description of Codasyl-DB2 Database Blocks (-DC): it is transformed into the description of relational Blocks (-DR).
- Documentation of Codasyl-DB2 Database Blocks description (-DC...GG; -DC...GC): it is transformed into the documentation of relational Blocks description (-DR...GG; -DR...GC).

The other records produced by RMEN are copied without transformation in the output transactions file.

### Execution conditions

None, since the database is not directly updated.

Batch procedure access authorization option: the use of the RMEN procedure is subject to a separate purchase agreement.

### Printed output

This procedure prints, in the PACX (RMEN) step, a selection report with the errors, if any.

### Result

The output file is a sequential file that contains the transformed Q2 Block transactions. These transactions will be used as input to the Database Update (UPDT) procedure.

### Note

It is possible to keep the original Block code by running RMEN to rename the new Q2-type code.

## **TRDQ - User Input**

One '\*' line containing the DB-type DBD Block(s) to be transformed:

This constraint is imposed by RMEN.

The procedure must be executed for each new extraction context:

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	User password
19	3	bbb	Library code to extract
22	4	ssss	Session number (default=current)
26	1	'T'	Test version of frozen session
29	4	RMEN	Code of extractor
33	1	'1'	Formatting for UPDT
50	1	' '	Password not transferred into the output file
		'1'	The password is transferred

One command line per DB-type DBD Block to be transformed into Q2-type SQL Block:

Pos.	Len.	Value	Meaning
2	2	'W1'	Line code
4	6	bbbbbb	Pacbase code of the DB-type Block to be transformed
10	6	qqqqqq	Pacbase code of the resulting Q2-type Block. This new code must be different from any existing Block code.
			Optional modifications for the resulting Q2-type Block:
16	8	eeeeeeee	External name of the Q2-type Block
24	1	x	Control card in front of the Q2 Block
25	1	y	Control card in back of the Q2 Block
26	36	nn....	Q2 Block name
62	2	Q2	Q2 Block type

## TRDQ - Description of Steps

RMEN input formatting: BVPTUDQ1

Code	Physical name	Type	Label
PAC7MB	User input	Input	User input
PAC7ME	Tmp dir.: WMB	Output	Input file for RMEN

Extraction: PACX

This step extracts transactions according to user input.

Code	Physical name	Type	Label
PAC7AE	System - Skel dir. : AE	Input	Error messages
PAC7AN	Database dir. : AN	Input	Development Database index
PAC7AR	Database dir. : AR	Input	Development Database data
PAC7AY	Database dir. : AY	Input	Development Database extension data
PACGGN	Admin Database - DBase dir. : AN	Input	Administration Database index
PACGGR	Admin Database - DBase dir. : AR	Input	Administration Database data
PACGGU	Admin Database - DBase dir. : GU	Input	Administration Database users
PAC7MB	Tmp dir.: WMB	Input	User input
PAC7MA	NUL	Input	Work file
PAC7ES	NUL	Input	Work file
PAC7BM	Tmp dir.: WBM	Input/Output	User input
PAC7MM	Tmp dir.: WMM	Input/Output	Work file
PAC7MJ	Tmp dir.: WMJ	Input/Output	Work file
PAC7TE	Tmp dir.: WTE	Input/Output	Work file
PAC7RE	Tmp dir.: WRE	Input/Output	Work file
PAC7RM	Tmp dir.: WRM	Input/Output	Work file
PAC7WD	Tmp dir.: WWD	Input/Output	Extracted transactions
SYSEXT	Tmp dir.: WSY	Input/Output	Work file
PAC7RQ	NUL	Output	Work file
PAC7MV	Tmp dir.: WMV	Output	Work file
PAC7MR	Tmp dir.: WMR	Output	Work file
PAC7MX	Tmp dir.: WMX	Output	Entities not extracted (PACX)
PAC7CP	NUL	Output	Work file
PAC7GY	NUL	Output	Transactions extracted for UPDP
PAC7RQ	NUL	Output	Matching Entity/initial Library
PAC7TD	Tmp dir.: WTD	Output	Work file

Code	Physical name	Type	Label
PAC7UE	Tmp dir.: WUE	Output	Work file
PAC7IA	User dir.: PACXIA	Report	General printout of the program stream
PAC7DD	User dir.: PACXDD	Report	Errors on input transactions
PAC7ED	Tmp dir.: WED	Report	Extractions report
PAC7EE	User dir.: PACXEE	Report	Extractions report
PAC7EG	Tmp dir.: WEG	Report	Extractions report
PAC7EM	Tmp dir.: WEM	Report	Extractions report
PAC7EP	User dir.: PACXEP	Report	Extractions report
PAC7EQ	User dir.: PACXEQ	Report	Extractions report
PAC7EU	Tmp dir.: WEU	Report	Extractions report
PAC7EZ	User dir.: PACXEZ	Report	Extractions report

### Transformation of DB Blocks into SQL Blocks: BVPTUDQ3

Code	Physical name	Type	Label
PAC7MB	User input	Input	User input
PAC7MX	Tmp dir.: WMV	Input	File produced by RMEN
PAC7MV	User dir.: UPDATESQL	Output	Update transactions

## TRDQ - Execution JCL

```

#!/bin/sh
#@(#)VA Pac xxx xxx (R) TRDQ BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *
# *      CONVERSION OF DBD BLOCKS INTO SQL BLOCKS
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "TRDQ"
echo "
=====
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"

