VisualAge Pacbase 2.5

PACTABLES 2.5 – IBM CICS/OS/MVS OPERATIONS MANUAL

DETCI000251F

Note

Before using this document, read the general information under "Notices" on the next page.

According to your license agreement, 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.software.ibm.com/ad/vapacbase/support.htm

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

First Edition (February 1999)

This edition applies to the following licensed program:

- VisualAge Pacbase Version 2.5

Comments on publications (including document reference number) should be sent electronically through the Support Center Web site at:
http://www.software.ibm.com/ad/vapacbase/support.htm
or to the following postal address:
IBM Paris Laboratory
VisualAge Pacbase Support
30, rue du Château des Rentiers
75640 PARIS Cedex 13
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.

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:

Intellectual Property and Licensing
International Business Machines Corporation
North Castle Drive, Armonk, New-York 10504-1785
USA

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 information which has been exchanged, should contact:

IBM Paris Laboratory
SMC Department
30, rue du Château des Rentiers
75640 PARIS Cedex 13
FRANCE

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.

TABLE OF CONTENTS

1. FOREWORD

FOREWORD

The purpose of this manual is to provide the reader with information related to the installation and operation of the Pactables Release 2.5 function.

This manual contains four sections:

1. General presentation of the Pactables function

   Chapter 1 - Pactables Components

   Chapter 2 - Environment

2. Batch operation procedures

   Chapters 4-18: Batch Procedures

3. Retrieval from previous releases of the Pactables function

   Chapter 19 - 7.x Table Retrieval

   Chapter 20 - 8.x or 1.2 Table Retrieval

4. Installation

   Chapter 22 - Installation

For a detailed description of each chapter, refer to the Table of Contents.

The index at the end of the manual will help you find information on installation and running of the system.

HOW TO USE THIS MANUAL FOR SYSTEM INSTALLATION

After reading the introductory chapters to the system: INTRODUCTION, COMPONENTS, and ENVIRONMENT, go directly to the INSTALLATION chapter.

If a previous Pactables release is already installed on the site:

. The 2.5 Release is different from any former Pactables release regarding installation parameters. The test case provided on the installation tape must be executed.

. Once the installation is complete, read the chapter about the retrieval and follow the instructions carefully in order to ensure a thorough compatibility of existing data from the former release.

2. PACTABLES COMPONENTS

2.1. INTRODUCTION

INTRODUCTION

The purpose of the Pactables function is to process a certain amount of permanent data whether on-line or in batch mode (see the Pactables Reference Manual).

Two types of resources are therefore necessary:

. Libraries which store the programs making up the Pactables function, and its parameters,

. Permanent files, which contain the data processed by those programs. These files can be divided into two categories:

- 'System' files, which remain stable during the use of the Pactables function,

- 'Evolving' files, which are handled by the users, and whose volumes vary according to the types of updates performed.

NOTE:

The installation of the Pactables function is quite independent from that of other VisualAge Pacbase functions.

The implementation of the Pactables function requires data which must be defined and described with the VisualAge Pacbase Specifications Dictionary function. The Extraction Procedure required to operate the Pactables function is described in the VisualAge Pacbase 2.5 Operations Manual.

Options of the Pactables function are coded as follows:

. Dispatched Table Management : DTM

. Security System Interface : SEC (only with IBM MVS)

2.2. THE ON-LINE PROGRAM LIBRARY

THE ON-LINE PROGRAM LIBRARY (MTR8)

Its size is approximately 200 blocks of 6,144 bytes. It contains the following programs :

CODE	OPERATION AND MEANING
FT00	Tables extraction (TUF-TP MODULE)
FT90	User Interface (TUF-TP MODULE)
P500	Enter, FT or 'clear' : initial screen
P510	C1: read-write access to mono-item with CR, MO, DE for updating
P512	C1: read-write access to mono-item with CR, MO, DE for updating (V.2)
P520	C2: read-only access to multi-item with DE for an item deletion
P522	C2: read-only access to multi-item with DE for an item deletion (V.2)
P530	LT : list of tables
P540	LS : list of sub-schemas/sub-systems
P550	LD : list of documentation
P560	C3 : read-only access to item hist. acc.
P570	HELP screen
P580	LH : list of historical accounts
P590	LJ, LE : print requests
P599	Display system errors
P600	Parameter & password updating
P610	User code updating
P620	Access authorization updating
P820	Optimized generalized access module
P920	User generalized access module
PLNK	Pactables access via user-program module
SECT	Security systems interface sub-program

NOTE:

Codes of programs and maps are given without the 2-character suffix which is made up of the two first characters of the transaction code used to access the Pactables function (this does not apply to the PACSECT sub-program).

IMPORTANT

Two additional programs (P512 and P522) are supplied with Pactables Release 2.0.

During updates, the P510 and P520 programs may call the user check routines in order to perform additional checks. As a default, the generation option of these routines is without the century management.

From Rel. 2.0, if the user check routines are generated with the century management option, the two new programs (P512 and P522) must be renamed and used instead of P510 and P520.

In all cases, ALL user check routines should be generated with the same option.

2.3. THE BATCH PROGRAM LIBRARY

THE BATCH PROGRAM LIBRARY (MBR8)

Size: approximately 200 blocks of 6,144 bytes.

CODE	PROC.	OPT.	MEANING
PTU001			Transaction file copy
PTAINI	INTA		File initialization
PTARSD	RSTA		Table restoration
PTARSV	-		- -
PTARSG	-		- -
PTARTG	R2TA		Retrieval 7.2 tables
PTAR20	RTTA		Retrieval 8.02, 1.2 tables ->2.5
-	R2TA		
-	R3TA		Retrieval 7.3 tables
PTASVD	SVTA		Table backup
PTASVV	-		- -
PTASVG	-		- -
-	RETA		Table reorganization
PTAU80	TUTA		Direct consultation of tables
PTAXVD	R2TA		- - - -
-	R3TA		- - - -
PTAXVV	R2TA		- - - -
-	R3TA		- - - -
PTAXVG	R2TA		- - - -
-	R3TA		- - - -
PTA100	PMTA		Parameter update
PTA120	-		- -
PTA150	EXTA		Table extraction
PTA160	-		- -
PTA250	GETT		Table generation
PTA290	-		- /Lists -
-	LDTA		- /Lists -
PTA300	UPTA		Table update
PTA302	-		- -
PTA310	IMTA		Table import
PTA312	-		- -
PTA320	PRTA		Table printout
PTA350	UPTA		- -
-	IMTA		- -
-	PRTA		- -
PTA360	UPTA		- -
-	IMTA		- -
-	PRTA		- -

CODE	PROC.	OPT.	MEANING
PTA400	RETA		Table reorganization
PTA410	-		- - -
PTA420	-		- - -
PTA430	-		- - -
PTAD05	CDT1	DTM	Table-description comparison
PTAD10	-	-	- - - -
PTAD20	CDT2	-	- - - -
PTAV10	CVTA	-	Table update
PTAV20	-	-	- - -
PTA800			Optimized access module
PTA900			Generalized access module
PACSECB		SEC	Security systems sub-program
PTATCD	TCTA		TD file sort
PTATCG	-		TG file sort
PTATCV	-		TV file sort
PTATC1	-		TC partitioning according to the type of file
PTATC2	-		Sorted TC file rebuilding

IMPORTANT NOTE:

Two other programs (PTA302 and PTA312) are supplied with version 2.0 and higher versions.

During updates, the PTA302 and PTA312 programs may call the user check routines in order to perform additional checks. The default generation option of these routines is 'without century management'.

From the 2.0 version, if the user check routines are generated with the century-management option, the two new programs, PTA302 and PTA312, must be renamed and used respectively in the UPTA and IMTA procedures instead of the PTA300 and PTA310 programs.
In all cases, ALL the user check routines should be generated with the same century-management option.

THE LIBRARY OF COBOL/VS SUB-PROGRAMS

Its required size is about 50 blocks of 6,144 bytes. It contains the following programs:

CODE	MEANING
	Batch sub-programs
PTA800	Optimized access module
PTA900	Generalized access module
PACSECB	Security System sub-program
	On-line sub-programs
P820	Optimized access module
P920	User generalized access module
PSECT	Security Systems Interface sub-program

These sub-programs must be used with programs developed in Cobol/VS.

SECURITY SYSTEMS INTERFACE EXTENSION (SEC)

The optional sub-program PACSECB interfaces the Pactables function with the site's security system.

This sub-program is found on the tape in the batch load-module library (PACT.MBR8). It must be installed in an authoized library. (See in Chapter INSTALLATION, subchapter 'Installation Process', the section about the '$prfj.PGM' job.)

Refer to the VISUALAGE PACBASE-SECURITY SYSTEMS INTERFACE Reference Manual for details on this extension operations.

2.4. THE PACBASE MACROS-STRUCTURES LIBRARY

VA PAC MACRO-STRUCTURES LIBRARY

The Macro-structures are the following ones:

CODE	MEANING
AATUFA	Description of the table data element
AATUFL	'LT' or 'LH' list
AATUFS	'LS' or 'LC' list
AATUFX	List of items

These macro-structures are used in user on-line application programs using the TUF-TP facility.
They are used to add the description of communication areas which are necessary to the call of xxFT90 sub-program in the TUF-TP facility.

These Macro-structures are supplied as VA Pac updating transactions. They must be loaded in the Va Pac library used for the development of user transactions by taking the transactions of VA Pac UPDT procedure in input.

2.5. THE PARAMETER LIBRARY

THE PARAMETER LIBRARY (SY)

Its size is approximately 4 blocks of 6,080 bytes.

It contains:

. The DEFINEs of VSAM files:

The DELETE/DEFINE of each VSAM file is named DFxx00ff (where xx00ff = file suffix).

Information on the catalog in use, disks, size, etc., is in- itialized according to the initial parameters of the instal- lation and can be modified by the System Administrator, if needed.

. The VERIFYs of VSAM files:

Under the name VERIFff, one finds the VERIFY requests applied to the Pactables files.

NOTE:

Any modification of the file characteristics must be done in the parameter library.

2.6. SYSTEM FILES

THE 'SYSTEM' FILES

They represent the system itself. They are not modified by daily handling, and they must be re-loaded if the system has to be re-installed.

. The library of batch load modules MBR8, described above:

```
.Size    : 200 blocks
.Blksize : 6,144
```

. The library of on-line load modules MTR8, described above:

```
.Size    : 200 blocks
.Blksize : 6,144
```

. The library of parameters (PDS) SY, described above:

```
.Size    : 3 blocks
.Blksize : 6,080
```

. The file containing the error messages and the auto- matic documentation of the Pactables function: TE.

```
.Size         : Approximately 900 records
.Organization : VSAM-KSDS
.Recsize      : 90
.Key          : 17 (position 0)
.Utilization  : Batch/On-line
```

2.7. EVOLVING FILES

EVOLVING FILES

They contain the user's data. They are processed by the system in either on-line or batch mode.

The first two make up the actual Tables.

```
.TABLE-DESCRIPTION FILE: TD
---------------------------

     .Organization : VSAM-KSDS
     .Recsize      : 240
     .CI size      : 2,048
     .Key          : 21 (position 0)
     .Utilization  : Batch/On-line
     .Space        : 8 records per C.I. of 1,024


.TABLE-CONTENTS FILE: TV
 ----------------------

     .Organization : VSAM-KSDS
     .Recsize      : 80 to 1,100
     .CI size      : 2,048
     .Key          : 35 (position 4)
     .Utilization  : Batch/On-line
     .Space        : Varies with the table size.


The third file contains the user parameters required for the
system operations. It is managed through a specific batch
procedure:

.USER PARAMETERS FILE: TG
 ------------------------

     .Organization : VSAM-KSDS
     .Recsize      : 85
     .CI size      : 2,048
     .Key          : 22 (position 0)
     .Utilization  : Batch/On-line
     .Space        : 24 records per C.I. of 2,048.

The TG file includes:

     -User codes and corresponding access authorizations,

     -Table printing user JCL.




The fourth file constitutes the backup of the user Table
files described above.

.BACKUP: TC
-----------

     .Organization : Sequential generation file
```

```
.DSNAME       : &INDUN..&ROOTT.00TC(n)

.DCB          : RECFM=VB,LRECL=1067,BLKSIZE=10674

.Utilization  : Batch
```

A fifth file used by the TUF-TP facility enables the transitory storage of data extracted from Pactables, data used to update Pactables and updating error messages.

```
.Working file (TB)     .Organization : VSAM-KSDS
     .Recsize      : 80 to 1140
     .CI size      : 1,024
     .key          : 63 (position 3)
     .Utilization  : TP
     .Space        : depending on the table size
```

STANDARD LIMITATIONS

```
Maximum length for a table item            :  999 characters

Maximum length for the table key           :  20 characters

Maximum number of Data Elements in a table :  40

Number of table items per table            :  Unlimited
```

3. ENVIRONMENT

3.1. INTRODUCTION

INTRODUCTION

It is assumed that the site where Pactables is installed provides the environment and the resources necessary to run the system.

The purpose of this chapter is to define this environment, and thus help determine how much disk space is necessary.

File sizes are specified in Chapter ENVIRONMENT of the VisualAge Pacbase INSTALLATION AND ENVIRONMENT Operations Manual.

3.2. CICS ENVIRONMENT

CICS ENVIRONMENT

The monitor used is CICS ESA, version 3.1 or later.

It must include the SPOOL=YES option for running batch jobs (LE or LJ choice).

The Description (TD), Tables (TV), User parameter (TG) files and the TUF-TP working file (TB) are updated on-line and must be protected by option allowing for Dynamic Backout.

It is recommended to use the CICS 'EMERGENCY RESTART' option.

The size of the COMMAREA used for Pactables is 8Kb.

The TUF-TP facility needs a specific COMMONAREA of 30K.

BASICS ON THE PACTABLES OPERATIONS

The general characteristics of Pactables operations are:

. A transaction code is used to enter the system. The branchings to the different programs are done through 'RETURN TRANSID'.

A transaction code and a program are associated to each screen (example: xxP510 ensures the update and the transaction code is xx01 for a mono-item screen).

. When an error is detected by the system a 'MAP ABEND' is displayed. The display program of this map xxP599 is called by XCTL.

UPPERCASE/LOWERCASE PROCESSING

The Pactables function automatically changes lowercase into uppercase on screens with the UCTRAN option at the TCT level for fields requiring uppercase, i.e.:

. User code & associated password,

. Operation code.

3.3. ACCESS METHODS (VSAM)

ACCESS METHODS (VSAM)

The Pactables function manages its files using the VSAM-KSDS indexed access method without secondary index.

Files are protected against concurrent read-write accesses (SHARE OPTION 2). In particular, the Pactables function protects itself against simultaneous updates in both batch and on-line modes by using this share option.

Each batch procedure includes a DELETE/DEFINE step in case of file reloading. As a result, files need not include the REUSE default option and, consequently, may be allocated using either the UNIQUE option or the SUB-ALLOCATION option.

3.4. BATCH ENVIRONMENT

BATCH ENVIRONMENT

In batch mode, the system uses standard functions of the operating system and the VSAM access method.

The size of the memory necessary for the execution of the batch procedures varies according to the size of the buffers allocated to the files they use.

4. THE BATCH PROCEDURES

4.1. INTRODUCTION

INTRODUCTION TO THE BATCH PROCEDURES

Batch processing with Pactables is divided into various procedures. The procedures likely to be used are described in the following chapters with their specific execution conditions.

For each procedure, there is:

. A general presentation including:

- the introduction,

- the execution condition(s),

- the action(s) to be taken in case of abnormal execution.

. A description of user input, processing executed, and results, plus - if needed - specific recommendations.

. A description of steps:

- symbolics or parameters used,

- list of the files used (temporary or permanent),

- possible return codes for each step.

. JCL lines.

4.2. CLASSIFICATION OF PROCEDURES

CLASSIFICATION OF PROCEDURES

The batch procedures are the following:

.Pactables file initialization (INTA)

.Table generation (GETT)

.Table Update (UPTA)

.Table printing (PRTA)

.Table importation (IMTA)

.Table reorganization (RETA)

.Table backup (SVTA)

.Pactables database migration (TCTA)

.Table restoration (RSTA)

.Printing of table description lists (LDTA)

.Update of user parameters (PMTA)

.Extraction of data (EXTA)

.Direct reading of tables (TUTA)

With the Dispatched Table Management option (DTM):

.Table description comparison (CDT1, CDT2)

.Table extraction for update (CVTA).

For retrieval of previous releases:

.Retrieval of 7.2 Pactables files (R2TA)

.Retrieval of 7.3 Pactables files (R3TA)

.Retrieval of the 8.xx or 1.2 backup file (RTTA).

NOTE

Pactables does not provide a journal of update transactions.

4.3. ABNORMAL EXECUTIONS

ABNORMAL EXECUTIONS

A Batch program execution may terminate abnormally. For example, input-output errors on the system files or on the database cause a forced abnormal end with an USER ABEND (code 12), accompanied by a message on the SYSOUT file.

When an ABEND occurs, the user must first find this message. It is displayed in the following manner:

```
PROGR : pppppp   INPUT-OUTPUT ERROR : FILE ff   OP: oo
STATUS : nn
END OF RUN DUE TO PROVOKED ABEND
```

In most cases, examining the status and type of operation allows the user to find the cause of the abnormal end.

The reader will find in the charts below the most common values for the status and type of operation.

NN	STATUS	OO	OPERATION
21	SEQUENCE ERROR		
22	DUPLICATE KEY	W	WRITE
23	NO RECORD FOUND	RW	REWRITE
24	BOUNDARY VIOLATION (KSDS-RRDS)	RU	READ UP
30	SYSTEM ERROR	OP	OPEN
34	BOUNDARY VIOLATION(SEQUENTIAL)	CL	CLOSE
92	LOGIC ERROR (FOR EXAMPLE, OPEN OF AN ALREADY OPEN FILE)	D	DELETE
		R	READ
93	FILE STILL OPEN UNDER CICS	P	START
95	INVALID OR INCOMPLETE FILE INFORMATION	RN	READ NEXT

When this message is absent, and the type of ABEND generated directly reports a problem in the VisualAge Pacbase system programs, it will be necessary to contact the VisualAge Pacbase technical team at IBM. Be sure to KEEP ALL LISTINGS that may be necessary to analyze the problem.

5. TABLE INITIALIZATION (INTA)

5.1. INTRODUCTION

INTA: TABLE INITIALIZATION

INTRODUCTION

This procedure initializes the table description and contents files of the Pactables Database.

NOTE:

The purpose of this procedure is to physically initialize new files. It may not be used to initialize new tables in already defined files (refer to chapter 'TABLE GENERATION' for more details on the Table initialization procedure).

5.2. USER INPUT

USER INPUT

POS.	LEN.	VALUE	MEANING
1	36		Installation label
37	1		Language version parameter:
		E	English
		F	French
38	1		Machine date inversion
			Only with IBM-DOS and BULL DPS7:
		blank	If MM/DD/CCYY
		I	If DD/MM/CCYY
39	12		Function keys assignments
51	4	cccc	Security system class
55	1		Security system type
		blank	No security system
		R	RACF
		S	TOP SECRET
56	2	nn	Number of lines per printout page
58	1		Type of resource control
		blank	Def tables resource security system
		P	Def of resources in VA Pac
59	1		Lock of user's code
		blank	Other user's code authorized
		N	Other user's code unauthorized

5.3. DESCRIPTION OF STEPS

INTA: DESCRIPTION OF STEPS

TRANSACTION RECOGNITION: PTU001

DEFINITION OF FILES: IDCAMS

```
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Table-contents file
  PAC7TV : DSN=&INDUV..&ROOTT.00TV
```

INITIALIZATION OF FILES: PTAINI

```
.Input file
  PAC7MD

.Output files:
 -Table Descriptions File
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Table Contents File
  PAC7TV : DSN=&INDUV..&ROOTT.00TV

.Output report:
 -Initialization review
  PAC7ED
```

5.4. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*              ---- TABLE INITIALIZATION  ----                      *
//*********************************************************************
//$RADP.INTA PROC ROOTT=$ROOTT,  PACTABLES SYSTEM ROOT                *
//         INDUV='$INDUV',       PACTABLES FILE INDEX                 *
//         INDSN='$INDSN',       NON-VSAM FILE INDEX                  *
//*:       VSAMCAT='$VCAT',      USER VSAM CATALOG                    *
//         STEPLIB='$MODB',      LOAD-MODULE LIBRARY                  *
//         UWK=$UWK,             WORK UNIT                            *
//         SPAMB='(TRK,(1,1),RLSE)', MB FILE SPACE                    *
//         OUT=$OUT,             OUTPUT CLASS                         *
//         OUTL=$OUT             REPORT OUTPUT CLASS                  *
//*********************************************************************
//COPY   EXEC PGM=PTU001
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&INTAMB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=&SPAMB
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//DEFINE   EXEC PGM=IDCAMS
//************************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD  SYSOUT=&OUT
//SYSIN DD DSN=&INDSN..&ROOTT.&ROOTT.SY(DF&ROOTT.00TD),
//         DISP=SHR
//      DD DSN=&INDSN..&ROOTT.&ROOTT.SY(DF&ROOTT.00TV),
//         DISP=SHR
//PTAINI   EXEC PGM=PTAINI
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7MD   DD DSN=&&INTAMB,DISP=SHR
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7ED   DD SYSOUT=&OUTL
//SYSUDUMP DD SYSOUT=&OUT
```

6. TABLE GENERATION (GETT)

6.1. INTRODUCTION

GETT: TABLE GENERATION

INTRODUCTION

This procedure updates the Table-Descriptions file using the table descriptions extracted from the VisualAge Pacbase Database, and initializes the generated tables in the Table-Contents file.

EXECUTION CONDITION

This procedure must be preceded by the Extraction procedure of the VisualAge Pacbase system (GETD or GETA), whose output file contains the extracted table descriptions used in input by the GETT procedure.

GETT updates the TD and TV files. These must therefore be closed to on-line use except if the material in use allows Batch/TP concurrency.

NOTE: about the platforms where the disk space allocated to the files is fixed:

When a very large update is run (in terms of the number of transactions), it may be necessary to run a backup and a reload in order to increase or physically reorganize the files and make all the initially provided free space available.

USER INPUT

Result of GETD or GETA extraction.

6.2. DESCRIPTION OF STEPS

GETT: DESCRIPTION OF STEPS

VERIFICATION OF VSAM FILES: IDCAMS

UPDATE OF TABLE FILES: PTA250

```
.Permanent input-output files:
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Table-contents file
  PAC7TV : DSN=&INDUV..&ROOTT.00TV

.Input transaction file (GETD or GETA output):
 -Update transactions
  PAC7MD : DSN=&MD

.Output file
  PAC7TK : DSN=&&DE

.Output report:
 -Input/output errors on files
  PAC7ET

.Sort files:
  SORTWK01, SORTWK02, SORTWK03
```

PRINTING OF DESCRIPTIONS: PTA290

```
.Permanent input file:
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD

.Transaction input file:
 -Print request
  PAC7TE : DSN=&&DE

.Output report:
 -Printout of descriptions
  PAC7ID
```

6.3. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*                ---- TABLE GENERATION  ---                         *
//*********************************************************************
//$RADP.GETT PROC ROOTT=$ROOTT,   PACTABLES SYSTEM ROOT               *
//         INDUV='$INDUV',        PACTABLES FILE'S INDEX              *
//         INDSV='$INDSV',        INDEX OF VSAM SYSTEM FILES          *
//         INDSN='$INDSN',        INDEX OF NON-VSAM SYSTEM FILES      *
//         MD='&&MD',             GENERATED DESCRIPTION DSNAME        *
//         UNITS=$UNITUN,         GENERATED DESCRIPTION UNIT          *
//         VOLS='SER=$VOLUN',     GENERATED DESCRIPTION VOLUME        *
//*:       VSAMCAT='$VCAT',       USER VSAM CATALOG                   *
//*:       SYSTCAT='$SCAT',       SYSTEM VSAM CATALOG                 *
//         STEPLIB='$MODB',       LIBRARY OF LOAD-MODULES             *
//         SORTLIB='$BIBT',       SORT LIBRARY                        *
//         OUT=$OUT,              UTILITY AND ERROR OUTPUT CLASS      *
//         OUTL=$OUT,             OUTPUT CLASS OF REPORTS             *
//         UWK=$UWK,              WORK UNIT                           *
//         CYL='(3,1)',           SORTWORK SPACE                      *
//         SPAWK='(TRK,(50,10),RLSE)'  WORK FILE SPACE                *
//*********************************************************************
//VERIFY   EXEC PGM=IDCAMS
//************************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTE),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTD),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTV),
//         DISP=SHR
//PTA250   EXEC PGM=PTA250
//************************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7MD   DD DSN=&MD,DISP=OLD,
//         VOL=&VOLS,UNIT=&UNITS
//PAC7ET   DD SYSOUT=&OUTL
//PAC7TK   DD DSN=&&DE,DISP=(,PASS),UNIT=&UWK,
//         SPACE=&SPAWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=1600)
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTA290   EXEC PGM=PTA290
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
```

```
//PAC7TE   DD DSN=&&DE,DISP=(OLD,PASS)
//PAC7ID   DD SYSOUT=&OUTL
//SYSUDUMP DD SYSOUT=&OUT
```

7. TABLE UPDATE (UPTA)

7.1. INTRODUCTION

UPTA: TABLE UPDATING

INTRODUCTION

This procedure executes a batch update of the tables, and prints the updated tables.

EXECUTION CONDITION

The TV and TD Table files being updated by this procedure, access to on-line use must be closed except if the material in use allows Batch/TP concurrency.

NOTE: about the platforms where the disk space allocated to the files is fixed:

When a very large update is run (in terms of the number of transaction), it may be necessary to run a backup and a reload in order to increase or physically reorganize the TV file to make all the initially provided free space available.

IMPORTANT NOTE:

An alternative version of the update program, PTA302, is shipped with Pactables Rel. 2.0.

During updates, the PTA300 program may call the user check routines in order to perform additional checks. The default generation option for these routines is 'without century management'.

From Release 2.0 onwards, the user check routines are generated with the century-management option. The new program, PTA302, must therefore be renamed and used instead of the PTA300 program.

In all cases, ALL the user check routines should be generated with the same century-management option.

7.2. USER INPUT

USER INPUT

. One '*'-type line per user:

Pos.	Len.	Value	Meaning
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password

. One 'A'-type line per table to update:

Pos.	Len.	Value	Meaning
2	1	'A'	Line code
3	6	tttttt	Table number
9	8	DDMMCCYY	Historical account date
17	1		Not used
18	1		Sub-system number
		' '	No sub-system specified
		1 to 0	Sub-system number
19	1		Data delimiter
		' '	Considered as '/' be default

. 'V'-type lines to update table data:

Pos.	Len.	Value	Meaning
1	1		Action code
		'C'	Creation
		'M'	Modification
		'D'	Deletion
2	1	'V'	Line code
3	1		Continuation line
		' '	First data line
		'-'	Item data continuation
4	77		Table data separated by the delimiter indicated on the 'A'-type line

7.3. DESCRIPTION OF STEPS

UPTA: DESCRIPTION OF STEPS

TRANSACTION RECOGNITION: PTU001

VERIFICATION OF VSAM FILES: IDCAMS

```
.Permanent input files:
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Error-message file
  PAC7TE : DSN=&INDSV..&ROOTT.00TE
 -User parameters file
  PAC7TG : DSN=&INDUV..&ROOTT.00TG

.Permanent input-output file:
 -Table contents file
  PAC7TV : DSN=&INDUV..&ROOTT.00TV

.Input transaction file:
 -Update transactions
  PAC7MS : DSN=&&UPTAMB

.Output file:
 -Print requests
  PAC7DE : DSN=&&TABLE      LRECL=80

.Output report:
 -Transaction review
  PAC7ET

.Work file:
 -Prepared transactions
  PAC7MT : DSN=&&MVT300
```

FORMATTING FOR PRINTING: PTA350

```
.Permanent input files:
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Table-contents file
  PAC7TV : DSN=&INDUV..&ROOTT.00TV

.Input transaction file:
 -Print request
  PAC7DE : DSN=&&TABLE

.Output file:
 -Print file
  PAC7ET : DSN=&&SPOOL

.Output report:
 -Statistics on printing
  PAC7EX
```

PRINTING OF TABLES: PTA360

```
.Permanent inpput file:
 -Table-description file
```

```
  PAC7TD : DSN=&INDUV..&ROOTT.00TD

.Input Transaction file:
 -Print file
  PAC7SP : DSN=&&SPOOL

.Output report:
 -Printing of tables
  PAC7ET

.Sort files:
  SORTWK01, SORTWK02, SORTWK03.
```

7.4. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*                    ---  TABLE UPDATE  ---                        *
//*********************************************************************
//$RADP.UPTA PROC ROOTT=$ROOTT, PACTABLES SYSTEM ROOT                 *
//         INDUV='$INDUV',      PACTABLES FILES' INDEX                *
//         INDSV='$INDSV',      VA PAC SYSTEM FILES' INDEX            *
//         INDSN='$INDSN',      NON-VSAM FILES' INDEX                 *
//*:       VSAMCAT='$VCAT',     USER VSAM CATALOG                     *
//*:       SYSTCAT='$SCAT',     SYSTEM VSAM CATALOG                   *
//         STEPLIB='$MODB',     LOAD-MODULE LIBRARY                   *
//         SORTLIB='$BIBT',     SORT LIBRARY                          *
//         OUT=$OUT,            UTILITY AND ERROR OUTPUT CLASS        *
//         OUTL=$OUT,           REPORT OUTPUT CLASS                   *
//         UWK=$UWK,            WORK UNIT                             *
//         CYL=3,               SORTWORK SPACE                        *
//         SPAWK='(TRK,(50,10),RLSE)',  WORK FILE SPACE              *
//         SPAED='(TRK,(150,30),RLSE)',   PRINT FILE SPACE           *
//         SPAMB='(TRK,(5,1),RLSE)'    REQUEST FILE SPACE            *
//*********************************************************************
//COPY   EXEC PGM=PTU001
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&UPTAMB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=&SPAMB
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//VERIFY   EXEC PGM=IDCAMS
//**********************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTE),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTD),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTV),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTG),
//         DISP=SHR
//PTA300   EXEC PGM=PTA300
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7MS   DD DSN=&&UPTAMB,DISP=(OLD,PASS)
//PAC7DE   DD DSN=&&TABLE,DISP=(NEW,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800),
//            SPACE=&SPAWK
```

```
//PAC7ET   DD SYSOUT=&OUTL
//PAC7MT   DD DSN=&&MVT300,DISP=(NEW,DELETE),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=95,BLKSIZE=6175),
//            SPACE=&SPAWK
//SYSUDUMP DD SYSOUT=&OUT
//PTA350   EXEC PGM=PTA350
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7DE   DD DSN=&&TABLE,DISP=(OLD,DELETE)
//PAC7ET   DD DSN=&&SPOOL,DISP=(NEW,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=160,BLKSIZE=1600),
//            SPACE=&SPAED
//PAC7EX   DD SYSOUT=&OUTL
//SYSUDUMP DD SYSOUT=&OUT
//PTA360   EXEC PGM=PTA360
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7ET   DD DSN=&&SPOOL,DISP=(OLD,DELETE)
//PAC7EY   DD SYSOUT=&OUTL
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
```

8. TABLE PRINTING (PRTA)

8.1. INTRODUCTION

PRTA: TABLE PRINTING

INTRODUCTION

This procedure performs a batch print of tables.

EXECUTION CONDITION

This procedure reads the Pactables files; it can be executed even if on-line access remains open.

NOTE:

Users may also submit the PRTA procedure on-line: refer to the Pactables Reference Manual for more details on batch printing submission.

8.2. USER INPUT

USER INPUT

.One '*'-type line per user:

POS.	LEN.	VALUE	MEANING
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password

.One 'A'-type line per table to be printed:

POS.	LEN.	VALUE	MEANING
1	1		Action code
		'E'	Table printing
		'H'	List of historical accounts
		'L'	List of the tables
		'S'	List of sub-schemas and sub-systems
		'X'	Table contents with historical accounts
2	1	'A'	Line code
3	6	tttttt	Table number
9	8	DDMMCCYY	Historical account date or date of the reference historical with action code 'X'
17	1		Sub-schema selection
		blank	No sub-schema selection
		1 to 0	Selected sub-schema number
18	1		Sub-system selection
		blank	No sub-system selection
		1 to 0	Selected sub-system number
19	1		Print option of the key's data elements
		blank	Printing of concatenated data elements
		'O'	Printing of separated data elements

8.3. DESCRIPTION OF STEPS

PRTA: DESCRIPTION OF STEPS

TRANSACTION RECOGNITION: PTU001

VERIFICATION OF VSAM FILES: IDCAMS

EXTRACTION OF TABLES FOR PRINTING: PTA320

```
.Permanent input files:
 -Table-description File
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Error-message file
  PAC7TE : DSN=&INDSV..&ROOTT.00TE
 -Table-contents File
  PAC7TV : DSN=&INDUV..&ROOTT.00TV
 -User-parameter file
  PAC7TG : DSN=&INDUV..&ROOTT.00TG

.Input transaction file:
 -Update transactions
  PAC7CA : DSN=&&PRTAMB

.Output file:
 -Print requests
  PAC7DE : DSN=&&TABLE      LRECL=80

.Output report:
 -Transaction review
  PAC7XE
```

PREPARATION FOR PRINTING: PTA350

```
.Permanent input files:
 -Table-description File
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Table-contents file
  PAC7TV : DSN=&INDUV..&ROOTT.00TV

.Input transaction file:
 -Print requests
  PAC7DE : DSN=&&TABLE

.Output file:
 -Print file
  PAC7ET : DSN=&&SPOOL

.Output report:
 -Statistics on printing
  PAC7EX
```

PRINTING OF TABLES: PTA360

```
.Permanent input file:
 -Tables-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD

.Input transaction file:
```

```
 -Print file
  PAC7ET : DSN=&&SPOOL

.Output report:
 -Printing of tables
  PAC7EY

.Sort files:
  SORTWK01, SORTWK02, SORTWK03
```

8.4. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*                  --- TABLE PRINTING  ---                          *
//*********************************************************************
//$RADP.PRTA PROC ROOTT=$ROOTT, PACTABLES SYSTEM ROOT                 *
//         INDUV='$INDUV',      PACTABLES FILES' INDEX                *
//         INDSV='$INDSV',      VA PAC SYSTEM FILES' INDEX            *
//         INDSN='$INDSN',      NON-VSAM FILE INDEX                   *
//*:       VSAMCAT='$VCAT',     USER VSAM CATALOG                     *
//*:       SYSTCAT='$SCAT',     SYSTEM VSAM CATALOG                   *
//         STEPLIB='$MODB',     LOAD-MODULE LIBRARY                   *
//         SORTLIB='$BIBT',     SORT LIBRARY                          *
//         OUT=$OUT,            UTILITY AND ERROR OUTPUT CLASS        *
//         OUTL=$OUT,           REPORT OUTPUT CLASS                   *
//         UWK=$UWK,            WORK UNIT                             *
//         CYL=3,               SORTWORK SPACE                        *
//         SPAWK='(TRK,(50,10),RLSE)',  WORK FILE SPACE              *
//         SPAED='(TRK,(150,30),RLSE)', PRINTING FILE SPACE          *
//         SPAMB='(TRK,(5,1),RLSE)'  REQUEST FILE SPACE              *
//*********************************************************************
//COPY   EXEC PGM=PTU001
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&PRTAMB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=&SPAMB
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//VERIFY   EXEC PGM=IDCAMS
//************************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTE),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTD),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTV),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTG),
//         DISP=SHR
//PTA320   EXEC PGM=PTA320
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//PAC7CA   DD DSN=&&PRTAMB,DISP=(OLD,PASS)
//PAC7DE   DD DSN=&&TABLE,DISP=(NEW,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800),
//            SPACE=&SPAWK
//PAC7XE   DD SYSOUT=&OUTL
```

```
//SYSUDUMP DD SYSOUT=&OUT
//PTA350 EXEC PGM=PTA350
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7DE   DD DSN=&&TABLE,DISP=(OLD,DELETE)
//PAC7ET   DD DSN=&&SPOOL,DISP=(NEW,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=160,BLKSIZE=1600),
//            SPACE=&SPAED
//PAC7EX   DD SYSOUT=&OUTL
//SYSUDUMP DD SYSOUT=&OUT
//PTA360   EXEC PGM=PTA360
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7ET   DD DSN=&&SPOOL,DISP=(OLD,DELETE)
//PAC7EY   DD SYSOUT=&OUTL
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
```

9. TABLE IMPORT (IMTA)

9.1. INTRODUCTION

TABLE IMPORT (IMTA): INTRODUCTION

This procedure imports external tables into the existing Pactables files.