```



```

BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
PAC7MB=$PACINPUT
export PAC7MB
PAC7ME=~BVPENV PTUDQ1 PAC7ME $PACTMP/WMB~
export PAC7ME
BVPMSG 1009 "BVPTUDQ1"
rtspac BVPTUDQ1
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTUDQ1"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
PAC7BM=~BVPENV PACX PAC7BM $PACTMP/WBM~
export PAC7BM
PAC7CP=~BVPENV PACX PAC7CP /dev/null~
export PAC7CP
PAC7DD=~BVPENV PACX PAC7DD $PACUSERS/PACXDD.txt~
export PAC7DD
PAC7ED=~BVPENV PACX PAC7ED $PACUSERS/PACXED.txt~
export PAC7ED
PAC7EE=~BVPENV PACX PAC7EE $PACUSERS/PACXEE.txt~
export PAC7EE
PAC7EG=~BVPENV PACX PAC7EG $PACUSERS/PACXEG.txt~
export PAC7EG
PAC7EM=~BVPENV PACX PAC7EM $PACUSERS/PACXEM.txt~
export PAC7EM
PAC7EP=~BVPENV PACX PAC7EP $PACUSERS/PACXEP.txt~
export PAC7EP
PAC7EQ=~BVPENV PACX PAC7EQ $PACUSERS/PACXEQ.txt~
export PAC7EQ
PAC7ES=~BVPENV PACX PAC7ES /dev/null~
export PAC7ES
PAC7EU=~BVPENV PACX PAC7EU $PACUSERS/PACXEU.txt~
export PAC7EU
PAC7EZ=~BVPENV PACX PAC7EZ $PACUSERS/PACXEZ.txt~

```

```

export PAC7EZ
PAC7GY=~BVPENV PACX PAC7GY /dev/null`
export PAC7GY
PAC7IA=~BVPENV PACX PAC7IA $PACUSERS/PACXIA.txt`
export PAC7IA
PAC7MA=~BVPENV PACX PAC7MA /dev/null`
export PAC7MA
PAC7MB=~BVPENV PACX PAC7MB $PACTMP/WMB`
export PAC7MB
PAC7MM=~BVPENV PACX PAC7MM $PACTMP/WMM`
export PAC7MM
PAC7MJ=~BVPENV PACX PAC7MJ $PACTMP/WMJ`
export PAC7MJ
PAC7MR=~BVPENV PACX PAC7MR $PACUSERS/PACXMR`
export PAC7MR
PAC7MV=~BVPENV PACX PAC7MV $PACTMP/WMV`
export PAC7MV
PAC7MX=~BVPENV PACX PAC7MX $PACUSERS/PACXMX`
export PAC7MX
PAC7RE=~BVPENV PACX PAC7RE $PACTMP/WRE`
export PAC7RE
PAC7RM=~BVPENV PACX PAC7RM $PACTMP/WRM`
export PAC7RM
PAC7RQ=~BVPENV PACX PAC7RQ /dev/null`
export PAC7RQ
PAC7TD=~BVPENV PACX PAC7TD $PACUSERS/PACXTD`
export PAC7TD
PAC7TE=~BVPENV PACX PAC7TE $PACTMP/WTE`
export PAC7TE
PAC7UE=~BVPENV PACX PAC7UE $PACUSERS/PACXUE`
export PAC7UE
PAC7WD=~BVPENV PACX PAC7WD $PACTMP/WWD`
export PAC7WD
SYSEXT=~BVPENV PACX SYSEXT $PACTMP/WSY`
export SYSEXT
BVPMSG 1009 "BVPACX"
rtspac BVPACX
RETURN=$?
case $RETURN in
0)
;;
8)
BVPMSG 1012 "BVPACX"
BVPMSG 1014
BVPERR
BVPRMTMP
exit $RETURN
;;
4)
BVPMSG 1012 "BVPACX"
BVPMSG 1043
BVPMSG 1010
BVPERR
BVPRMTMP
exit $RETURN