You must first enter the description of the Table you want to import in the VA Pac Database, then generate this description (GETA/GETT procedures).

Once you have performed these operations, you can import the external Table via the IMTA procedure.

The IMTA input format of the Table to be imported is a sequential file which contains one record per table item, whose contents corresponds to the description performed in the VA Pac Database (input format).

The length of this file record is 999 characters (maximum length of a Table item).

EXECUTION CONDITION

Since this procedure updates the TV Table file, the files must be closed to on-line use.

NOTE: for platforms where the disk space allocated to the files is fixed:

If the table to be imported is large, you may have to --prior to this procedure execution-- save and reload, to either increase the size of TV file, or physically reorganize this file so as to make available the 'free space' initially provided.

RESTRICTION

Each execution of the procedure allows you to import only one table.

IMPORTANT NOTE:

An alternative version of the update program, PTA312, is shipped with Pactables Rel. 2.0.

During updates, the PTA310 program may call the user check routines in order to perform additional checks. The default generation option for these routines is 'without century management'.

From Release 2.0 onwards, the user check routines are generated with the century-management option. The new program, PTA312, must therefore be renamed and used instead of the PTA310 program.

In all cases, ALL the user check routines should be generated with the same century-management option.

9.2. USER INPUT

USER INPUT

.One '*'-type line per user:

POS.	LEN.	VALUE	MEANING
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password

.One 'A'-type line per table to be imported:

POS.	LEN.	VALUE	MEANING
2	1	'A'	Line code
3	6	tttttt	Number of the table to be imported
9	8	DDMMCCYY	Table date (optional)

9.3. DESCRIPTION OF STEPS

IMTA: DESCRIPTION OF STEPS

TRANSACTION RECOGNITION: PTU001

VERIFICATION OF VSAM FILES: IDCAMS

TABLE CHECK AND UPDATE: PTA310

```
.Permanent input files:
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Error-message file
  PAC7TE : DSN=&INDSV..&ROOTT.00TE
 -User-parameter file
  PAC7TG : DSN=&INDUV..&ROOTT.00TG

.Permanent input-output file:
 -Table-contents files
  PAC7TV : DSN=&INDUV..&ROOTT.00TV

.Input file:
 -Request transactions
  PAC7MV : DSN=&&IMTAMB
 -External table-file
  PAC7NK : DSN=&TABF        LRECL=999

.Output file:
 -Print requests
  PAC7DE : DSN=&&TABLE      LRECL=80

.Output report:
 -Execution report
  PAC7ET
```

FORMATTING OF PRINTOUT: PTA350

```
.Permanent input files:
 -Table-descriptions file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Table-contents file
  PAC7TV : DSN=&INDUV..&ROOTT.00TV

.Input transaction file:
 -Print requests
  PAC7DE : DSN=&&TABLE

.Output file:
 -Print file
  PAC7ET : DSN=&&SPOOL

.Output report:
 -Printing statistics
  PAC7EX
```

PRINTING: PTA360

```
.Permanent input file:
```

```
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD

.Input transaction file:
 -Print file
  PAC7ET : DSN=&&SPOOL

.Output report:
 -Table printout

.Sort files:
  SORTWK01, SORTWK02, SORTWK03.
```

9.4. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*                    ---- TABLE IMPORT  ---
//*********************************************************************
//$RADP.IMTA PROC ROOTT=$ROOTT, PACTABLES SYSTEM ROOT                 *
//         INDUV='$INDUV',      PACTABLES FILES' INDEX                *
//         INDSV='$INDSV',      VA PAC SYSTEM FILES' INDEX            *
//         INDSN='$INDSN',      NON-VSAM FILES' INDEX                 *
//*:       VSAMCAT='$VCAT',     USER VSAM CATALOG                     *
//*:       SYSTCAT='$SCAT',     SYSTEM VSAM CATALOG                   *
//         STEPLIB='$MODB',     LOAD-MODULE LIBRARY                   *
//         SORTLIB='$BIBT',     SORT LIBRARY                          *
//         TABF=,               DSN OF TABLE FILE TO BE IMPORTED      *
//         OUT=$OUT,            UTILITY AND ERROR OUTPUT CLASS        *
//         OUTL=$OUT,           REPORT OUTPUT CLASS                   *
//         UWK=$UWK,            WORK UNIT                             *
//         CYL=3,               SORTWORK SPACE                        *
//         SPAWK='(TRK,(50,10),RLSE)',  WORK FILE SPACE              *
//         SPAED='(TRK,(150,30),RLSE)',  PRINT FILE SPACE             *
//         SPAMB='(TRK,(5,1),RLSE)'   REQUEST FILE SPACE             *
//*********************************************************************
//COPY   EXEC PGM=PTU001
//*********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&IMTAMB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=&SPAMB
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//VERIFY   EXEC PGM=IDCAMS
//************************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTE),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTD),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTV),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTG),
//         DISP=SHR
//PTA310   EXEC PGM=PTA310
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7MV   DD DSN=&&IMTAMB,DISP=(OLD,PASS)
//PAC7NK   DD DSN=&TABF,DISP=OLD
//PAC7DE   DD DSN=&&TABLE,DISP=(NEW,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800),
//            SPACE=&SPAWK
```

```
//PAC7ET   DD SYSOUT=&OUTL
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTA350   EXEC PGM=PTA350
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7DE   DD DSN=&&TABLE,DISP=(OLD,DELETE)
//PAC7ET   DD DSN=&&SPOOL,DISP=(NEW,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=160,BLKSIZE=1600),
//            SPACE=&SPAED
//PAC7EX   DD SYSOUT=&OUTL
//SYSUDUMP DD SYSOUT=&OUT
//PTA360   EXEC PGM=PTA360
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7ET   DD DSN=&&SPOOL,DISP=(OLD,DELETE)
//PAC7EY   DD SYSOUT=&OUTL
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
```

10. TABLE REORGANIZATION (RETA)

10.1. INTRODUCTION

RETA: TABLE REORGANIZATION

INTRODUCTION

From the Pactables Database, this procedure rebuilds the backup file containing the new table-description and table contents files, reorganized images of the initial TD and TV files.

RETA deletes the records that were logically deleted during update and reorganizes these files' historical accounts according to user requests (see the Pactables Reference Manual). The records that were logically deleted can be kept as options.

For user programs written in cobol II, RETA assigns a a sign to numeric data that contain a positive sign.

EXECUTION CONDITION

To ensure the consistency of the reorganized database, files must be closed to on-line use.

10.2. USER INPUT

USER INPUT

.One '*'-type line identifying the Pactables manager :

POS.	LEN.	VALUE	MEANING
2	1	'*'	Line code
3	8	'********'	Table manager administrator's code
11	8	pppppppp	Table manager password

.One 'A'-type line per historical account to keep or delete:

POS.	LEN.	VALUE	MEANING
1	1		Action code
		'S'	Historical account to delete
		'G'	Historical account to keep
2	1	'A'	Line code
3	6	ttttttt	Table number
9	8	DDMMCCYY	Historical account date
19	1		Option
			- when the action code is equal to 'G', storing of the historical account whose date is equal to the date specified. If there is no date, all historical accounts are stored.
			- When the action code is equal to 'S', deletion of the historical account whose date is equal to the date specified.
		'<'	- When the action code is equal to 'G', storing of all historical accounts whose dates are strictly smaller than the date specified.
			- When the action code is equal to 'S', deletion of all historical accounts whose dates are strictly smaller than the date specified.
		'>'	- When the action code is equal to 'G', storing of all historical accounts whose dates are higher than or equal to the date specified
			- When the action code is equal to 'S', deletion of all historical accounts whose dates are higher than or equal to the date specified.

The action codes 'G' and 'S' are exclusive.

For more details, see the Pactables Reference Manual.

10.3. DESCRIPTION OF STEPS

RETA: DESCRIPTION OF STEPS

TRANSACTION RECOGNITION: PTU001

VERIFICATION OF VSAM FILES: IDCAMS

REORGANIZATION OF TABLE CONTENTS: PTA400

```
.Permanent input files:
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Error-message file
  PAC7TE : DSN=&INDSV..&ROOTT.00TE
 -Table-contents file
  PAC7TV : DSN=&INDUV..&ROOTT.00TV
 -User parameter file
  PAC7TG : DSN=&INDUV..&ROOTT.00TG

.Input transaction file:
 -Reorganization requests
  PAC7DR : DSN=&&RETAMB

.Output file:
 -Reorganized-contents file
  PAC7TX : DSN=&&TXREO      LRECL=1063
 -Reorganized-table list file
  PAC7DE : DSN=&&DEREO      LRECL=80
```

NOTE: This file, whose description contains print requests, may be kept. Once the reorganization is finished, it can be used as input for the PRTA procedure applied to the reorganized files, thus enabling the printing of all the tables that were kept, in order to check the correct execution of the reorganization.

```
.Ouput report:
 -Transaction report
  PAC7IR

.Sort files:
  SORTWK01, SORTWK02, SORTWK03

.Return codes:
 - 0:  No error detected.
 - 4:  Error on an 'A' line.
```

VALIDIDATION OF TABLE CONTENTS: PTA410

```
.Updating input file :
 -Reorganization requests

.Input file:
 -Reorganized-contents file
  PAC7TX : DSN=&&TXREO

.Output file:
 -Validated-contents file
  PAC7TW : DSN=&&TWREO

.Sort files:
  SORTWK01, SORTWK02, SORTWK03
```

REORGANIZATION OF TABLE-DESCRIPTIONS: PTA420

```
.Permanent input file:
 -Table-description file
 PAC7TD : DSN=&INDUV..&ROOTT.00TD

.Input file:
 -Reorganized-table list file
  PAC7DE : DSN=&&DEREO

.Output files:
 -Reorganized table-description file
  PAC7TS : DSN=&&TSREO
 -Table-description print request
  PAC7ML : DSN=&&ME
```

NOTE: This file should be kept and used as input of the LDTA procedure, to produce a printout of the table-descriptions that were kept, in order to check the correct execution of the reorganization.

```
 -Sort files:
   SORTWK01, SORTWK02, SORTWK03
```

BUILDING OF BACKUP FILE: PTA430

```
.Input files:
 -Validated-contents fille
  PAC7TW : DSN=&&TWREO
 -Reorganized-description file
  PAC7TS : DSN=&&TSREO

.Ouput file:
 -Backup file resulting from
  reorganization
  PAC7TC : DSN=&&INDUN..&ROOTT.00TC(+1)
```

TG FILE BACKUP: PTASVG

```
.Permanent input file:
 -User-parameter file
  PAC7TG : DSN=&INDUV..&ROOTT.00TG
.Output file:
 -Table backup
  PAC7TC : DSN=&INDUN..&ROOTT.00TC(+1),DISP=MOD
```

10.4. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*             ---  REORGANIZATION OF TABLES   ---                   *
//*********************************************************************
//$RADP.RETA PROC ROOTT=$ROOTT,   ROOT OF PACTABLES SYSTEM            *
//         INDUV='$INDUV',        PACTABLES FILE INDEX                *
//         INDSV='$INDSV',        VA PAC SYSTEM FILE INDEX            *
//         INDSN='$INDSN',        NON VSAM FILES INDEX                *
//         INDUN='$INDUN',        NON-VSAM USER FILE INDEX            *
//*:       VSAMCAT='$VCAT',       USER VSAM CATALOG                   *
//*:       SYSTCAT='$SCAT',       SYSTEM USER CATALOG                 *
//         STEPLIB='$MODB',       LIBRARY OF LOAD-MODULES             *
//         SORTLIB='$BIBT',       SORT LIBRARY                        *
//         OUT=$OUT,              OUTPUT CLASS                        *
//         OUTL=$OUT,             OUTPUT CLASS OF REPORTS             *
//         UNITS=$UNITUN,         BACKUP UNIT (DISK OR TAPE)          *
//         VOLS='SER=$VOLUN',     BACKUP VOLUME                       *
//         DSCB='$DSCB',          SAMPLE DSCB FILE                    *
//         UWK=$UWK,              WORK UNIT                           *
//         CYL='(3,1)',                SORTWORK SPACE                 *
//         SPAWK='(TRK,(50,10),RLSE)', WORK FILE SPACE                *
//         SPAMB='(TRK,(5,1),RLSE)',   REQUEST FILE SPACE             *
//         SPATC='(TRK,(150,10),RLSE)' BACKUP FILE SPACE              *
//*********************************************************************
//COPY   EXEC PGM=PTU001
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&RETAMB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=&SPAMB
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//VERIFY   EXEC PGM=IDCAMS
//************************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTE),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTD),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTV),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTG),
//         DISP=SHR
//PTA400   EXEC PGM=PTA400
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
```

```
//         DISP=SHR
//PAC7DR   DD DSN=&&RETAMB,DISP=(OLD,PASS)
//PAC7DE   DD DSN=&&DEREO,DISP=(,PASS),UNIT=&UWK,
//         SPACE=&SPAWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=3200)
//PAC7TX   DD DSN=&&TXREO,DISP=(,PASS),UNIT=&UWK,
//         SPACE=&SPAWK,
//         DCB=(RECFM=VB,LRECL=1063,BLKSIZE=10630)
//PAC7IR   DD SYSOUT=&OUTL
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//PTA410   EXEC PGM=PTA410
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//PAC7MB   DD DSN=&&RETAMB,DISP=(OLD,PASS)
//PAC7TX   DD DSN=&&TXREO,DISP=(OLD,PASS)
//PAC7TW   DD DSN=&&TWREO,DISP=(,PASS),UNIT=&UWK,
//         SPACE=&SPAWK,
//         DCB=(RECFM=VB,LRECL=1063,BLKSIZE=10630)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//PTA420   EXEC PGM=PTA420
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TS   DD DSN=&&TSREO,DISP=(NEW,PASS),UNIT=&UWK,
//         SPACE=&SPAWK,
//         DCB=(RECFM=FB,LRECL=240,BLKSIZE=2400)
//PAC7DE   DD DSN=&&DEREO,DISP=(OLD,PASS)
//PAC7ML   DD DSN=&&ME,DISP=(,PASS),UNIT=&UWK,
//         SPACE=&SPAWK,
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=3200)
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//PTA430   EXEC PGM=PTA430,COND=(8,LE,PTA400)
//*****************************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TS   DD DSN=&&TSREO,DISP=(OLD,PASS)
//PAC7TW   DD DSN=&&TWREO,DISP=(OLD,PASS)
//PAC7TC   DD DSN=&INDUN..&ROOTT.00TC(+1),
//         UNIT=&UNITS,VOL=&VOLS,
//         DISP=(NEW,CATLG,DELETE),
//         SPACE=&SPATC,
//         DCB=(&DSCB,RECFM=VB,LRECL=1067,BLKSIZE=10674)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTASVG   EXEC PGM=PTASVG,COND=(8,LE,PTA400)
//*****************************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//PAC7TC   DD DSN=&INDUN..&ROOTT.00TC(+1),
//         UNIT=&UNITS,VOL=&VOLS,
//         DISP=MOD,
//         DCB=(&DSCB,RECFM=VB,LRECL=1067,BLKSIZE=10674)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

11. BACKUP (SVTA)

11.1. INTRODUCTION

TABLE BACKUP (SVTA): INTRODUCTION

The SVTA procedure performs a backup of the Table descriptions and contents, and a backup of the user parameters in a unique sequential file: TC.

EXECUTION CONDITION

The files must be closed to on-line use.

USER INPUT

None.

11.2. DESCRIPTION OF STEPS

SVTA: DESCRIPTION OF STEPS

TD BACKUP: PTASVD

```
.Permanent input files:
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
.Output file:
 -Table backup
  PAC7TC : DSN=&INDUN..&ROOTT.00TC(+1)
```

TV BACKUP: PTASVV

```
.Permanent input file:
 -Table-contents file
  PAC7TV : DSN=&INDUV..&ROOTT.00TV
.Output file:
 -Table backup
  PAC7TC : DSN=&INDUN..&ROOTT.00TC(+1),DISP=MOD
```

TG BACKUP: PTASVG

```
.Permanent input file:
 -User-parameter file
  PAC7TG : DSN=&INDUV..&ROOTT.00TG
.Output file:
 -Table backup
  PAC7TC : DSN=&INDUN..&ROOTT.00TC(+1),DISP=MOD
```

11.3. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*               ---  BACKUP  ---                                    *
//*********************************************************************
//$RADP.SVTA PROC ROOTT=$ROOTT, ROOT OF PACTABLES SYSTEM              *
//         INDUV='$INDUV',      USER VSAM FILES INDEX                 *
//         INDUN='$INDUN',      NON VSAM FILES INDEX                  *
//*:       VSAMCAT='$VCAT',     USER VSAM CATALOG                     *
//         STEPLIB='$MODB',     BIBLI DE LOAD-MODULES                 *
//         OUT=$OUT,            OUTPUT CLASS                          *
//         DSCB='$DSCB',        DSCB MODEL FILE                       *
//         VOLS='SER=$VOLUN',    BACKUP VOLUME                        *
//         UNITS=$UNITUN,        BACKUP UNIT (DISK OR TAPE)           *
//         SPATC='(TRK,(150,10))'  BACKUP SPACE                       *
//*********************************************************************
//PTASVD   EXEC PGM=PTASVD
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TC   DD DSN=&INDUN..&ROOTT.00TC(+1),
//         UNIT=&UNITS,VOL=&VOLS,
//         DISP=(,CATLG,DELETE),SPACE=&SPATC,
//         DCB=(&DSCB,RECFM=VB,LRECL=1067,BLKSIZE=10674)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTASVV   EXEC PGM=PTASVV
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7TC   DD DSN=&INDUN..&ROOTT.00TC(+1),
//         UNIT=&UNITS,VOL=&VOLS,
//         DISP=MOD,
//         DCB=(&DSCB,RECFM=VB,LRECL=1067,BLKSIZE=10674)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTASVG   EXEC PGM=PTASVG
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//PAC7TC   DD DSN=&INDUN..&ROOTT.00TC(+1),
//         UNIT=&UNITS,VOL=&VOLS,
//         DISP=MOD,
//         DCB=(&DSCB,RECFM=VB,LRECL=1067,BLKSIZE=10674)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

12. PACTABLES TRANSFER FROM ANOTHER PLATFORM (TCTA)

12.1. INTRODUCTION

TRANSFER OF A DATABASE FROM ANOTHER PLATFORM

The purpose of this procedure is to retrieve Pactables Databases from other platforms (source-platforms) in order to adapt them to your environment.

The Database backup is sorted according to the format converted in the EBCDIC format for IBM-MVS (TCTA procedure).

If the source-site version is the same as the target site's version, the actions to perform are the following:

. Backup on the source site (SVTA procedure)

. Transfer of the TC file produced by SVTA onto the target platform,

. Retrieval of the file on the target platform (TCTA procedure),

. Restoration of the database (RSTA procedure), with, in input, the TC file built by the preceding step.

If on the contrary, the source site is of an older version and that the version requires a retrieval, the TC backup must be retrieved in the new format ON THE SOURCE SITE before being transferred onto the target environment.

EXECUTION CONDITION

None. However, read the notes on the following page carefully.

USER INPUT

None.

NOTES

1. BACKUP TRANSFER

Transferring the TC backup from the source site to the mainframe host where Pactables is installed is the responsibility of the user. The file contains data (DATA) which must be converted in the EBCDIC format.

2. DISK SPACE

The TCTA procedure, described thereafter, consists mainly of sorting the TC backup according to an EBCDIC sequence. The sort is performed in three distinct steps, so as to minimize the disk space required. However, the procedure requires between 4 to 4.5 times the equivalent of the original file's size.

3. INITIAL AND RESULT FILES

The TC backup input file, coming from a different platform, is specified in the TCTA procedure by its DSNAME, by setting a value to the SAVIN parameter. As a default, generation 0 of the Data-group corresponding to the backup of the Pactables database is used.

As a default, the TC output file, sorted according to the EBCDIC sequence, corresponds to the generation +1 of the Pactables database backup. This file may be retrieved by performing an Overrid on the PTATC2.PAC7TC procedure (see the execution test JCL provided).

12.2. DESCRIPTION OF STEPS

TCTA: DESCRIPTION OF STEPS

TC BACKUP SPLIT: PTATC1

```
.Input backup file
  PAC7TC : (SAVIN parameter of the procedure)

.Output work files:
 -Table-description sequential image
  PAC7SD : DSN=&&PAC7SD
 -Table-contents sequential image
  PAC7SV : DSN=&&PAC7SV
 -Parameter sequential image
  PAC7SG : DSN=&&PAC7SG
```

TABLE-DESCRIPTION SORT: PTATCD

```
.Input work file:
 -Table-description sequential image
  PAC7SD : DSN=&&PAC7SD

.Output work file:
 -Sorted table descriptions
  PAC7AD : DSN=&&PAC7AD
```

TABLE-CONTENTS SORT: PTATCV

```
.Input work file:
 -Sequential image of table-contents
  PAC7SV : DSN=&&PAC7SV

.Output work file:
 -Sorted table-contents
  PAC7AV : DSN=&&PAC7AV
```

USER-PARAMETER SORT: PTATCG

```
.Input work file:
 Sequential image of parameters
  PAC7SG : DSN=&&PAC7SG

.Output work file:
 -Sorted user parameters
  PAC7AG : DSN=&&PAC7AG
```

RECONSTITUTION OF THE TC BACKUP: PTATC2

```
.Permanent output file:
 -TC backup in EBCDIC format
  PAC7TC : DSN=&INDUN..&ROOTT.00TC(+1)

.Input work files:
 -Table-description sequential image
  PAC7AD : DSN=&&PAC7AD
 -Sequential image of contents
  PAC7AV : DSN=&&PAC7AV
 -Sequential image of parameters
  PAC7AG : DSN=&&PAC7AG
```

12.3. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*      ----  TRANSFER OF A PACTABLES DATABASE ---                    *
//*********************************************************************
//$RADP.TCTA PROC ROOTT=$ROOTT,  PACTABLES SYSTEM ROOT                 *
//         INDUN='$INDUN',       BACKUP FILES' INDEX                   *
//*:       VSAMCAT='$VCAT',      USER VSAM CATALOG                     *
//         STEPLIB='$MODB',      LOAD-MODULE LIBRARY                   *
//         UWK=$UWK,             WORK UNIT                             *
//         OUT=$OUT,             OUTPUT CLASS                          *
//         SAVIN='$INDUN..$ROOTT.00TC(0)', INPUT BACKUP FILE           *
//         SPASD='(TRK,(15,5),RLSE)',  'SD' FILE SPACE                 *
//         SPASV='(TRK,(15,5),RLSE)',  'SV' FILE SPACE                 *
//         SPASG='(TRK,(15,5),RLSE)',  'SG' FILE SPACE                 *
//         CYL='(3,1)'                 SORTWORK SPACE                  *
//*********************************************************************
//PTATC1   EXEC PGM=PTATC1
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7TC   DD DSN=&SAVIN,DISP=SHR
//PAC7SD   DD DSN=&&PAC7SD,DISP=(,PASS),UNIT=SYSDA,
//         SPACE=&SPASD,
//         DCB=(RECFM=FB,LRECL=244,BLKSIZE=24400)
//PAC7SV   DD DSN=&&PAC7SV,DISP=(,PASS),UNIT=SYSDA,
//         SPACE=&SPASV,
//         DCB=(RECFM=FB,LRECL=1063,BLKSIZE=10630)
//PAC7SG   DD DSN=&&PAC7SG,DISP=(,PASS),UNIT=SYSDA,
//         SPACE=&SPASG,
//         DCB=(RECFM=FB,LRECL=89,BLKSIZE=8900)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTATCD   EXEC PGM=PTATCD
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//PAC7SD   DD DSN=&&PAC7SD,DISP=SHR
//PAC7AD   DD DSN=&&PAC7AD,DISP=(,PASS),UNIT=SYSDA,
//         SPACE=&SPASD,
//         DCB=(RECFM=FB,LRECL=244,BLKSIZE=24400)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTATCV   EXEC PGM=PTATCV
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//PAC7SV   DD DSN=&&PAC7SV,DISP=SHR
//PAC7AV   DD DSN=&&PAC7AV,DISP=(,PASS),UNIT=SYSDA,
//         SPACE=&SPASV,
//         DCB=(RECFM=FB,LRECL=1063,BLKSIZE=10630)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTATCG   EXEC PGM=PTATCG
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//PAC7SG   DD DSN=&&PAC7SG,DISP=SHR
//PAC7AG   DD DSN=&&PAC7AG,DISP=(,PASS),UNIT=SYSDA,
//         SPACE=&SPASG,
//         DCB=(RECFM=FB,LRECL=89,BLKSIZE=8900)
//SYSOUT   DD SYSOUT=&OUT
```

```
//SYSUDUMP DD SYSOUT=&OUT
//PTATC2   EXEC PGM=PTATC2
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7AD   DD DSN=&&PAC7AD,DISP=SHR
//PAC7AV   DD DSN=&&PAC7AV,DISP=SHR
//PAC7AG   DD DSN=&&PAC7AG,DISP=SHR
//PAC7TC   DD DSN=&INDUN..&ROOTT.00TC(+1),
//         DISP=(,CATLG,DELETE),
//         UNIT=$UNITUN,
//         VOL=SER=$VOLUN,
//         SPACE=(TRK,(15,5),RLSE),
//         DCB=($DSCB,RECFM=VB,LRECL=1067,BLKSIZE=10674)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

13. RESTORATION (RSTA)

13.1. INTRODUCTION

RESTORATION (RSTA): INTRODUCTION

The RSTA procedure is used to restore the Table descriptions and contents, as well as the user parameters, from the sequentiaal image obtained by the SVTA backup procedure.

EXECUTION CONDITION

On-line access must be closed.

As this procedure reloads the files, it is recommended to consider beforehand the estimated evolution of the files and re-adjust their size accordingly. These modifications should be made in the system parameters library.

ABNORMAL EXECUTION

See Chapter BATCH PROCEDURES, Subchapter 'Abnormal Executions'.

Whatever the cause of the abnormal end, the procedure can be restarted as is, after correcting the problem.

USER INPUT

None.

13.2. DESCRIPTION OF STEPS

RSTA: DESCRIPTION OF STEPS

DEFINITION OF FILES: IDCAMS

```
.Defined files:
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Table-contents file
  PAC7TV : DSN=&INDUV..&ROOTT.00TV
 -User parameter file
  PAC7TG : DSN=&INDUV..&ROOTT.00TG
```

RESTORATION OF TD: PTARSD

```
.Permanent output file:
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD

.Permanent input file:
 -Table backup
  PAC7TC : DSN=&INDUN..&ROOTT.00TC(0)
```

RESTORATION OF TV: PTARSV

```
.Permanent output file:
 -Table-contents file
  PAC7TV : DSN=&INDUV..&ROOTT.00TV

.Permanent input file:
 -Table backup
  PAC7TC : DSN=&INDUN..&ROOTT.00TC(0)
```

RESTORATION OF TG: PTARSG

```
.Permanent output file:
 -User parameter file
  PAC7TG : DSN=&INDUV..&ROOTT.00TG

.Permanent input file:
 -Table backup
  PAC7TC : DSN=&INDUN..&ROOTT.00TC(0)
```

13.3. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*               ---- RESTORATION ---                                *
//*********************************************************************
//$RADP.RSTA PROC ROOTT=$ROOTT,  ROOT OF THE PACTABLES SYSTEM         *
//         INDUV='$INDUV',       INDEX OF PACTABLES FILES             *
//         INDUN='$INDUN',       INDEX OF BACKUP FILES                *
//         INDSN='$INDSN',       INDEX NON VSAM FILES                 *
//*:       VSAMCAT='$VCAT',      USER VSAM CATALOG                    *
//         STEPLIB='$MODB',      LIBRARY OF LOAD-MODULES              *
//         OUT=$OUT              OUTPUT CLASS                         *
//*********************************************************************
//DEFINE   EXEC PGM=IDCAMS
//************************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD  SYSOUT=&OUT
//SYSIN DD DSN=&INDSN..&ROOTT.&ROOTT.SY(DF&ROOTT.00TD),
//         DISP=SHR
//      DD DSN=&INDSN..&ROOTT.&ROOTT.SY(DF&ROOTT.00TV),
//         DISP=SHR
//      DD DSN=&INDSN..&ROOTT.&ROOTT.SY(DF&ROOTT.00TG),
//         DISP=SHR
//PTARSD   EXEC PGM=PTARSD
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TC   DD DSN=&INDUN..&ROOTT.00TC(0),
//         DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTARSV   EXEC PGM=PTARSV
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7TC   DD DSN=&INDUN..&ROOTT.00TC(0),
//         DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTARSG   EXEC PGM=PTARSG
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//PAC7TC   DD DSN=&INDUN..&ROOTT.00TC(0),
//         DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
```

14. LIST OF TABLE DESCRIPTIONS (LDTA)

14.1. INTRODUCTION

LDTA: LIST OF TABLE DESCRIPTIONS

INTRODUCTION

This procedure prints table descriptions.

EXECUTION CONDITION

This procedure reads the TD file, which can remain open to on-line use.

14.2. USER INPUT

USER INPUT

.A 'Z'-type line per print request:

POS.	LEN.	VALUE	MEANING
2	1	'Z'	Line code
5	4		Print request
		'TLS '	List of table descriptions
		'TDS '	Table description
9	6	tttttt	Table number
23	8	MMDDCCYY	Historical account date

NOTE:

The input transactions are not validated; erroneous requests are not taken into account.

14.3. DESCRIPTION OF STEPS

LDTA: DESCRIPTION OF STEPS

TRANSACTION RECOGNITION: PTU001

VERIFICATION OF VSAM FILES: IDCAMS

TABLE-DESCRIPTION PRINTING: PTA290

```
.Permanent input file:
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD

.Input transaction file:
 -Print request
  PAC7TE :DSN=&&LDTAMB

.Output report:
 -Table-description printout
  PAC7ID
```

14.4. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*         --- LIST OF TABLE DESCRIPTIONS  ---                       *
//*********************************************************************
//$RADP.LDTA PROC ROOTT=$ROOTT,   ROOT OF THE PACTABLES SYSTEM        *
//         INDUV='$INDUV',        INDEX OF PACTABLES FILES            *
//         INDSN='$INDSN',        INDEX NON-VSAM FILES                *
//*:       VSAMCAT='$VCAT',       USER VSAM CATALOG                   *
//         STEPLIB='$MODB',       LIBRARY OF LOAD-MODULES             *
//         OUT=$OUT,              UTILITIES AND ERRORS OUTPUT CLA     *
//         OUTL=$OUT,             OUTPUT CLASS OF REPORTS             *
//         UWK=$UWK,              WORK UNIT                           *
//         SPAMB='(TRK,(5,1),RLSE)'   REQUEST-FILE SPACE              *
//*********************************************************************
//COPY   EXEC PGM=PTU001
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&LDTAMB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=&SPAMB
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//VERIFY   EXEC PGM=IDCAMS
//************************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTD),
//         DISP=SHR
//PTA290   EXEC PGM=PTA290
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TE   DD DSN=&&LDTAMB,DISP=(OLD,PASS)
//PAC7ID   DD SYSOUT=&OUTL
//SYSUDUMP DD SYSOUT=&OUT
```

15. PARAMETER UPDATE (PMTA)

15.1. INTRODUCTION

PMTA: USER PARAMETER UPDATE

INTRODUCTION

This procedure updates Pactables user codes, passwords and authorizations as well as control cards for print request submission.

When the user input contains a 'TA' line with the Database Administratoruser's code, the PMTA procedure prints all the user parameters.

EXECUTION CONDITION

This procedure updates the TG file, which must be closed to on-line use except if the material in use allows Batch/TP concurrency.

15.2. USER INPUT

USER INPUT

'TA'-line: user parameter updating:

POS.	LEN.	VALUE	MEANING
1	1		Action code
		blank	Creation or modification
		'C'	Creation
		'M'	Modification
		'D'	Deletion
2	8	uuuuuuuu	User code
10	2	'TA'	Line code
12	8	pppppppp	Password
20	1		General access authorization
		'0'	No general access authorization
		'1'	Read-only access
		'2'	Read-write access
		'3'	User codes update authorized

'TC'-line: access authorizations per table:

POS.	LEN.	VALUE	MEANING
1	1		Action code
		blank	Creation or modification
		'C'	Creation
		'M'	Modification
		'D'	Deletion
2	8	uuuuuuuu	User code
10	2	'TC'	Line code
12	6	tttttt	Table code
18	3	nnn	Line number
21	60		Access authorizations: 20 access authorizations may be entered in this field, with, for each authorization:
		n	pos. 1: sub-schema number ('*' for all sub-schemas)
	1	n	pos. 2: sub-system number ('*' for all sub-systems)
	1	x	pos. 3: autorization (0,1 or 2)

'TJ'-line: control cards:

POS.	LEN.	VALUE	MEANING
1	1		Action code
		blank	Creation or modification
		'C'	Creation
		'M'	Modification
		'D'	Deletion
2	8	uuuuuuuu	User code
10	2	'TJ'	Line code
12	6		JCL line number
		<600000	Control card in front of program
		>599999	Control card in back of program
18	69		Content of JCL line

NOTE:

When a user code is deleted, related access authorizations and JCL lines are also deleted.

The Database must include at least one administrator code with an access authorization of 3 . The deletion of this code is not allowed.

15.3. DESCRIPTION OF STEPS

PMTA: DESCRIPTION OF STEPS

TRANSACTION RECOGNITION: PTU001

VERIFICATION OF VSAM FILES: IDCAMS

PARAMETER UPDATE: PTA100