```

```

;;
*)
  BVPMSG 1012 "BVPACX"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
;;
esac
# -----
PAC7MB=$PACINPUT
export PAC7MB
PAC7MV=~BVPENV PTUDQ3 PAC7MV $PACUSERS/UPDATESQL~
export PAC7MV
PAC7MX=~BVPENV PTUDQ3 PAC7MX $PACTMP/WMV~
export PAC7MX
BVPMSG 1009 "BVPTUDQ3"
rtspac BVPTUDQ3
RETURN=$?
case $RETURN in
0)
  ;;
*)
  BVPMSG 1012 "BVPTUDQ3"
  BVPMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```



---

## Chapter 9. Components

---

### Server Environment Components

#### Introduction

One of the purposes of the product is to manage permanent data in either batch or on-line mode, by using two types of resources:

- Directories in which the programs which make up the system, and the parameters required to run the system, are stored.
- 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.

#### 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.

#### Generation Skeletons

The product also includes the following files:

- A generation skeleton file (SA file) used by the Batch generator function for COBOL API.
- A generation skeleton file (SC file) used by the Batch generator function.
- A generation skeleton file (SG file) used by the On-Line Systems Development and Database generator functions.
- A generation skeleton file (SN file) used by the eBusiness generator function.
- A generation skeleton file (SR file), used by the Reverse generator function.
- A generation skeleton file (SP file) used by the PAF function for the generation of extractors.
- A skeleton file (SF file) used by the PAF function for the generation of extractors.
- A generation skeleton file (SS file), used by the eBusiness generator function.

## Administration Database

### Administration Database Files

- Data file, AR.
- Extension data file, AY.
- Index file, AN.
- Journal file, AJ.
- User file, GU.

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

### Administration Database Backup

The Administration Database backup consists of two sequential generation files.

- Backup of the Database (PC).

This is a backup file of the Administration Database components: index (AN), Data (AR) and extension (AY) in a sequential format.

- Backup of the journal (PJ).

The purpose of this file is to store all the update transactions that have affected the Administration Database since its installation and that have passed through the transactions file (AJ).

When the size of this file becomes incompatible with operation requirements, the ARCH procedure of the Administration Database enables you to split it into several files, among which only the most recent one is used on a regular basis.

- 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.

## Development Database

### Development Database Files

These files contain all the data related to development of applications.

- The Data file (AR).

- The extension data file (AY).
- The index file (AN).
- 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.

### **Development Database Backup Files**

According to the organization taken into account upon restoration, the Database backup is either made of two sequential 'rotating' files (PC and PJ) or of four sequential 'rotating' 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)).

- The backup of the Development Database index (PD).
- The backup of the Development Database bulk data (PY).
- 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.

### **Modules - Specific Files**

#### **Pac/Impact:**

- File of already-impacted criteria (FQ).
- Search criteria or entry points file (FH).
- Reduced file of criteria for purge (FR).
- Impact result file (FO).
- File of entities to be analyzed (FP).

## 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)

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.

- 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.

## PAF extension

Extraction master path file (GS), containing the user's extractors and macro-commands.

## Complementary Libraries and Files

Complementary Dictionary files are located in the \SYS\SKEL.

## PQC function

- The BVPQCRA and BVPQCRF files contain the standard quality rules.

- Specific members of Pacbench Quality Control function

File	Contents of format	Comments
BVPQCRA	Sequential file in English	Standard rules
BVPQCRF	Sequential file in French	Standard rules



MIAM procedure.

The parameters file for the MIAM procedure is automatically supplied in the \SYS\SKEL directory.

<b>Member</b>	<b>Content or format</b>	<b>Remarks</b>
BVPAMIAM	Sequential file	Standard parameters for the procedure MIAM



---

## Chapter 10. Appendix

---

### Installation of the Administration Database Model

#### VINS - Introduction

The VINS 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 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'	

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

The transactions extracted for the REOR procedure are stored in a file, assigned by PAC7MR, which is to be made permanent by substitution. otherwise):

## **VINS - Description of Steps**

### Update of the Administration Database: VINS

Code	Physical name	Type	Label
PAC7AE	System - skel. dir.: AE	Input	Error labels
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database Index
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database Data
PACGGY	Admin. Database - Base dir.: AY	Input	Administration Database Extension
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database Users
PAC7AJ	Journal directory: AJ	Output	Administration Database Journal
PAC7AN	Admin. Database - Base dir.: AN	Output	Administration Database Index
PAC7AR	Admin. Database - Base dir.: AR	Output	Administration Database Data

Code	Physical name	Type	Label
PAC7AY	Admin. Database - Base dir.: AY	Output	Administration Database Extension
PAC7MA	System - skel. dir.: BVPMETAD	Input	IBM Meta Entities Transactions
PAC7MB	User input	Input	User Input
PAC7BM	Tmp dir.: WBM	Input/ Output	Work file
PAC7WD	Tmp dir.: WWD	Input/ Output	Extracted Transactions
PAC7ES	Tmp dir.: WES	Input/ Output	Extracted Transactions
PAC7TD	User dir.: TD	Input/ Output	Extracted Transactions
PAC7MR	Tmp dir.: WMR	Output	Extracted Transactions for REOR on Administration Base
PAC7MX	Tmp dir.: WMX	Output	Non extracted entities
PAC7RQ	Tmp dir.: WRQ	Output	Work file
PAC7IA	User dir.: VINSIA	Report	Complete printing of programs sequence
PAC7CP	/dev/null		
PAC7EE	User dir.: VINSEE	Report	Report
PAC7EQ	User dir.: VINSEQ	Report	Report
PAC7EU	User dir.: VINSEU	Report	Report
PAC7ER	User dir.: VINSER	Report	Report
PAC7EZ	User dir.: VINSEZ	Report	Report
PAC7DD	User dir.: VINSDD	Report	Report
PAC7IE	User dir.: VINSIE	Report	Report
PAC7IF	User dir.: VINSIF	Report	Report
PAC7IG	User dir.: VINSIG	Report	Report
PAC7IH	User dir.: VINSIH	Report	Report

Return codes:

- 0 : No error detected on files
- 4 : Correct the errors and restart the procedure
- 8 : No access authorization for batch procedure
- 12: Input-output error on a file

## VINS - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) VINS BATCH PROCEDURE
# * -----
# *      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"
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "VINS"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
. $PACDIR/config/$1/PAC7AJ.ini
BVPMSG 1015 "`dirname $PAC7AJ`"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
STATUS=`pactp info $1 | grep "Server Status" | cut -d: -f2`
if [ "$STATUS" != "Inactive" -a "$STATUS" != "" ]
then
    BVPMSG 1012 "VINS"
    BVPMSG 1037 $1
    BVPERR
    exit 12
fi
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AJ.ini
. $PACDIR/config/$1/PAC7AN.ini
```

```

. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/PACGGY.ini
PAC7BM=~BVPENV VINS PAC7BM $PACTMP/WBM`
export PAC7BM
PAC7CP=~BVPENV VINS PAC7CP /dev/null`
export PAC7CP
PAC7DD=~BVPENV VINS PAC7DD $PACUSERS/VINSDD.txt`
export PAC7DD
PAC7EE=~BVPENV VINS PAC7EE $PACUSERS/VINSEE.txt`
export PAC7EE
PAC7EQ=~BVPENV VINS PAC7EQ $PACUSERS/VINSEQ.txt`
export PAC7EQ
PAC7ER=~BVPENV VINS PAC7ER $PACUSERS/VINSER.txt`
export PAC7ER
PAC7ES=~BVPENV VINS PAC7ES $PACTMP/WES`
export PAC7ES
PAC7EU=~BVPENV VINS PAC7EU $PACUSERS/VINSEU.txt`
export PAC7EU
PAC7EZ=~BVPENV VINS PAC7EZ $PACUSERS/VINSEZ.txt`
export PAC7EZ
PAC7IA=~BVPENV VINS PAC7IA $PACUSERS/VINSIA.txt`
export PAC7IA
PAC7IE=~BVPENV VINS PAC7IE $PACUSERS/VINSIE.txt`
export PAC7IE
PAC7IF=~BVPENV VINS PAC7IF $PACUSERS/VINSIF.txt`
export PAC7IF
PAC7IG=~BVPENV VINS PAC7IG $PACUSERS/VINSIG.txt`
export PAC7IG
PAC7IH=~BVPENV VINS PAC7IH $PACUSERS/VINSIH.txt`
export PAC7IH
. $PACDIR/config/$1/PACVINS.ini
PAC7MA=~BVPENV VINS PAC7MA $PACVINS`
export PAC7MA
PAC7MB=$PACINPUT
export PAC7MB
PAC7MR=~BVPENV VINS PAC7MR $PACTMP/WMR`
export PAC7MR
PAC7MX=~BVPENV VINS PAC7MX $PACTMP/WMX`
export PAC7MX
PAC7RQ=~BVPENV VINS PAC7RQ /dev/null`
export PAC7RQ
PAC7TD=~BVPENV VINS PAC7TD $PACUSERS/TD.txt`
export PAC7TD
PAC7WD=~BVPENV VINS PAC7WD $PACTMP/WWD`
export PAC7WD
SYSEXT=~BVPENV VINS SYSEXT $PACTMP/WSY`
export SYSEXT
BVPMSG 1009 "BVPVINS"
rtspac BVPVINS
RETURN=$?
case $RETURN in

```

```

0)
;;
4)
  BVPMMSG 1008 $PACUSERS
  ;;
*)
  BVPMMSG 1012 "BVPVINS"
  BVPMMSG 1025
  BVPERR
  BVPRMTMP
  exit $RETURN
  ;;
esac
# -----
BVPMMSG 1010
BVPRMTMP
exit $RETURN

```

---

## 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 of User Entities with an extension format, a sequential file of purge transactions can be generated (if 'R' in column 33 in the user input). You then have to reorganize the Database with this file as input. The reorganization of the Database with the PC file, saved after the retrieval, is also required if the client user entities of the .PPTEX and .QPAQC meta entities exist in more than one session.

### Note

The transactions extracted for the REOR procedure are stored in a file, assigned by PAC7MR, which is to be made permanent by substitution.

## VINS - Description of Steps

### Update of the Development Database : VINS

Code	Physical name	Type	Label
PAC7AE	System - Skel. dir.: AE	Input	Error Labels
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database Index
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database Data
PACGGY	Admin. Database - Base dir.: AY	Input	Administration Database Extension
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database Users
PAC7AJ	Journal dir.: AJ	Output	Development Database Journal
PAC7AN	Base dir.: AN	Output	Development Database Index
PAC7AR	Base dir.: AR	Output	Development Database Data
PAC7AY	Base dir.: AY	Output	Development Database Extension
PAC7MA	System - skel. dir.: BVPMETBA	Input	IBM Meta Entities Transactions
PAC7MB	User input	Input	User Input
PAC7BM	Tmp dir.: WBM	Input/ Output	User input
PAC7WD	Tmp dir.: WWD	Input/ Output	Extracted Transactions
PAC7ES	Tmp dir.: WES	Input/ Output	Extracted Transactions
PAC7TD	User dir.: TD	Input/ Output	Extracted Transactions
PAC7MR	Tmp dir.: WMR	Output	Extracted Transactions for REOR
PAC7MX	Tmp dir.: WMX	Output	Non extracted entities
PAC7RQ	Tmp dir.: WRQ	Output	Work file
PAC7IA	User dir.: VINSIA	Report	Complete printing of programs sequence
PAC7CP	/dev/null		
PAC7EE	User dir.: VINSEE	Report	Report
PAC7EQ	User dir.: VINSEQ	Report	Report
PAC7EU	User dir.: VINSEU	Report	Report