```
.Permanent input files:
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Error-message file
  PAC7TE : DSN=&INDSV..&ROOTT.00TE

.Permanent input-output file:
 -User parameter file
  PAC7TG : DSN=&INDUV..&ROOTT.00TG

.Input transaction file:
 -Extraction requests
  PAC7MV : DSN=&&PMTAMB

.Output file:
 -Parameter printing requests
  PAC7NU : DSN=&&NUTAB

.Output report:
 -Printing of descriptions
   PAC7ET
```

PRINTING OF USER PARAMETERS: PTA120

```
.Permanent input files:
 -Table-description file
  PAC7TD :  DSN=&INDUV..&ROOTT.00TD
 -User parameter file
  PAC7TG : DSN=&INDUV..&ROOTT.00TG

.Input transaction file:
 -Print requests
  PAC7NU : DSN=&&NUTAB

.Output report:
 -Printing of user parameters
  PAC7ET
```

15.4. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*           --- USER PARAMETER UPDATE  --                           *
//*********************************************************************
//$RADP.PMTA PROC ROOTT=$ROOTT, ROOT OF PACTABLES SYSTEM              *
//         INDUV='$INDUV',      INDEX OF PACTABLES FILES              *
//         INDSV='$INDSV',      INDEX OF VA PAC SYSTEM FILES          *
//         INDSN='$INDSN',      NON-VSAM FILES INDEX                  *
//*:       VSAMCAT='$VCAT',     VSAM USER CATALOG                     *
//*:       SYSTCAT='$SCAT',     VSAM SYSTEM CATALOG                   *
//         STEPLIB='$MODB',     LIBRARY OF LOAD-MODULES               *
//         OUT=$OUT,            UTILITIES AND ERRORS OUTPUT CLASS     *
//         OUTL=$OUT,           OUTPUT CLASS OF REPORTS               *
//         UWK=$UWK,            WORK UNIT                             *
//         SPANU='(TRK,(1,1),RLSE)', WORK FILE SPACE                  *
//         SPAMB='(TRK,(5,1),RLSE)'  REQUEST-FILE SPACE               *
//*********************************************************************
//COPY   EXEC PGM=PTU001
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&PMTAMB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=&SPAMB
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//VERIFY   EXEC PGM=IDCAMS
//************************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTD),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTE),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTG),
//         DISP=SHR
//PTA100   EXEC PGM=PTA100
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//PAC7MV   DD DSN=&&PMTAMB,DISP=(OLD,DELETE)
//PAC7NU   DD DSN=&&NU,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPANU,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//PAC7ET   DD SYSOUT=&OUTL
//SYSUDUMP DD SYSOUT=&OUT
//PTA120   EXEC PGM=PTA120
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
```

```
//         DISP=SHR
//PAC7NU   DD DSN=&&NU,DISP=(OLD,DELETE)
//PAC7ET   DD SYSOUT=&OUTL
//SYSUDUMP DD SYSOUT=&OUT
```

16. TABLE EXTRACTION (EXTA)

16.1. INTRODUCTION

EXTA: TABLE EXTRACTION

INTRODUCTION

The EXTA procedure transforms table data into batch update transactions.

EXECUTION CONDITION

This procedure reads the Pactables files, which can remain open to on-line use.

16.2. USER INPUT

USER INPUT

.One '*'-type line per user:

POS.	LEN.	VALUE	MEANING
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password

.One 'A'-type line per table to extract:

POS.	LEN.	VALUE	MEANING
2	1	'A'	Line code
3	6	tttttt	Table number
9	8	DDMMCCYY	Historical account date
17	1		Not used
18	1		Sub-system selection
		blank	No sub-system selection
		1 TO 0	Number of selected sub-system
19	1		Data delimiter
		blank	'/'

16.3. DESCRIPTION OF STEPS

EXTA: DESCRIPTION OF STEPS

TRANSACTION RECOGNITION: PTU001

VERIFICATION OF VSAM FILES: IDCAMS

EXTRACTION OF TABLE DATA: PTA150

```
.Permanent input files:
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Error message file
  PAC7TE : DSN=&INDSV..&ROOTT.00TE
 -Table contents file
  DSN=&INDUV..&ROOTT.00TV
 -User parameter file
  PAC7TG : DSN=&INDUV..&ROOTT.00TG

.Input transaction file:
 -Extraction requests
  PAC7MV : DSN=&&EXTAMB

.Output file:
 -Extracted transactions
  PAC7EX : DSN=&&EX

.Output report:
 -Transaction review
  PAC7ET
```

PRINTING OF EXTRACTED TRANSACTIONS: PTA160

```
.Permanent input file:
 -Table description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD

.Input transaction file:
 -Extracted transactions
  PAC7EX : DSN=&&EX

.Output report:
 -Printing of extracted data
  PAC7ET

.Output file:
 -Extracted transactions
  PAC7NU : DSN=&&MBTAB

.Sort files:
  SORTWK01, SORTWK02, SORTWK03.

.Return codes:
 - 0:  No delimiter in data
 - 8:  Delimiter in at least one table
 -12:  Delimiter in all tables
```

16.4. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*            ---  TABLE EXTRACTION  ---                             *
//*********************************************************************
//$RADP.EXTA PROC ROOTT=$ROOTT, ROOT OF PACTABLES SYSTEM              *
//         INDUV='$INDUV',      INDEX OF PACTABLES FILES              *
//         INDSV='$INDSV',      INDEX OF VA PAC SYSTEM FILES          *
//         INDSN='$INDSN',      NON VSAM FILES INDEX                  *
//*:       VSAMCAT='$VCAT',     VSAM USER CATALOG                     *
//*:       SYSTCAT='$SCAT',     VSAM SYSTEM CATALOG                   *
//         STEPLIB='$MODB',     LIBRARY OF LOAD-MODULES               *
//         SORTLIB='$BIBT',       SORT LIBRARY                        *
//         OUT=$OUT,            UTILITIES AND ERRORS OUTPUT CLASS     *
//         OUTL=$OUT,           OUTPUT CLASS OF REPORTS               *
//         UWK=$UWK,            WORK UNIT                             *
//         CYL='(3,1)',         SORT-FILE SPACE                       *
//         SPAEX='(TRK,(10,10),RLSE)', EXTRACTED-TRANSACTIONS SPA     *
//         SPAMB='(TRK,(5,1),RLSE)'  REQUEST-FILE SPACE              *
//*********************************************************************
//COPY   EXEC PGM=PTU001
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&EXTAMB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=&SPAMB
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//VERIFY   EXEC PGM=IDCAMS
//**********************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTD),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTV),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTE),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTG),
//         DISP=SHR
//PTA150   EXEC PGM=PTA150
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7ET   DD SYSOUT=&OUTL
//PAC7EX   DD DSN=&&EX,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAEX,
//            DCB=(RECFM=FB,LRECL=120,BLKSIZE=2400)
//PAC7MV   DD DSN=&&EXTAMB,DISP=(OLD,DELETE)
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//SYSUDUMP DD SYSOUT=&OUT
```

```
//PTA160   EXEC PGM=PTA160
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7ET   DD SYSOUT=&OUTL
//PAC7EX   DD DSN=&&EX,DISP=(OLD,PASS)
//PAC7NU   DD DSN=&&MBTAB,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAEX,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//SYSOUX   DD SYSOUT=&OUT
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
```

17. DIRECT CONSULTATION OF TABLES (TUTA)

17.1. INTRODUCTION

TUTA: DIRECT CONSULTATION OF TABLES

INTRODUCTION

The TUTA procedure extracts tables in the form of tables without historical account intended to be used.

The procedure creates two new files which contain the descriptions and contents of the selected tables. There is only one description and one version of data for each selected table.

EXECUTION CONDITION

This procedure recreates the AD and AV files, which must therefore be closed to on-line use. These two files are the reorganized images of TD and TV respectively.

The TUTA procedure defines both files in the second step.

17.2. USER INPUT

USER INPUT

.One '*'-type line :

POS.	LEN.	VALUE	MEANING
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password

.One 'A'-type line for each selected table:

POS.	LEN.	VALUE	MEANING
2	1	'A'	Line code
3	6	tttttt	Table number
9	8	DDMMCCYY	Historical account date

When no 'A'-type line is entered, the user may use all the tables that are accessible at that time. A different date may be entered on a single 'A'-type line where no table number is indicated.

17.3. DESCRIPTION OF STEPS

TUTA: DESCRIPTION OF STEPS

TRANSACTION RECOGNITION: PTU001

VERIFICATION OF VSAM FILES: IDCAMS

DIRECT CONSULTATION OF TABLES: PTAU80

```
.Permanent input files:
 -Table-description file
  PAC7TD : DSN=&INDUV..&ROOTT.00TD
 -Error-message file
  PAC7TE : DSN=&INDSV..&ROOTT.00TE
 -Table-contents file
  PAC7TV : DSN=&INDUV..&ROOTT.00TV
 -User-parameter file
  PAC7TG : DSN=&INDUV..&ROOTT.00TG

.Input transaction file:
 -Request transactions
  PAC7MX : DSN=&&TUTAMB

.Permanent output files:
 -Table-description file
  PAC7AD : DSN=&INDUV..&ROOTT.00AD
 -Table-contents file
  PAC7AV : DSN=&INDUV..&ROOTT.00AV

.Output report:
 -Transaction report
  PAC7ET

.Sort files:
  SORTWK01, SORTWK02, SORTWK03.
```

17.4. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*        ---- DIRECT CONSULTATION OF TABLES  ---                    *
//*********************************************************************
//$RADP.TUTA PROC ROOTT=$ROOTT, ROOT OF PACTABLES SYSTEM              *
//         INDUV='$INDUV',      INDEX OF PACTABLES FILES              *
//         INDSV='$INDSV',      INDEX OF VA PAC SYSTEM FILES          *
//         INDSN='$INDSN',      NON VSAM FILES INDEX                  *
//*:       VSAMCAT='$VCAT',     VSAM USER CATALOG                     *
//*:       SYSTCAT='$SCAT',     VSAM SYSTEM CATALOG                   *
//         STEPLIB='$MODB',     LIBRARY OF LOAD-MODULES               *
//         SORTLIB='$BIBT',       SORT LIBRARY                        *
//         OUT=$OUT,            UTILITIES AND ERRORS OUTPUT CLASS     *
//         OUTL=$OUT,           OUTPUT CLASS OF REPORTS               *
//         CYL='(3,1)',         SORT-FILE SPACE                       *
//         UWK=$UWK,            WORK UNIT                             *
//         SPAMB='(TRK,(5,1),RLSE)'  REQUEST-FILE SPACE               *
//*********************************************************************
//COPY   EXEC PGM=PTU001
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&TUTAMB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=&SPAMB
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//VERIFY   EXEC PGM=IDCAMS
//************************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTD),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTV),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTE),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTG),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(DF&ROOTT.00AD),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(DF&ROOTT.00AV),
//         DISP=SHR
//PTAU80   EXEC PGM=PTAU80
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TV   DD DSN=&INDUV..&ROOTT.00TV,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//PAC7AD   DD DSN=&INDUV..&ROOTT.00AD,
//         DISP=SHR
```

```
//PAC7AV   DD DSN=&INDUV..&ROOTT.00AV,
//         DISP=SHR
//PAC7MX   DD DSN=&&TUTAMB,DISP=(OLD,DELETE)
//PAC7ET   DD SYSOUT=&OUTL
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
```

18. DISPATCHED TABLE MANAGEMENT (DTM OPTION)

18.1. TABLE DESCRIPTION COMPARISON (CDT1-CDT2)

DISPATCHED TABLE MANAGER (DTM)

The Dispatched Table Manager is an optional utility and its use depends on a specific purchase agreement.

TABLE DESCRIPTION COMPARISON

The CDT1 procedure compares two different states of a Table description file and extracts the differences, giving an intermediate sequential file.

This file may be used as input in the CDT2 procedure in order to update the "outdated" version of the table description.

EXECUTION CONDITION

The CDT1 procedure reads the files, which can therefore remain open to on-line use.

From the result of the CDT1 procedure, the CDT2 procedure updates the TD and TV files, which are called 'slave' files. These files must therefore remain closed to on-line use.

18.2. USER INPUT (CDT1)

USER INPUT

.One '*'-type line per user:

POS.	LEN.	VALUE	MEANING
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password

.One 'A'-type line for each selected table:

POS.	LEN.	VALUE	MEANING
2	1	'A'	Line code
3	6	tttttt	Table number

When a single 'A'-type line is entered without the TABLE NUMBER, all table descriptions are compared.

18.3. DESCRIPTION OF STEPS (CDT1)

CDT1: DESCRIPTION OF STEPS

TRANSACTION RECOGNITION: PTU001

VERIFICATION OF VSAM FILES: IDCAMS

CHECK OF TRANSACTIONS: PTAD05

```
.Permanent input files:
 -'Master' table-description file
  PAC7TD : DSN=&TDMAST
 -Error-message file
  PAC7TE : DSN=&INDSV..&ROOTT.00TE
 -User-parameter file
  PAC7TG : DSN=&INDUV..&ROOTT.00TG

.Input transaction file:
 -Comparison request transactions
  PAC7MV : DSN=&&CDT1MB

.Output file:
 -Validated comparison request transactions
  PAC7MX : DSN=&&MX

.Output report:
 -Transaction report
  PAC7ET
```

TABLE-DESCRIPTION COMPARISON AND EXTRACTION: PTAD10

```
.Permanent input files:
 -'Master' table-description file
  PAC7TD : DSN=&TDMAST
 -Error message file
  PAC7TE : DSN=&INDUV..&ROOTT.00TE
 -'Slave' table-description file
  PAC7TS : DSN=&TDSLAV

.Input transaction file:
 -Validated transactions
  PAC7MX : DSN=&&MX


.Output file:
 -Comparison result to be used as input of
  the CDT2 procedure
  PAC7TX : DSN=&XD

.Output report:
 -Extraction printout
  PAC7ET
```

18.4. EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*         ----  TABLE-DESCRIPTION COMPARISON  ---                   *
//*********************************************************************
//$RADP.CDT1 PROC ROOTT=$ROOTT, ROOT OF PACTABLES SYSTEM              *
//         INDUV='$INDUV',      INDEX OF PACTABLES FILES              *
//         INDSV='$INDSV',      INDEX OF VA PAC SYSTEM FILES          *
//         INDSN='$INDSN',      NON VSAM FILES INDEX                  *
//*:       VSAMCAT='$VCAT',     VSAM USER CATALOG                     *
//*:       SYSTCAT='$SCAT',     VSAM SYSTEM CATALOG                   *
//         TDMAST=,             MASTER DESCRIPTION                    *
//         TDSLAV=,             SLAVE DESCRIPTION                     *
//         XD='&&TX',           EXTRACTED DESCRIPTION DSN             *
//         SPAXD='(TRK,(30,3),RLSE)', EXTRACTED DESCRIPTION SPACE     *
//         STEPLIB='$MODB',     LOAD-MODULE LIBRARY                   *
//         SORTLIB='$BIBT',     SORT LIBRARY                          *
//         OUT=$OUT,            UTILITIES AND ERRORS OUTPUT CLASS     *
//         OUTL=$OUT,           OUTPUT CLASS OF REPORTS               *
//         UWK=$UWK,            WORK UNIT                             *
//         CYL='(3,1)',         SORTWORK SPACE                        *
//         SPAMB='(TRK,(5,1),RLSE)' REQUEST-FILE SPACE                *
//*********************************************************************
//COPY   EXEC PGM=PTU001
//*********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&CDT1MB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=&SPAMB
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//VERIFY EXEC PGM=IDCAMS
//*********************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7TD   DD DSN=&TDMAST,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//PAC7AD   DD DSN=&TDSLAV,
//         DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTD),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTE),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTG),
//         DISP=SHR
//PTAD05 EXEC PGM=PTAD05
//*********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7ET   DD SYSOUT=&OUTL
//PAC7MV   DD DSN=&&CDT1MB,DISP=(OLD,DELETE)
//PAC7MX   DD DSN=&&MX,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAXD,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=1600)
//PAC7TD   DD DSN=&TDMAST,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//SYSOUX   DD SYSOUT=&OUT
```

```
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
//PTAD10 EXEC PGM=PTAD10
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7ET   DD SYSOUT=&OUTL
//PAC7MX   DD DSN=&&MX,DISP=(OLD,PASS)
//PAC7TD   DD DSN=&TDMAST,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TS   DD DSN=&TDSLAV,
//         DISP=SHR
//PAC7TX   DD DSN=&XD,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAXD,
//            DCB=(RECFM=FB,LRECL=240,BLKSIZE=2400)
```

18.5. DESCRIPTION OF STEPS (CDT2)

CDT2: DESCRIPTION OF STEPS

VERIFICATION OF VSAM FILES: IDCAMS

UPDATE OF 'SLAVE' FILES, TABLE-DESCRIPTIONS AND
RECOGNITION OF THE FILE EXTRACTED BY CDT1: PTAD20

```
.Input files:
 -'Slave' file of table-descriptions
  PAC7TD : DSN=&TDSLAV
 -Error-message file
  PAC7TE : DSN=&INDSV..&ROOTT.00TE

.Output file:
 -File of table-contents associated to the
  'slave' table-description file
  PAC7TV : DSN=&TVSLAV

.Input transaction file:
 -Result extracted from comparison in the
  CDT2 procedure
  PAC7TX : DSN=&XD

.Output report:
 -Update report
  PAC7ET

.Sort files:
  SORTWK01, SORTWK02, SORTWK03.
```

18.6. EXECUTION JCL (CDT2)

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*   --- UPDATE OF TABLE-DESCRIPTIONS AFTER COMPARISON ---
//*********************************************************************
//$RADP.CDT2 PROC ROOTT=$ROOTT, ROOT OF PACTABLES SYSTEM              *
//         INDSV='$INDSV',      INDEX OF VA PAC SYSTEM FILES          *
//         INDSN='$INDSN',      NON VSAM FILES INDEX                  *
//*:       VSAMCAT='$VCAT',     VSAM USER CATALOG                     *
//*:       SYSTCAT='$SCAT',     VSAM SYSTEM CATALOG                   *
//         TDSLAV=,             'SLAVE' DESCRIPTION                   *
//         TVSLAV=,             TABLES LINKED TO SLAVE DESCRIPTIO     *
//         XD='&&TX',           DSN OF CDT1 EXTRACTED DESCRIPTION     *
//         STEPLIB='$MODB',     LOAD-MODULE LIBRARY                   *
//         SORTLIB='$BIBT',     SORT LIBRARY                          *
//         OUT=$OUT,            UTILITIES AND ERRORS OUTPUT CLASS     *
//         OUTL=$OUT,           OUTPUT CLASS OF REPORTS               *
//         UWK=$UWK,            WORK UNIT                             *
//         CYL='(3,1)'          SORTWORK SPACE                        *
//*********************************************************************
//VERIFY EXEC PGM=IDCAMS
//**********************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7TD   DD DSN=&TDSLAV,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TV   DD DSN=&TVSLAV,
//         DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTD),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTE),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTV),
//         DISP=SHR
//PTAD20 EXEC PGM=PTAD20
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7ET   DD SYSOUT=&OUTL
//PAC7TD   DD DSN=&TDSLAV,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TV   DD DSN=&TVSLAV,
//         DISP=SHR
//PAC7TX   DD DSN=&XD,
//         DISP=SHR
//SYSOUX   DD SYSOUT=&OUT
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
```

18.7. TABLE CONTENTS UPDATE (CVTA)

CVTA: COMPARISON AND UPDATING OF TABLE CONTENTS

INTRODUCTION

The CVTA procedure extracts table contents modified on a given date, or between two given dates, and formats them as batch update transactions.