Code	Physical name	Type	Label
PAC7ER	User dir.: VINSER	Report	Report
PAC7EZ	User dir.: VINSEZ	Report	Report
PAC7DD	User dir.: VINSDD	Report	Report
PAC7IE	User dir.: VINSIE	Report	Report
PAC7IF	User dir.: VINSIF	Report	Report
PAC7IG	User dir.: VINSIG	Report	Report
PAC7IH	User dir.: VINSIH	Report	Report

Return codes:

- 0 : No error detected on files
- 4 : Correct the errors and restart the procedure
- 8 : No access authorization for batch procedure
- 12: Input-output error on a file

## VINS - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) VINS BATCH PROCEDURE
# * -----
# *          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"
# * -----
# *
# Parameter control
# . $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "VINS"
echo "          ====="
```

```

BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
. $PACDIR/config/$1/PAC7AJ.ini
BVPMSG 1015 "`dirname $PAC7AJ`"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
STATUS=`pactp info $1 | grep "Server Status" | cut -d: -f2`
if [ "$STATUS" != " Inactive" -a "$STATUS" != "" ]
then
    BVPMSG 1012 "VINS"
    BVPMSG 1037 $1
    BVPERR
    exit 12
fi
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AJ.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/PACGGY.ini
PAC7BM=`BVPENV VINS PAC7BM $PACTMP/WBM`
export PAC7BM
PAC7CP=`BVPENV VINS PAC7CP /dev/null`
export PAC7CP
PAC7DD=`BVPENV VINS PAC7DD $PACUSERS/VINSDD.txt`
export PAC7DD
PAC7EE=`BVPENV VINS PAC7EE $PACUSERS/VINSEE.txt`
export PAC7EE
PAC7EQ=`BVPENV VINS PAC7EQ $PACUSERS/VINSEQ.txt`
export PAC7EQ
PAC7ER=`BVPENV VINS PAC7ER $PACUSERS/VINSER.txt`
export PAC7ER
PAC7ES=`BVPENV VINS PAC7ES $PACTMP/WES`
export PAC7ES
PAC7EU=`BVPENV VINS PAC7EU $PACUSERS/VINSEU.txt`
export PAC7EU
PAC7EZ=`BVPENV VINS PAC7EZ $PACUSERS/VINSEZ.txt`
export PAC7EZ
PAC7IA=`BVPENV VINS PAC7IA $PACUSERS/VINSIA.txt`
export PAC7IA
PAC7IE=`BVPENV VINS PAC7IE $PACUSERS/VINSIE.txt`
export PAC7IE
PAC7IF=`BVPENV VINS PAC7IF $PACUSERS/VINSIF.txt`
export PAC7IF
PAC7IG=`BVPENV VINS PAC7IG $PACUSERS/VINSIG.txt`
export PAC7IG

```

```

PAC7IH=~BVPENV VINS PAC7IH $PACUSERS/VINSIH.txt`
export PAC7IH
. $PACDIR/config/$1/PACVINS.ini
PAC7MA=~BVPENV VINS PAC7MA $PACVINS`
export PAC7MA
PAC7MB=$PACINPUT
export PAC7MB
PAC7MR=~BVPENV VINS PAC7MR $PACTMP/WMR`
export PAC7MR
PAC7MX=~BVPENV VINS PAC7MX $PACTMP/WMX`
export PAC7MX
PAC7RQ=~BVPENV VINS PAC7RQ /dev/null`
export PAC7RQ
PAC7TD=~BVPENV VINS PAC7TD $PACUSERS/TD.txt`
export PAC7TD
PAC7WD=~BVPENV VINS PAC7WD $PACTMP/WWD`
export PAC7WD
SYSEXT=~BVPENV VINS SYSEXT $PACTMP/WSY`
export SYSEXT
BVPMSG 1009 "BVPVINS"
rtspac BVPVINS
RETURN=$?
case $RETURN in
0)
;;
4)
BVPMSG 1008 $PACUSERS
;;
*)
BVPMSG 1012 "BVPVINS"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

---

## GS/HE/ZS Files Initialization Utilities

### LDGS - Introduction

The LDGS procedure enables to physically create and initialize the GS indexed file.

This procedure must be executed when the GS file is not physically created (during the first installation especially) or logically disorganized.

#### Execution condition

On-line servers must be shut down.

### User input

None.

## **LDGS - Description of Steps**

### Initialization of the GS file: PTLDGS

This step initializes the GS file with a record.

Code	Physical name	Type	Label
PAC7GS	Database dir.: GS	Output	Database work file

## **LDGS - Execution Script**

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) LDGS BATCH PROCEDURE
# * -----
# *     VISUALAGE PACBASE
# *
# * -----
# *     INITIALIZATION OF THE GS FILE
# *
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "LDGS"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
echo "-----"
echo ""
BVPPAUSE
# -----
. $PACDIR/config/$1/PAC7GS.ini
BVPMSG 1009 "BVPTLDGS"
rtspac BVPTLDGS
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTLDGS"
BVPERR
exit $RETURN
;;
;
```

```

esac
# -----
BVPMSG 1010
exit $RETURN

```

## LDHE - Introduction

The LDHE procedure enables to physically create and initialize the HE indexed file.

This procedure must be executed when the HE file is not physically created (during the first installation especially) or logically disorganized.

### Execution condition

On-line servers must be shut down.

### User input

None.

## LDHE - Description of Steps

### Initialization of the HE file: PTLDHE

This step initializes the HE file with a record.

Code	Physical name	Type	Label
PAC7HE	Base dir.: HE	Output	Backup file before display of Help documentation

## LDHE - Execution Script

```

#!/bin/sh
#@(#)VA Pac xxx xxx (R) LDHE BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "LDHE"
echo "======"
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
echo "-----"
echo ""
BVPPAUSE
# -----
. $PACDIR/config/$1/PAC7HE.ini
BVPMSG 1009 "BVPTLDHE"

```

```

rtspac BVPTLDHE
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTLDHE"
BVPERR
exit $RETURN
;;
esac
# -----
BVPMSG 1010
exit $RETURN

```

## LDZS - Introduction

This procedure enables to physically create and initialize the ZS indexed file.

It must be executed when the ZS file is not physically created (during the first installation especially) or logically disorganized.

### Execution condition

On-line servers must be shut down.

### User input

None.

## LDZS - Description of Steps

Initialization of the ZS file: PTLDTS

This step initializes the ZS file with a record.

Code	Physical name	Type	Label
PAC7ZS	Base dir.: ZS	Output	Database work file

## LDZS - Execution Script

```

#!/bin/sh
#@(#)VA Pac xxx xxx (R) LDZS BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "LDZS"
echo "      ====="

```



```

BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
echo "-----"
echo ""
BVPPAUSE
# -----
. $PACDIR/config/$1/PAC7ZS.ini
BVPMSG 1009 "BVPTLDTs"
rtspac BVPTLDTs
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTLDTs"
BVPERR
exit $RETURN
;;
esac
# -----
BVPMSG 1010
exit $RETURN

```

---

## Retrieval utilities

### UTU1 UTU2 - Adaptation of 'UNS' operators

#### UTU1 - Extraction of 'P' lines with 'UNS'

##### Principle

This tool is used to extract the programs' 'P' lines which contain the 'UNS' operator and do not contain anything in the 'Level-Condition type' field. The user will have to check the output file and delete, in this file, all the lines he/she wants to keep as they are. For the other lines, the 'Level-Condition type' field will have to be forced to '99BL' before the execution of the UTU2 procedure.

##### Execution conditions

Enter the name of the result file of the lines to be checked in the startup script: NOMUT='...'

##### Result

A 'NOMUT' file which contains UNS 'P' lines to be checked.

#### UTU1 - Input / Processing / Results

No user input.

## UTU1 - Description of Steps

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

Code	Physical name	Type	Label
PAC7PC	Save dir.: PC	Input	Sequential image of the Development Database
UTUTO	User dir.: UTUTI	Output	'P' lines with 'UNS' to be updated

## UTU1 - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) UTU1 BATCH PROCEDURE
# * -----
# *          VISUALAGE PACBASE
# *
# * -----
# *          EXTRACTION OF LINES "P"
# *          WITH OPERATOR "UNS"
# *          WITHOUT LEVEL-CONDITION TYPE
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "UTU1"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
UTUTO=`BVPENV PTUNS1 UTUTO `dirname $PACUSERS`/UTUTI`
export UTUTO
. $PACDIR/config/$1/PACSAVPC.ini
PAC7PC=`BVPENV PTUNS1 PAC7PC $PACSAVPC`
export PAC7PC
BVPMSG 1009 "BVPTUNS1"
rtspac BVPTUNS1
RETURN=?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTUNS1"
BVPERR
BVPRMTMP
```

```

        exit $RETURN
    ;;
esac
# -----
BVPMSG 1010
BVPRMTMP
exit $RETURN

```

## UTU2 - Update of 'P' lines with 'UNS'

### Principle

This tool is used to update the transactions extracted with the UTU1 procedure.

For all the lines in the input file, the 'Level- Condition type' area is forced to '99BL'.

### Execution conditions

Specify the result file name of the UTU1 procedure in the startup Script:  
 NOMUT='... '

### Result

A new sequential image of the Development Database.

## UTU2 - Input / Processing / Results

No user input.

## UTU2 - Description of Steps

Extracting 'P' lines with 'UNS' operator: UTIUN2

Code	Physical name	Type	Label
PAC7PC	Save dir.: PC	Input	Sequential image of the Development Database
UTUTI	User dir.: UTUTI	Input	'P' lines with 'UNS' to be updated
PAC7CP	Save dir.: PC-new	Output	New sequential image of the Development Database

## UTU2 - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) UTU2 BATCH PROCEDURE
# * -----
# *          VISUALAGE PACBASE
# *
# * -----
# *          UPDATE LINES "P"
# *          WITH OPERATOR "UNS"
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "UTU2"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
UTUTI=`BVPENV PTUNS2 UTUTI \dirname $PACUSERS\`/UTUTI`
export UTUTI
. $PACDIR/config/$1/PACSAVPC.ini
PACSAVPC=`BVPENV PTUNS2 PAC7PC $PACSAVPC`
PAC7PC=$PACSAVPC
export PAC7PC
PAC7CP=$PACSAVPC.NEW
export PAC7CP
BVPMSG 1009 "BVPTUNS2"
rtspac BVPTUNS2
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTUNS2"
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMSG 1010
BVPMSG 1016 "PCBACKUP.ini"
sh $PACDIR/config/$1/PCBACKUP.ini
BVPRMTMP
exit $RETURN
```

## UTM1 UTM2 - Conversion of 'old' Meta Entities

### Principle

This procedure is a utility whose purpose is to convert the 'old' meta entities into 'formatted' meta entities.

The PC25 procedure retrieves the 2.n user entities into 3.n 'old'-type meta entities. These meta entities cannot be modified.

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

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

### Migration process

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

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

Any 'old'-type relation must be converted into as many relations as the number of entities they are associated with.

This first step consists in searching, in the VA Pacbase Database, the calls to 'old' relations in the description lines of the meta entities and in all the entities.

The list of calls is printed in the output file.

In this file, the '&&' characters separate the printed information from the information in transaction format.

You will have to specify the new relation code.

The old code can be kept if the relation is associated with one entity type only.

Example of transformation:

```
RELAT1 P 220 P PGMXCR CR VAO 2243 && ...
```

modified as:

```
RELATE P 220 P PGMXCR CR VAO 2243 && ...
```

The RELATE relation will then be dedicated to the 'P'-type entity (Program), whereas RELAT1 was dedicated to several entity types.

Note: Only the Relation name, located before the && characters, is to be modified. The continuation of the line must remain as is.

If the same relation code is linked to UEs, but in libraries which belong to different branches, you must rename the relation for each new library.

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

- Prior to this conversion, all the relations of the PAC7ME file are checked to ensure that they all point to only one entity type. If they do not, you are requested, via a display, to make them point to only one type and to re-run the UTM2 procedure. The procedure is then stopped.

When the ME file is consistent, the 'old'-type meta entities are converted into 'formatted' meta entities.

- The relations you have selected are modified or created.

If the relation already exists in the Database, it can be kept if it is defined in a convenient context for the calling entity, if it is 'constrained' and if the associated entity type is the same as the chosen type.

If the relation is 'old', it will be changed into 'constrained' and the chosen entity type will be associated with it.

If the existing relation is not suitable, an error message is printed and you will have to choose a new relation code.

All the relations are created in the library and the 'H' session which is the closest to their use.

- Relations calls are updated in the concerned entities (description lines of meta entities and others).
- If errors are detected (return code 8), you will have to modify the input file PAC7ME and start again the UTM2 procedure before the update. Caution, the &UTM2MV permanent file must first be deleted or renamed.

#### Update

The update is performed by the BVPACA15 program.

A backup of the Database is recommended before the update.

Only transactions where an error is detected are printed. There may be many rejects because these entities created in the 2.n version are much more controlled in the 3.n version. Manual interventions in the Database are then required.

The transactions are not journalized.

The &UTM2MV transaction file is declared as a permanent file to enable the user to view all the transactions impacted by the update.

### Step 3: Inventory of fixtures

It is recommended to re-execute the first step to make sure that the Database no longer contains calls to 'old'-type relations.

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

### Step 4: Reorganization

When the conversion is acceptable, you must reorganize the Database.

### Execution conditions

None during step 1 (UTM1).

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

### Printed output

At the end of step 1, a report is printed. It contains the list of the calls to 'old'-type relations.

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

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

### Result

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

## **UTM1 - Description of Steps**

Analysis of the Database relations: PTUME1

Code	Physical name	Type	Label
PAC7AR	Admin. Database - Base dir.: AR	Input	Development Database data
PAC7AN	Admin. Database - Base dir.: AN	Input	Development Database Index
PAC7ME	User dir. : UTM1ME	Output	List of relations calls in all the entities (length = 221)
PAC7AE	System - Skel. dir.: AE	Input	Error messages

Code	Physical name	Type	Label
PAC7EQ	User dir.: UTM1EQ	Report	Report

### UTM1 - Execution Script

```

#!/bin/sh
#@(#)VA Pac xxx xxx (R) UTM1 BATCH PROCEDURE
# * -----
# *      VISUALAGE PACBASE
# *
# * -----
# *      CONVERSION OF OLD META-ENTITIES
# *      ANALYSIS OF THE DATABASE RELATIONS
# * -----
# *
# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "UTM1"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
PAC7EQ=~BVPENV PTUME1 PAC7EQ $PACUSERS/UTM1EQ.txt`
export PAC7EQ
PAC7ME=~BVPENV PTUME1 PAC7ME `dirname $PACUSERS`~/UTM1ME.txt`
export PAC7ME
BVPMSG 1009 "BVPTUME1"
rtspac BVPTUME1
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTUME1"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac

```