EXECUTION CONDITION

This procedure reads Pactables' files. It can be executed even if the files are open to on-line use.

18.8. USER INPUT (CVTA)

USER INPUT

.One '*'-type line per user:

POS.	LEN.	VALUE	MEANING
2	1	'*'	Line code
3	8	uuuuuuuu	User code
11	8	pppppppp	Password

.One 'A'-type line for each selected table:

POS.	LEN.	VALUE	MEANING
1	1	'S'	Transaction code
2	1	'A'	Line code
3	6	tttttt	Table number
9	8	DDMMCCYY	Update date: beginning
17	4		Not used
19	1	'/'	Delimiter
20	1		Not used
21	8	DDMMCCYY	Update date: end

When a single 'A'-type line is entered without the TABLE NUMBER, all table contents to which the user ('*'-line) has access may be extracted.

18.9. DESCRIPTION OF STEPS (CVTA)

CVTA: DESCRIPTION OF STEPS

TRANSACTION RECOGNITION: PTU001

VERIFICATION OF VSAM FILES: IDCAMS

TABLE-CONTENTS COMPARISON: PTAV10

```
.Permanent input files:
-Table-description file
 PAC7TD : DSN=&TD
-Error-message file
 PAC7TE : DSN=&INDSV..&ROOTT.00TE
-Table-contents file
 PAC7TV : DSN=&TV
-User-parameter file
 PAC7TG : DSN=&INDUV..&ROOTT.00TG

.Input transaction file:
-Comparison requests
 PAC7MV : DSN=&&CVTAMB

.Output file:
-Comparison result
 PAC7EX : DSN=&&EX

.Output report:
 -Transaction report
  PAC7ET
```

EXTRACTION OF UPDATE TRANSACTIONS: PTAV20

```
.Permanent input file:
-Table-Description file
 PAC7TD : DSN=&TD

.Input transaction file:
-Comparison result
 PAC7EX : DSN=&&EX



.Output file:
-Update transactions for use as
 input of UPTA)
 PAC7NU : DSN=&&NU

.Output report:
 -Printing of extracted transactions
  PAC7ET

.Sort files:
 SORTWK01, SORTWK02, SORTWK03.
```

18.10. EXECUTION JCL (CVTA)

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*   ---- TABLE TRANSACTION EXTRACTION ---                           *
//*********************************************************************
//$RADP.CVTA PROC ROOTT=$ROOTT, ROOT OF PACTABLES SYSTEM              *
//         INDUV='$INDUV',      INDEX OF PACTABLES FILES              *
//         INDSV='$INDSV',      INDEX OF VA PAC SYSTEM FILES          *
//         INDSN='$INDSN',      NON-VSAM FILES INDEX                  *
//*:       VSAMCAT='$VCAT',     VSAM USER CATALOG                     *
//*:       SYSTCAT='$SCAT',     VSAM SYSTEM CATALOG                   *
//         TD=,                 DSN DESCRIPTION                       *
//         TV=,                 TABLES LINKED TO DESCRIPTION          *
//         STEPLIB='$MODB',     LOAD-MODULE LIBRARY                   *
//         SORTLIB='$BIBT',     SORT LIBRARY                          *
//         OUT=$OUT,            UTILITIES AND ERRORS OUTPUT CLASS     *
//         OUTL=$OUT,           OUTPUT CLASS OF REPORTS               *
//         UWK=$UWK,            WORK UNIT                             *
//         CYL='(3,1)',         SORTWORK SPACE                        *
//         SPAEX='(TRK,(30,3),RLSE)', EXTRACTED-TRANSACTION SPACE     *
//         SPAMB='(TRK,(5,1),RLSE)'   REQUEST-FILE SPACE              *
//*********************************************************************
//COPY   EXEC PGM=PTU001
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&CVTAMB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=&SPAMB
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//VERIFY EXEC PGM=IDCAMS
//**********************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7TD   DD DSN=&TD,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//PAC7TV   DD DSN=&TV,
//         DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTD),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTE),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTG),
//         DISP=SHR
//         DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTV),
//         DISP=SHR
//PTAV10 EXEC PGM=PTAV10
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7ET   DD SYSOUT=&OUTL
//PAC7MV   DD DSN=&&CVTAMB,DISP=(OLD,DELETE)
//PAC7EX   DD DSN=&&EX,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAEX,
//            DCB=(RECFM=FB,LRECL=120,BLKSIZE=2400)
//PAC7TD   DD DSN=&TD,
//         DISP=SHR
//PAC7TE   DD DSN=&INDSV..&ROOTT.00TE,
//         DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//PAC7TV   DD DSN=&TV,
```

```
//         DISP=SHR
//SYSUDUMP DD SYSOUT=&OUT
//PTAV20 EXEC PGM=PTAV20
//*********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SORTLIB  DD DSN=&SORTLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7ET   DD SYSOUT=&OUTL
//PAC7EX   DD DSN=&&EX,DISP=(OLD,DELETE)
//PAC7NU   DD DSN=&&NU,DISP=(,PASS),UNIT=&UWK,
//            SPACE=&SPAEX,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=1600)
//PAC7TD   DD DSN=&TD,
//         DISP=SHR
//SYSOUX   DD SYSOUT=&OUT
//SORTWK01 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK02 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SORTWK03 DD UNIT=&UWK,SPACE=(CYL,&CYL,,CONTIG)
//SYSUDUMP DD SYSOUT=&OUT
```

19. TABLE RETRIEVAL (FROM RELEASES 7.x) (RxTA)

19.1. RETRIEVAL FROM REL. 7.3 (R3TA) - INTRODUCTION

7.3 RETRIEVAL (R3TA): INTRODUCTION

The retrieval of existing tables and files, which allows Tables of the 7.3 release to be used in the Pactables 2.5, includes five steps:

. Application of the 2.5 retrieval procedure (R3TA) to the TD, TV, and TG files of Rel. 7.3, producing a backup (TC) formatted to meet the requirements of Rel. 2.5.

Note:
For this procedure, refer to the description of Retrieval 8.02/1.2 into 2.5, for details on the definition and use of user input.

. Execution of the 2.5 restoration procedure (RSTA) on the Database, using the backup produced by the preceding step.

. Assignment, at the Administrator level, of the '********' (PMTA) Database Manager.

. Execution of the 2.5 reorganization procedure (RETA), using the restored Database, in order to purge it, and to assign the positive sign to those data needing it in the 7.3 release, for the purpose of user programs written in Cobol II.

. Second execution of the 2.5 restoration procedure (RSTA) on the Database, using the backup produced by the preceding step.

RESULT

Pactables files ready to be used in Release 2.5.

19.2. DESCRIPTION OF STEPS (R3TA)

R3TA: DESCRIPTION OF STEPS

TRANSACTION RECOGNITION: PTU001

BACKUP OF THE 7.3 TD FILE: PTAXVD

This step creates a backup of the TD file used in release 7.3.

.Input file:
-7.3 TD file
PAC7TD : DSN=parameter &OLDTD of the procedure

.Output file:
-Backed up 7.3 file
PAC7TC : DSN=&&R3TATC01

7.3 TV FILE BACKUP: PTAXVV

This step creates a backup of the TV file of release 7.3

.Input file:
-7.3 TV file
PAC7TV : DSN=parameter &OLDTV of the procedure

.Output file:
-7.3 backed up file
PAC7TC : DSN=&&R3TATC01

BACKUP OF 7.3 TG FILE: PTAXVG

This step creates a backup of the TG file from Release 7.3.

.Input file:
-7.3 TG file
PAC7TG : DSN=parameter &OLDTG of the procedure

```
.Output file:
 -7.3 backed up file
  PAC7TC : DSN=&&R3TATC01
```

CONVERSION OF 7.3 BACKUP INTO 2.5 BACKUP: PTAR20

This step creates a backup in 2.5 format from the 7.3 backup file.

```
.Input file:
 -7.3 backup file
  PAC7TC : DSN=&&R3TATC01
 -User-parameter file
  PAC7MB

.Output file:
 -Temporary 2.0 backup
  PAC7TR : DSN=&&R3TATC02

.Output report:
 -Retrieval report
  PAC7ET
```

CATALOGING OF THE 2.0 BACKUP: IEBGENER

This step catalogs the +1 generation of the 2.0 backup if no error was detected during the preceding steps.

```
.Input file:
 -Temporary 2.0 backup
  SYSUT1 : DSN=&&R3TATC02

.Output file:
 -Cataloged 2.0 backup
  SYSUT2 : DSN=&INDUN..&ROOTT.00TC(+1)
```

19.3. EXECUTION JCL (R3TA)

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*         ---  RETRIEVAL OF 7.3 TABLES ---                          *
//*********************************************************************
//$RADP.R3TA PROC ROOTT=$ROOTT,    PACTABLES SYSTEM ROOT              *
//         INDUN='$INDUN',         NON-VSAM FILES' INDEX              *
//*:       VSAMCAT='<>',           USER VSAM CATALOG                  *
//         STEPLIB='$MODB',        LOAD-MODULE LIBRARY                *
//         OUT=$OUT,               OUTPUT CLASS                       *
//         UWK=$UWK,               WORK UNIT                          *
//         DSCB='$DSCB',           DSCB MODEL FILE                    *
//         VOLS='SER=$VOLUN',      BACKUP VOLUME                      *
//         UNITS=$UNITUN,          BACKUP UNIT (DISK OR TAPE)         *
//         SPATC='(TRK,(150,10))', BACKUP SPACE                       *
//         OLDTD=,                 TD FILE, REL. 7.3                  *
//         OLDTG=,                 TG FILE, REL. 7.3                  *
//         OLDTV=                  TV FILE, REL. 7.3                  *
//*********************************************************************
//COPY   EXEC PGM=PTU001
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&R3TAMB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=(TRK,(1))
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//PTAXVD   EXEC PGM=PTAXVD
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TD   DD DSN=&OLDTD,DISP=SHR
//PAC7TC   DD DSN=&&R3TATC01,DISP=(,PASS),
//         UNIT=&UWK,SPACE=&SPATC,
//         DCB=(&DSCB,RECFM=VB,LRECL=1061,BLKSIZE=10614)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTAXVV   EXEC PGM=PTAXVV
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TV   DD DSN=&OLDTV,DISP=SHR
//PAC7TC   DD DSN=*.PTAXVD.PAC7TC,DISP=(MOD,PASS)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTAXVG   EXEC PGM=PTAXVG
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TG   DD DSN=&OLDTG,DISP=SHR
//PAC7TC   DD DSN=*.PTAXVD.PAC7TC,DISP=(MOD,PASS)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTAR20   EXEC PGM=PTAR20
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7MB   DD DSN=&&R3TAMB,DISP=SHR
//PAC7TC   DD DSN=&&R3TATC01,
//         DISP=SHR
//PAC7TR   DD DSN=&&R3TATC02,UNIT=SYSDA,
//         DISP=(,PASS),SPACE=&SPATC,
//         DCB=(RECFM=VB,LRECL=1067,BLKSIZE=10674)
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//IEBGENER EXEC PGM=IEBGENER,COND=((12,LE,PTAR20),
//     (0,NE,PTAXVD),(0,NE,PTAXVG),(0,NE,PTAXVV))
```

```
//*******************************************
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DUMMY
//SYSUT1   DD DSN=&&R3TATC02,DISP=SHR
//SYSUT2   DD DSN=&INDUN..&ROOTT.00TC(+1),
//         UNIT=&UNITS,VOL=&VOLS,
//         DISP=(,CATLG,DELETE),SPACE=&SPATC,
//         DCB=(&DSCB,RECFM=VB,LRECL=1067,BLKSIZE=10674)
```

19.4. 7.3 RETRIEVAL: COMPLETE EXECUTION JCL

```
//$PRFJ.R73A JOB ($CCPT),'7.3 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//R3TA   EXEC $RADP.R3TA,
//       OLDTD=---.---.---,     <------ TD 7.3
//       OLDTV=---.---.---,     <------ TV 7.3
//       OLDTG=---.---.---      <------ TG 7.3
//COPY.CARTE DD *
61
/*
//$PRFJ.R73B JOB ($CCPT),'7.3 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//RSTA20A  EXEC $RADP.RSTA
//$PRFJ.R73C JOB ($CCPT),'7.3 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//PMTA20   EXEC $RADP.PMTA
 ********TASUPER   3
/*
//$PRFJ.R73D JOB ($CCPT),'7.3 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//RETA20   EXEC $RADP.RETA
 *********SUPER
GA
/*
//$PRFJ.R73E JOB ($CCPT),'7.3 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//RSTA20B  EXEC $RADP.RSTA
```

19.5. RETRIEVAL 7.2 (R2TA) - INTRODUCTION

INTRODUCTION

The retrieval of existing tables and files, which allows Tables of the 7.2 release to be used in the new 2.5 release, includes five steps:

. Conversion of the TG file, Rel. 7.2, into a 7.3 TG file (R2TA procedure); creation of a backup (TA) with this file as well as with the 7.2 TD and TV files, so as to make up a backup in the 7.3 format. This 7.3 backup is then converted into a 2.5 backup.

NOTE: For this procedure, refer to the description of Retrieval 8.02 - 1.2 into 2.5, for details on the definition and use of user input.

. Execution of the 2.5 restoration procedure (RSTA) on the Database, using the backup produced by the preceding step.

. Assignment, at the Administrator level, of the '********' (PMTA) Database Manager.

. Execution of the 2.5 reorganization procedure (RETA), using the restored Database, in order to purge it, and to assign the positive sign to those data needing it in the 7.2 release, for the purpose of user programs written in Cobol II.

. Second execution of the 2.5 restoration procedure (RSTA) on the Database, using the backup produced by the preceding step.

RESULT

Pactables files ready to be used in Release 2.5.

19.6. DESCRIPTION OF STEPS (R2TA)

R2TA: DESCRIPTION OF STEPS

TRANSACTION RECOGNITION: PTU001

ALLOCATION OF THE TG FILE: IDCAMS

This step allocates the TG file:
PAC7TG : DSN=&INDUV..ROOTT.00TG

CREATION OF A SEQUENTIAL TG FILE: IDCAMS

.Input file:
-TG file, Rel. 7.2
PAC7IG : DSN=parameter &OLDTG of the procedure

.Output file:
-Sequential copy of the 7.2 TG file
PAC7TG : DSN=&&TG

CONVERSION OF THE TG FILE FROM 7.2 TO 7.3: PTARTG

.Input file:
-Sequential 7.2 TG file
PAC7AG : DSN=&&TG

.Output file:
-7.3 TG file
PAC7TG : DSN=&INDUV..&ROOTT.00TG
-Conversion report
PAC7ET

.Input-output file:
-7.2 TD file
PAC7TD : DSN=parameter &OLDTD of the procedure

BACKUP OF TD FILE, REL. 7.3: PTAXVD

This step creates a backup of the 7.3 TD file.

.Input file:
-7.3 TD file
PAC7TD : DSN=parameter &OLDTD of the procedure

.Output file:
-7.3 backup file
PAC7TC : DSN=&&R2TATC01

BACKUP OF TV FILE, REL. 7.3: PTAXVV

This step creates a backup of the 7.3 TV file.

.Input file:
-7.2 TV file
PAC7TV : DSN=parameter &OLDTV of the procedure

.Output file:
-7.3 backup file
PAC7TC : DSN=&&R2TATC01

BACKUP OF TG FILE, REL. 7.3: PTAXVG

This step creates a backup of the 7.3 TG file.

.Input file:
-7.2 TG file
PAC7TG : DSN=&INDUV..ROOTT.00TG

.Output file:
-7.3 backup file
PAC7TC : DSN=&&R2TATC01

CONVERSION OF 7.3 BACKUP TO 2.5 BACKUP: PTAR20

This step creates a 2.5 backup from the 7.3 backup.