```
# -----
BVPMMSG 1010
BVPRMTMP
exit $RETURN
```

## UTM2 - Input / Processing / Results

A '\*' line as input to the second step of the conversion (UTM2) with a user code and its password.

If the user code and password are not indicated, an error message is displayed and the procedure cannot be run.

## UTM2 - Description of Steps

Consistency check of the relations file : PTUME3

Code	Physical name	Type	Label
PAC7ME	User dir.: UTM1ME	Input	List of relation calls in all the entities

Conversion of the meta entities, the relations and their calls: PTUME2

Code	Physical name	Type	Label
PAC7AR	Admin. Database - Base dir.: AR	Input	Development Database data
PAC7AN	Admin. Database - Base dir.: AN	Input	Development Database index
PAC7ME	User dir. : UTM1ME	Input	List of relations calls in all the entities
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PAC7MV	User dir.: UTM2MV	Output	Update transactions (length = 170)
PAC7ET	User dir.: UTM2ET	Output	Report
PAC7MB	User input	Input	user input

Update of the Administration Database: PACA15

Code	Physical name	Type	Label
PAC7AR	Database dir.: AR	Output	Development Database data
PAC7AN	Database dir.: AN	Output	Development Database index
PAC7AY	Database dir.: AY	Output	Development Database extension
PAC7AJ	/dev/null	Output	Development Database Journal

Code	Physical name	Type	Label
PAC7AE	System - Skel. dir.: AE	Input	Error messages
PACGGN	Admin. Database - Base dir.: AN	Input	Administration Database index
PACGGR	Admin. Database - Base dir.: AR	Input	Administration Database data
PACGGY	Admin. Database - Base dir.: AY	Input	Administration Database extension
PACGGU	Admin. Database - Base dir.: GU	Input	Administration Database users
PAC7DC	Base dir.: DC	Input	DSMS elements file of the Development Database
PAC7ME	Tmp dir. : WME	Input	Work file
PAC7MV	User dir.: UTM2MV	Input	Update transactions
PAC7RB	Tmp dir.: WRB	Output	UPDT erroneous transactions (length=80)
PAC7RY	Tmp dir.: WRY	Output	UPDP erroneous transactions (length=310)
PAC7IE		Report	Update report (length=132)
PAC7IF		Report	List of erroneous transactions (length=132)

The list of transactions belonging to a user is preceded by a banner specifying the user code.

Return codes:

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

### UTM2 - Execution Script

```
#!/bin/sh
#@(#)VA Pac xxx xxx (R) UTM2 BATCH PROCEDURE
# * -----
# *          VISUALAGE PACBASE
# *
# * -----
# *          CONVERSION OF OLD META-ENTITIES
# *          THE RELATIONS AND THEIR CALLS
# * -----
# *
```

```

# Parameter control
. $PACDIR/system/proc/BVPINIT.ini
echo ""
echo "-----"
BVPMSG 1004 "UTM2"
echo "          ====="
BVPMSG 1047 "$BVPBASE"
BVPMSG 1005 "$PACDIR/config/$1"
BVPMSG 1006 "$PACTMP"
BVPMSG 1073 "$PACUSERS"
BVPMSG 1007 "$PACINPUT"
echo "-----"
echo ""
BVPPAUSE
BVPMKDIR
# -----
PAC7ME=~BVPENV PTUME3 PAC7ME `dirname $PACUSERS~/UTM1ME.txt`
export PAC7ME
BVPMSG 1009 "BVPTUME3"
rtspac BVPTUME3
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTUME3"
BVPMSG 1025
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
PAC7ET=~BVPENV PTUME2 PAC7ET $PACUSERS/UTM2ET.txt`
export PAC7ET
PAC7MV=~BVPENV PTUME2 PAC7MV $PACUSERS/UTM2MV.txt`
export PAC7MV
PAC7ME=~BVPENV PTUME2 PAC7ME `dirname $PACUSERS~/UTM1ME.txt`
export PAC7ME
PAC7MB=$PACINPUT
export PAC7MB
BVPMSG 1009 "BVPTUME2"
rtspac BVPTUME2
RETURN=$?
case $RETURN in
0)
;;
*)
BVPMSG 1012 "BVPTUME2"
BVPMSG 1025
BVPERR
BVPRMTMP

```

```

exit $RETURN
;;
esac
# -----
. $PACDIR/config/$1/PAC7AE.ini
. $PACDIR/config/$1/PAC7AJ.ini
. $PACDIR/config/$1/PAC7AN.ini
. $PACDIR/config/$1/PAC7AR.ini
. $PACDIR/config/$1/PAC7AY.ini
. $PACDIR/config/$1/PACGGN.ini
. $PACDIR/config/$1/PACGGR.ini
. $PACDIR/config/$1/PACGGU.ini
. $PACDIR/config/$1/PACGGY.ini
. $PACDIR/config/$1/PAC7DC.ini
. $PACDIR/config/$1/SEMLOCK.ini
PAC7IE=`BVPENV PACA15 PAC7IE /dev/null`
export PAC7IE
PAC7IF=`BVPENV PACA15 PAC7IF $PACUSERS/UTM2IFA15.txt`
export PAC7IF
PAC7ME=`BVPENV PACA15 PAC7ME /dev/null`
if [ "$PAC7ME" = "/dev/null" ]
then
    PAC7ME=$PACTMP/ME
    touch $PAC7ME
fi
export PAC7ME
PAC7MV=`BVPENV PACA15 PAC7MV $PACUSERS/UTM2MV.txt`
export PAC7MV
PAC7RB=`BVPENV PACA15 PAC7RB /dev/null`
export PAC7RB
PAC7RY=`BVPENV PACA15 PAC7RY /dev/null`
export PAC7RY
BVPMSG 1009 "BVPACA15"
rtspac BVPACA15
RETURN=$?
case $RETURN in
0)
    ;;
2)
    BVPMSG 1012 "BVPACA15"
    BVPMSG 1054
    BVPERR
    BVPRMTMP
    exit $RETURN
    ;;
4)
    BVPMSG 1012 "BVPACA15"
    BVPMSG 1055
    BVPERR
    BVPRMTMP
    exit $RETURN
    ;;
*)
    BVPMSG 1012 "BVPACA15"
    BVPMSG 1025

```

```
BVPERR
BVPRMTMP
exit $RETURN
;;
esac
# -----
BVPMMSG 1010
BVPRMTMP
exit $RETURN
```







Part Number: DELIX001368A - 9558

Printed in USA