.Input file:
-7.3 backup file
PAC7TC : DSN=&&R2TATC01
-User-parameter file
PAC7MB

.Output file:
-Temporary 2.5 backup
PAC7TR : DSN=&&R2TATC02

.Output report:
-Conversion report
PAC7ET

CATALOGING OF THE 2.5 BACKUP: IEBGENER

This step catalogs the +1 generation of the 2.5 backup
if no error was detected during the preceding steps.

.Input file:
-Temporary 2.5 backup
SYSUT1 : DSN=&&R2TATC02

.Output file:
-Cataloged 2.5 backup
SYSUT2 : DSN=&INDUN..&ROOTT.00TC(+1)

19.7. EXECUTION JCL (R2TA)

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*             ---- RETRIEVAL OF 7.2 TABLES ---                      *
//*********************************************************************
//$RADP.R2TA PROC ROOTT=$ROOTT,    PACTABLES SYSTEM ROOT              *
//         INDUN='$INDUN',         NON-VSAM USER FILES' INDEX         *
//         INDUV='$INDUV',         VSAM USER FILES' INDEX             *
//         INDSN='$INDSN',         NON-VSAM SYSTEM FILES' INDEX       *
//*:       VSAMCAT='<>',           USER VSAM CATALOG                  *
//         STEPLIB='$MODB',        LOAD-MODULE LIBRARY                *
//         OUT=$OUT,               OUTPUT CLASS                       *
//         UWK=$UWK,               WORK UNIT                          *
//         DSCB='$DSCB',           DSCB MODEL FILE                    *
//         VOLS='SER=$VOLUN',      BACKUP VOLUME                      *
//         UNITS=$UNITUN,          BACKUP UNIT (DISK OR TAPE)         *
//         SPATC='(TRK,(150,10))', BACKUP SPACE                       *
//         OLDTD=,                 TD FILE, REL. 7.2                  *
//         OLDTG=,                 TG FILE, REL. 7.2                  *
//         OLDTV=                  TV FILE, REL. 7.2                  *
//*********************************************************************
//COPY   EXEC PGM=PTU001
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&R2TAMB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=(TRK,(1))
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//DEFINE   EXEC PGM=IDCAMS
//************************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD  SYSOUT=&OUT
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//SYSIN DD DSN=&INDSN..&ROOTT.&ROOTT.SY(DF&ROOTT.00TG),
//         DISP=SHR
//REPRO    EXEC PGM=IDCAMS
//************************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD  SYSOUT=&OUT
//PAC7IG   DD DSN=&OLDTG,
//         DISP=SHR
//PAC7TG   DD DSN=&&TG,DISP=(,PASS),UNIT=&UWK,
//         SPACE=(TRK,60,RLSE),DCB=(RECFM=FB,LRECL=80,BLKSIZE=1600)
//SYSIN DD DSN=&INDSN..&ROOTT.&ROOTT.SY(REPROTG),
//         DISP=SHR
//PTARTG EXEC PGM=PTARTG
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7ET   DD SYSOUT=&OUT
//PAC7AG   DD DSN=&&TG,DISP=(OLD,PASS)
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//PAC7TD   DD DSN=&OLDTD,DISP=SHR
//SYSUDUMP DD SYSOUT=&OUT
//PTAXVD   EXEC PGM=PTAXVD
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TD   DD DSN=&OLDTD,DISP=SHR
//PAC7TC   DD DSN=&&R2TATC01,DISP=(,PASS),
//         UNIT=&UWK,SPACE=&SPATC,
//         DCB=(&DSCB,RECFM=VB,LRECL=1061,BLKSIZE=10614)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTAXVV   EXEC PGM=PTAXVV
```

```
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TV   DD DSN=&OLDTV,DISP=SHR
//PAC7TC   DD DSN=*.PTAXVD.PAC7TC,DISP=(MOD,PASS)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTAXVG   EXEC PGM=PTAXVG
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7TG   DD DSN=&INDUV..&ROOTT.00TG,
//         DISP=SHR
//PAC7TC   DD DSN=*.PTAXVD.PAC7TC,DISP=(MOD,PASS)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//PTAR20   EXEC PGM=PTAR20
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7MB   DD DSN=&&R2TAMB,DISP=SHR
//PAC7TC   DD DSN=&&R2TATC01,
//         DISP=SHR
//PAC7TR   DD DSN=&&R2TATC02,UNIT=SYSDA,
//         DISP=(,PASS),SPACE=&SPATC,
//         DCB=(RECFM=VB,LRECL=1067,BLKSIZE=10674)
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//IEBGENER EXEC PGM=IEBGENER,COND=((12,LE,PTAR20),
//     (0,NE,PTARTG),(0,NE,PTAXVD),(0,NE,PTAXVG),(0,NE,PTAXVV))
//*******************************************************
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DUMMY
//SYSUT1   DD DSN=&&R2TATC02,DISP=SHR
//SYSUT2   DD DSN=&INDUN..&ROOTT.00TC(+1),
//         UNIT=&UNITS,VOL=&VOLS,
//         DISP=(,CATLG,DELETE),SPACE=&SPATC,
//         DCB=(&DSCB,RECFM=VB,LRECL=1067,BLKSIZE=10674)
```

19.8. 7.2 RETRIEVAL: COMPLETE EXECUTION JCL

```
//$PRFJ.R72A JOB ($CCPT),'7.2 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//R2TA   EXEC $RADP.R2TA,
//       OLDTD=---.---.---,               <-- TD 7.2
//       OLDTV=---.---.---,               <-- TV 7.2
//       OLDTG=---.---.---                <-- TV 7.2
//COPY.CARTE DD *
61
/*
//$PRFJ.R72B JOB ($CCPT),'7.2 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//RSTA20A  EXEC $RADP.RSTA
//$PRFJ.R72C JOB ($CCPT),'7.2 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//PMTA20   EXEC $RADP.PMTA
 ********TASUPER   3
/*
//$PRFJ.R72D JOB ($CCPT),'7.2 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//RETA20   EXEC $RADP.RETA
 *********SUPER
GA
/*
//$PRFJ.R72E JOB ($CCPT),'7.2 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//RSTA20B  EXEC $RADP.RSTA
```

20. TABLE RETRIEVAL FROM RELEASES 8.xx OR 1.2

20.1. INTRODUCTION

RETRIEVAL OF PACTABLES 8.xx OR 1.2 (RTTA) : INTRODUCTION

The RTTA procedure retrieves Pactables files from releases 8.xx and 1.2, making it possible to use the resulting files in Pactables Rel. 2.5.

It creates a Pactables database in which all information of the 'DATE' type used for the management of the database's files are converted from the DDMMYY format into the DDMMCCYY format, or from the YYMMDD format into the CCYYMMDD format, so as to integrate the century mark.

Depending on the years present in dates in the 8.xx or 1.2 release, the century digits are added by reference to a 'pivot' year specified on a parameter line provided as input to the procedure.

The procedure's test job is delivere with the default 'pivot' year '61' (which can be changed). This means that, for a date in Rel. 1.2 whose year is less than '61', the value '20' is assigned to the century. If the year is higher than 61, the value assigned to the century is '19'.

The retrieval procedure processes only those internal dates useful to the management of the Pactables Database files, and not those belonging to user-specific data.

The retrieval of Pactables 8.xx or 1.2 includes the following steps:

. Backup in 8.xx or 1.2 format (SVTA procedure) of the TD, TV, and TG files of Release 8.xx or 1.2;

. Retrieval in 2.5 format (RTTA procedure) of the backup produced by the preceding step, so as to produce a 2.5 backup file;

. Assignement, at the Administrator level, of the '********' (PMTA) Database Manager.

. Restoration in the 2.5 format (RSTA procedure) of the database, from the backup produced by the preceding step;

. Execution of the 2.5 reorganization procedure (RETA), using the restored Database, in order to purge it, and to assign the positive sign to those data needing it in the former release, for the purpose of user programs written in Cobol II;

. Second execution of the 2.5 restoration procedure (RSTA) on the Database, using the backup produced by the preceding step.

RESULT

Pactables files ready to be used in Release 2.5.

20.2. RTTA : ENTREES UTILISATEUR

RTTA: USER INPUT

. Parameter line defining the 'pivot' year for century assignment.

Pos.	Len.	Value	Meaning
1	2	Number other than '00'	Pivot year

20.3. RTTA: DESCRIPTION OF STEPS

RTTA: DESCRIPTION OF STEPS

BACKUP RETRIEVAL: PTAR20

```
.Permanent input file:
 -1.2 backup file
  PAC7TC : DSN=INDUN..&ROOTT.00TC(0)

.Permanent output file:
 -Temporary backup, rel. 2.0
  PAC7TR : DSN=&&RTTATC

.Input file:
 -user parameter card
  PAC7MB

.Output report:
 -Retrieval report
  PAC7ET
```

CATALOGING OF THE 2.5 BACKUP: IEBGENER

```
.Input file:
 -Temporary 2.5 backup
  SYSUT1 : DSN=&&RTTATC

.Output file:
 -Cataloged 2.5 backup
  SYSUT2 : DSN=&INDUN..&ROOTT.00TC(+1)
```

20.4. RTTA: EXECUTION JCL

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*        --- BACKUP RETRIEVAL FOR RELEASE 2.0 ---                   *
//*********************************************************************
//$RADP.RTTA PROC ROOTT=$ROOTT,    PACTABLES SYSTEM ROOT              *
//         INDUN='$INDUN',         NON-VSAM FILES' INDEX              *
//*:       VSAMCAT='<>',           USER VSAM CATALOG                  *
//         STEPLIB='$MODB',        LOAD-MODULE LIBRARY                *
//         OUT=$OUT,               OUTPUT CLASS                       *
//         DSCB='$DSCB',           DSCB MODEL FILE                    *
//         VOLS='SER=$VOLUN',      BACKUP VOLUME                      *
//         UNITS=$UNITUN,          BACKUP UNIT (DISK OR TAPE)         *
//         SPATC='(TRK,(150,10))'  BACKUP SPACE                       *
//*********************************************************************
//PTAR20   EXEC PGM=PTAR20
//************************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//PAC7MB   DD DUMMY
//PAC7TC   DD DSN=&INDUN..&ROOTT.00TC(0),
//         DISP=SHR
//PAC7TR   DD DSN=&&RTTATC,UNIT=SYSDA,
//         DISP=(,PASS),SPACE=&SPATC,
//         DCB=(RECFM=VB,LRECL=1067,BLKSIZE=10674)
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//IEBGENER EXEC PGM=IEBGENER,COND=(12,LE,PTAR20)
//*****************************************
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DUMMY
//SYSUT1   DD DSN=&&RTTATC,DISP=SHR
//SYSUT2   DD DSN=&INDUN..&ROOTT.00TC(+1),
//         UNIT=&UNITS,VOL=&VOLS,
//         DISP=(,CATLG,DELETE),SPACE=&SPATC,
//         DCB=(&DSCB,RECFM=VB,LRECL=1067,BLKSIZE=10674)
```

20.5. COMPLETE RETRIEVAL JCL

```
//$PRFJ.TTA JOB ($CCPT),'2.5',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//RTTA     EXEC $RADP.RTTA
//* PARAMETER LINE SPECIFYING THE PIVOT YEAR
//* DEFAULT VALUE:  61
//PTAR20.PAC7MB DD *
61
/*
//* 1.2 OR 8.02 BACKUP
//* DEFAULT:  GENERATION 0 OF TC'S DATA GROUP
//PTAR20.PAC7TC DD DSN=---.---.---,DISP=SHR
//* 2.0 BACKUP
//* DEFAULT:  GENERATION +1 OF TC'S DATA GROUP
//IEBGENER.SYSUT2 DD DSN=---.---.---,DISP=SHR
//$PRFJ.TTAB JOB ($CCPT),'2.5 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//RSTA20A  EXEC $RADP.RSTA
//$PRFJ.TTAC JOB ($CCPT),'2.5 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//PMTA20   EXEC $RADP.PMTA
 ********TASUPER   3
/*
//$PRFJ.TTAD JOB ($CCPT),'2.5 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//RETA20   EXEC $RADP.RETA
 *********SUPER
GA
/*
//$PRFJ.TTAE JOB ($CCPT),'2.5 ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
// JCLLIB ORDER=($BIBP)
//RSTA20B  EXEC $RADP.RSTA
  $ROOTT
```

21. COMPATIBILITY BETWEEN PACTABLES AND VA PAC

21.1. COMPATIBILITY BETWEEN PACTABLES 2.5 AND VA PAC 1.6

COMPATIBILITY BETWEEN PACTABLES 2.5 and VA Pac 1.6

If you use Pactables 2.5 version and generate table descriptions of VA Pac from version 1.6 onwards (or from a previous version), you need using the GETA, GETD, and GETI procedures that are supplied with the 2.5 Pactables installation medium, instead of the GETA, GETD, AND GETI procedures supplied with Va Pac as they are not compatible with Pactables 2.5.

22. INSTALLATION

22.1. INTRODUCTION

PACTABLES INSTALLATION: INTRODUCTION

The installation procedure includes three phases:

. Preparation of the installation,

. Installation,

. On-line and batch tests.

An installation tape including French and English versions is required. To select a version, enter the parameter required (===SELL). The whole installation process is described in this chapter.

Before proceeding with the installation, it is important that the user should be familiar with the technical characteristics of the Pactables function described in this manual in order to prepare the necessary environment (disk space, VSAM catalog and space, on-line options, etc.).

Then you can start installing Pactables. Follow these steps:

PREPARATION

Retrieval of the initial JCL from the tape, and execution of this JCL:

. Backup of installation tape,

. Copy of a complete JCL processing module,

. Retrieval of the Pactables complete installation and operation JCL.

INSTALLATION

See Subchapter 'Installation Process'.

TESTS

. On-line tests,

. Tests of the batch procedures.

22.2. INSTALLATION TAPE

INSTALLATION TAPE

The installation tape (6,250 BPI, Standard labels) includes the following files:

RANK	LABEL	LRECL	BLOCK	CONTENTS
1	INST.JCL	80	3440	Initial installation JCL.
2	INST.MOD		6144	MM1JCL load module JCL preparation utility.
3	PACT.JCL	80	3440	Pactables operation and installation JCL
4	PAC.TE	90	1800	Pactables error mes. system file
5	PACT.MBR8		6144	Batch load modules
6	PACT.MTR8		6144	On-line load modules
7	PACT.MBR8C1		6144	COBOL/VS batch and on-line routines
8	PACB.MBR8		6144	Tables generation load-modules
9	PACT.TCFRA	1067 (VB)	10674	Test and User files backup (French)
10	PACT.TCENG	1067 (VB)	10674	Test and User files backup (English)
11	PACT.TB	1136 (VB)	11364	Working file for TUF-TP facility
12	PACT.MacT	80	32000	Macro-structures libraries for TUF-TP facility

22.3. INITIAL JCL

INSTALLATION PREPARATION

It is recommended to copy all the preparation, installation and operation JCLs in a specific PDS.

This PDS allocation is not supplied and must be performed in advance by the person responsible for the installation.

This PDS must have the following characteristics:

- Lrecl=80
- Size: about 60 tracks of a 3380 disk, 30-directory blocks.

Then, copy the initial JCL from the VisualAge Pacbase installation tape ('INST.JCL') into the allocated PDS, using one of the site's utilities (IEBGENER, for example).

INITIAL JCL

The initial JCL contains the JOB's necessary for the generation of VA Pac complete installation and operation JCL.

This complete JCL is obtained via a parameterized skeleton JCL ('PAC.JCL'), thus allowing each user's specific needs to be taken into account.

This JCL is processed by an 'INST.MOD' file utility, which generates a JCL taking into account the parameters specified by the user.

The INITIAL JCL includes three JOBs that should be adapted to the site's requirements:

. Copy of the installation tape supplied with the product onto a user medium. This will constitute the Va Pac system backup, and it must be used for the actual installation.

. Downloading, via IEBCOPY, of the MM1JCL utility contained in the INST.MOD file into a load-module library already existing on the site or allocated for this purpose. This operation is only executed for the first installation of the system.

. Execution of the MM1JCL which creates the actual installation and operation JCL.

Complete the JCL lines for this execution as follows: //STEPLIB DD DSN= <--- library containing the MM1JCL
//SYSUT1=<--- tape or cartridge number

//SYSUT2 DD DSN= <--- recipient file for the complete installation and operations JCL.
This file may be either a member of the PDS initially designed to store all the JCLs, or a sequential file of your choice.

Enter the required parameters (refer to the following subchapters).

KEEP THIS MM1JCL OUTPUT: YOU MAY NEED IT FOR REINSTALLATIONS.

```
$CO**** Pactables 2.5 CICS MVS $VV $DATE **************
//PACBASE0 JOB (---),'TAPE',CLASS=D,MSGCLASS=A
//ALLOC   EXEC PGM=IEHINITT
//TCGI     DD  DISP=SHR,UNIT=(3480,,DEFER),VOL=(,RETAIN,SER=$BDECGI)
//TINST    DD  DISP=SHR,UNIT=(3480,,DEFER),VOL=(,RETAIN,SER=------)
//SYSPRINT DD  SYSOUT=A
//SYSIN    DD  *
TINST INITT SER=------,OWNER='------',DISP=REWIND
/*
//PACCOP  PROC INDEX='$INPRO',NAME=XXX,LAB=N
//GENER   EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=A
//SYSIN    DD  DUMMY
//SYSUT1   DD  DSN=&INDEX..&NAME,DISP=SHR,
//             VOL=(,RETAIN,REF=*.ALLOC.TCGI),LABEL=&LAB
//SYSUT2   DD  DSN=&INDEX..&NAME,DISP=(,KEEP),
//             VOL=(,RETAIN,REF=*.ALLOC.TINST),LABEL=&LAB,
//             DCB=*.SYSUT1
//        PEND
//STEP1   EXEC PACCOP,LAB=01,NAME=JCL,INDEX=INST
//STEP2   EXEC PACCOP,LAB=02,NAME=MOD,INDEX=INST
//STEP3   EXEC PACCOP,LAB=03,NAME=JCL,INDEX=PACT
//STEP4   EXEC PACCOP,LAB=04,NAME=TE,INDEX=PACT
//STEP5   EXEC PACCOP,LAB=05,NAME=MBR8,INDEX=PACT
//STEP6   EXEC PACCOP,LAB=06,NAME=MTR8,INDEX=PACT
//STEP7   EXEC PACCOP,LAB=07,NAME=MBR8C1,INDEX=PACT
//STEP8   EXEC PACCOP,LAB=08,NAME=MBR8,INDEX=PACB
//STEP9   EXEC PACCOP,LAB=09,NAME=TCFRA,INDEX=PACT
//STEP10  EXEC PACCOP,LAB=10,NAME=TCENG,INDEX=PACT
//STEP11  EXEC PACCOP,LAB=11,NAME=TB,INDEX=PACT
//STEP12  EXEC PACCOP,LAB=12,NAME=MACT,INDEX=PACT
//PACBASE1  JOB (---),'MM1JCL',CLASS=D,MSGCLASS=A
//COPY    EXEC  PGM=IEBCOPY
//SYSPRINT DD SYSOUT=A
//SYSUT3   DD UNIT=SYSDA,SPACE=(TRK,10)
//SYSUT4   DD UNIT=SYSDA,SPACE=(TRK,10)
//IM       DD DISP=OLD,UNIT=3480,VOL=(,RETAIN,SER=------),
//         DSN=INST.MOD,LABEL=2
//OM       DD DISP=SHR,DSN=---.---.---
//SYSIN    DD *
 C  I=((IM,R)),O=OM
/*
//PACBASE2  JOB (---),'JCL INSTALLATION',CLASS=D,MSGCLASS=A
//MM1JCL EXEC PGM=MM1JCL
//STEPLIB  DD DISP=SHR,DSN=---.---.---
//SYSOUT   DD SYSOUT=A
//SYSUT1   DD DSN=PACT.JCL,DISP=OLD,
//            UNIT=3480,VOL=(,RETAIN,SER=------),LABEL=3
//SYSUT3   DD UNIT=SYSDA,SPACE=(CYL,(5,2)),DCB=BLKSIZE=4160
//SYSUT4   DD UNIT=SYSDA,SPACE=(CYL,(5,2)),DCB=BLKSIZE=4160
//SYSUT8   DD DUMMY,DCB=BLKSIZE=1370
//SYSUT9   DD DUMMY,DCB=BLKSIZE=1370
//*********************************************************************
//*  --- CREATION DU JCL D'INSTALLATION PAR L'UTILITAIRE 'MM1JCL' --- *
//*********************************************************************
//*                                                                   *
//*      .MODIFIER LA LISTE DES COMMANDES FOURNIES EN PRECISANT LES   *
//*       VARIANTES D'INSTALLATION (S'IL Y EN A), EN DEMANDANT  SI    *
//*       NECESSAIRE LA SELECTION DE PORTIONS DE JCL D'INSTALLATION   *
//*       (MODULES DE JCL), EN DONNANT DES VALEURS APPROPRIEES AUX    *
//*       PARAMETRES D'INSTALLATION, ET EN PRECISANT EVENTUELLEMENT   *
//*       DES LIGNES A AJOUTER EN TETE OU EN FIN DE CHAQUE MODULE     *
//*       DE JCL.                                                     *
//*********************************************************************
//*********************************************************************
//*  --- CREATION OF INSTALLATION JCL THROUGH PROGRAM 'MM1JCL' ---    *
//*********************************************************************
//*      .MODIFY THE LIST OF THE SUPPLIED COMMANDS BY ENTERING        *
//*       THE INSTALLATION VARIANTS (IF ANY), BY ASKING, IF           *
//*       NECESSARY, A SELECTION OF PARTS OF INSTALLATION JCL         *
//*       (JCL MODULES), BY GIVING THA APPROPRIATE VALUES TO THE      *
//*       INSTALLATION PARAMETERS, AND BY SPECIFYING (EVENTUALLY)     *
//*       THE LINES TO BE ADDED AT THE BEGINNING OR AT THE END OF     *
```

```
//*       EACH JCL MODULE.                                              *
//*                                                                     *
//*********************************************************************
//SYSPRM DD *
 *                                                                 F
//SYSUT2   DD DSN=-----   .MEMBRE DE PDS OU FICHIER SEQUENTIEL
//*                        RECEVANT LE JCL (LRECL=80)
//*                       .PDS MEMBER OR SEQUENTIAL FILE
//*                        RECEIVING THE JCL  (LRECL=80)
//SYSIN DD *
===SELL <>               .LANGUAGE SELECTION (FRA OU ENG)
===SELV SEC              .INTERFACE SYSTEME DE SECURITE
                         .SECURITY SYSTEM INTERFACE
===SELV DTM              .GESTIONNAIRE TABLES REPARTIES
                         .DISPATCHED TABLES
===PRM PRFJ=TAB          .JOB NAMES PREFIXES (3 CHARACTERS)     )
                         .JOB NAMES PREFIXES (3 CHARACTERS)
===PRM CCPT=<>           .CODE COMPTABLE DES JOBS (CARTE JOB)
                         .JOB ACCOUNTING CODES (JOB CARDS)
===PRM CLASSJ=1          .CLASSE D'EXECUTION JOBS(CARTE JOB)
                         .JOB EXECUTION CLASS (JOB CARDS)
===PRM MSGCL=A           .CLASSE DE SORTIE DU JCL (MSGCLASS)
                         .JCL OUTPUT CLASS (MSGCLASS)
===PRM UTAPE=TAPE        .UNIT BANDE
                         .TAPE UNIT
===PRM TAPEI=<>          .NOM DE LA BANDE D'INSTALLATION
                         .NAME OF THE INSTALLATION TAPE
===PRM OUT=A             .CLASSE DE SYSOUT DANS LES JOBS
                         .JOB SYSOUT CLASS
===PRM INDSV='EXP.TAB25' .INDEX FICHIERS Pactables VSAM
                         .PACTABLES SYSTEM VSAM FILES' INDEX
===PRM INDUV='CICS.TAB25' .INDEX FICHIERS UTILISATEUR TABLES VSAM
                         .PACTABLES USER VSAM FILES' INDEX
===PRM INDSN='EXP.TAB25' .INDEX FICHIERS Pactables NON VSAM
                         .PACTABLES SYST. NON-VSAM FILES' INDEX
===PRM INDUN='PAC.T25'   .INDEX FICHIERS UTILISATEUR TABLES NON VSAM
                         .Pactable  USER NON-VSAM FILES' INDEX
===PRM ROOTT='PM'        .RADICAL Pactables(2 CARACTERES)
                         .ROOT OF Pactable  SYSTEM (2 CHARACTER S)
===PRM RADP='PT25'       .PREFIXE DES NOMS DE PROCEDURES CATALOGUEES
                         .PREFIX OF CATALOGED PROCEDURE NAMES
===PRM VOLSV=<>          .VOLUME FICH. Pactable  SYSTEME VSAM
                         .VOL. OF Pactables SYSTEM VSAM FILES
===PRM VOLSN=<>          .VOLUME FICH. Pactables SYSTEME NON    VSAM
                         .VOL. OF Pactable  SYSTEM NON-VSAM     FILES
===PRM VOLUV=<>          .VOLUME FICH. VA Pac  UTILISATEUR TABLEVSAM
                         .VOL. OF VA Pac    USER VSAM FILES
===PRM VOLUN=<>          .VOLUME FICH. VA Pac  UTILIS. TABLE NONVSAM
                         .VOL. OF Pactable  USER NON-VSAM FILES
===PRM SCAT=<>           .CATALOGUE VSAM FICH. Pactables SYSTEME
                         .VSAM CATALOG OF Pactable  SYSTEM FILE
===PRM VCAT=<>           .CATALOGUE VSAM FICH. Pactables UTILIS.
                         .CATALOG OF Pactable  USER VSAM FILES
===PRM RUS=REUSE         .DEFINE FICHIERS VSAM REUSE OU UNIQUE
                         .REUSE OR UNIQUE FOR VSAM FILES DEFINE
===PRM UWK=SYSDA         .UNITE DE TRAVAIL
                         .WORK UNIT
===PRM UNITSN=SYSDA      .UNIT FICH.PERMANENTS Pactables non VSA
                         .NON VSAM Pactable SYSTEM FILES UNIT
===PRM UNITUN=SYSDA      .UNIT FICH.PERMANENTS UTILI. TABLES NONVSAM
                         .NON-VSAM TABLE USER PERM. FILES UNIT
===PRM DSCB='PAC.DSCB'   .NOM DE FICHIER DSCB MODELE
                         .DSCB MODEL FILE NAME
===PRM MODB='PAC.B25.MBR8'   .BIBLI.BATCH Pactables
                             .Pactable  BATCH LIBRARY
===PRM MODT='PAC.T25.MTR8'   .BIBLI.TP Pactables
                             .Pactable  ON-LINE LIBRARY
===PRM MODV='PAC.T25.MBR8C1' .BIBLI. Pactables MODULES COBOL/VS
                             .COBOL/VS ROUTINE BACTH/ON-LINE LIBRARY
===PRM MACT='PAC.T25.MACT'   .BIBLI. MACROS-STRUCTURES TUF-TP
                             .TUF-TP MACROS-STRUCTURES LIBRARY
===PRM BIBP='SYS1.PROCLIB'   .BIBLIOTHEQUE DES PROCEDURES
                             .PROCEDURE LIBRARY
```

```
===PRM BIBT='SYS1.SORTLIB'   .BIBLIOTHEQUE DE  TRI
                             .SORT LIBRARY
===PRM CSDL='CICS311.LOADLIB'  .DSN STEPLIB DFHCSDUP (SI RDO)
===PRM DFHCSD='PAC.DFHCSD'     .DSN CSD PACTABLE     (SI RDO)
                               .VA PAC CSD DSN       (IF RDO)
===PRM LIST=<>              .NOM DE "LIST"  RDO       (SI RDO)
                            .RDO 'LIST' NAME          (IF RDO)
===PRM GROUP='PACTABLE'     .NOM DE "GROUP" RDO       (SI RDO)
                            .RDO 'GROUP' NAME         (IF RDO)
===PRM ROOT='PB'            .RADICAL VA Pac
                            .VA Pac  ROOT CODE
===PRM FILE='25'            .NUMERO DE BASE PHYSIQUE VA Pac
                            .NUMBER OF THE VA Pac  DATABASE
===PRM INDSVX='EXP.PAC25'   .INDEX FICHIERS VA Pac  VSAM
                            .INDEX OF VSAM VA Pac  FILES
===PRM INDUVX='CICS.PAC25' .INDEX FICHIERS UTILISATEUR VA Pac  VSAM
                            .INDEX OF USERS VA Pac FILES
===PRM INDSNX='EXP.PAC25'   .INDEX FICHIERS VA Pac  NON VSAM
                            .INDEX OF USERS NON VSAM VA Pac  FILES
===PRM TABTDF='EXP.TAB25'   .DSN FICHIER DESCRIPTIFS TABLES
                            .DSN OF TABLES DESCRIPTION FILE
===BEGMOD
./ ADD NAME=$MODULE
/*
```

22.4. COMPLETE JCL INSTALLATION

COMPLETE JCL INSTALLATION

The MM1JCL module reads the JCL skeleton file (label 03) and outputs a complete JCL. It allows you to:

. Select portions of the skeleton JCL, which are called 'JCL modules',

. Parameterize the skeleton in order to obtain a JCL requiring a minimum of modifications to make it operational,

. Select the installation variants to generate the JCL needed for specific processing, depending on site and installation conditions,

. Add lines before and after the JCL modules to separate them.

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

USER INPUT

Refer to the following paragraphs:

```
.Coding of MM1JCL commands
.Installation variants
.JCL modules
.JCL parameters
.JCL before/after lines
```

OUTPUT RESULT: COMPLETE JCL

The resulting SYSUT2 file contains all the installation and operation JCLs. This file may be modified (if necessary) via a text editor before installation begins.

Two types of operations are to be performed on the complete JCL:

1. Global modifications (if necessary):

Adaptations can be performed on all the JCLs.

VSAM catalogues are entered as comments in the installation JCL:

```
-In DELETE/DEFINEs, as:       /*: CATALOG ($VCAT) */
                      or:     /*: CATALOG ($SCAT) */
-In JCL STEPCATs  as:        //*: STEPCAT  DD
                  and/or:    //*:          DD
-In procedure parameters as: //*: VSAMCAT='$VCAT'
                           or: //*: SYSTCAT='$SCAT'
```

When these parameters are not required, the resulting JCL is OK as it is.

When these parameters are required, affected lines should be changed into command lines. This is accomplished by:

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

Large files blockage criteria can also be changed. Refer to the paragraph 'Note on file Cisize/Blksize' (VA PAC ONLY).

CAUTION:

. If the SMS product is installed, you should delete IDCAMS definition DD //GDGMOD lines in the installation JCLs with DataGroup Generation allocation.

. If the UNIT and VOL parameters cannot be used on the site, you can delete them in the whole JCL through an exclusion (EXCLUDE command of TSO/EDIT).

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

2. JCL splitting

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

This allows for the complete JCL to be split in as many members as there are JCL modules in a PDS. The completed JCL file is to be used as SYSIN for the PDS update utility: IEUBUPDTE.

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

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

PRINTED OUTPUT

MM1JCL produces a list for each JCL module created, including parameters taken into account and according to required variants.

NOTE:

Since the JCL skeleton parameters are in the $xxxx format, during execution, if MM1JCL encounters a $ character that does not correspond to a defined parameter, it sends error messages such as: 'UNKNOWN SYMBOLIC PARAMETER' or 'INVALID POSITION OR LENGTH' or 'SYNTAX ERROR IN SYMBOLIC PARAMETER'.
Those messages do not stop the execution and should be ignored: they apply to the '$' in the flow processed by MM1JCL which are NOT parameters (in particular, PACDESIGN transactions).

CODING OF MM1JCL COMMANDS

```
===SELV vvvv              .Selection of variant
                           vvvv = variant code

===SELM mmmm1 mmmm2 ...   .Selection of JCL modules
                           mmmm1 = name of JCL module
                           mmmm2 = name of JCL module
                           etc.
                           The absence of a ===SELM line
                           involves the selection of all
                           JCL modules.

===PRM  PPPP=pppp         .Parameter
                           PPPP = name of parameter
                           pppp = value of parameter

NOTE: On ===PRM or ===SELV lines, comments may be entered.
      They should be preceded by a period, and not exceed
      column 72.

===BEGMOD         Insertion of lines at beginning of module.
....1         )
.....         ) lines to insert before each module
....n         )

===ENDMOD         Insertion of lines at end of module.
....1         )
.....         ) lines to insert after each module
....n         )
```

22.5. DEFAULT INSTALLATION SETTINGS

DEFAULT INSTALLATION OPTIONS

.VARIANTS (===SELV): all available variants are selected.

IMPORTANT: DELETE THE LINES CORRESPONDING TO THE VARIANTS NOT INSTALLED ON THE SITE.

.PARAMETERS (===PRM):

Indicated values are examples; they should be replaced according to the site's specific needs.

.MODULES (===SELM):

No selection; all modules (corresponding to the variants) are copied.

.JCL MODULE FIRST LINE (===BEGMOD):

A line: ./ ADD NAME=$MODULE

This adds a line before each JCL module, in the form:

./ ADD NAME=<name-of-JCL-module>

22.6. JCL VARIANTS

TABLE OF VARIANTS: ===SELV vvvv .Comment

vvvv	MEANING	TYPE
SEC	Security system interface (IBM MVS only)	Option
DTM	Dispatched Table Manager	-

22.7. JCL MODULES

TABLE OF JCL MODULES: ===SELM mmmm1 mmmm2 ... mmmmn

mmmm	CONTENT	NATURE
TCICSD	CICS/ESA V3: CSD update job	OS JCL
	Other CICS:	
TI1SY	Loading of file-parameter's PDS	OS JCL
TI2PGM	Allocation and loading of batch (MBR8), on-line (MTR8), and COBOL/VS routines (MBR8C1) program libraries	OS JCL
TI3SFI	Installation of error message and on-line documentation file (TE)	OS JCL
TI4PRE	Initialization of GDG backup (TC)	OS JCL
TI5ITB	Initialization of TB file (TUF-TP)	OS JCL
TI6PRO	Operations procedure cataloging	OS JCL
TI7TAB	Test tables restoration	OS JCL
TI8CTF	Loading of macro-structures that describe the communication areas used in TUF-TP user facility.	
	BATCH PROCEDURE TESTS: Proc.	
TO2GET	Tables generation GETT	OS JCL
TO2INT	Ex. Tables initialization INTA	OS JCL
TO2PRT	Ex. Tables printing PRTA	OS JCL
TO2IMT	Ex. Tables import IMTA	OS JCL
TO2UPT	Ex. Tables update UPTA	OS JCL
TO2SVT	Ex. Tables backup SVTA	OS JCL
TO2TCT	Ex. Tables transfer TCTA	OS JCL
TO2RST	Ex. Tables restoration RSTA	OS JCL
TO2RET	Ex. Tables reorganization RETA	OS JCL
TO2PMT	Ex. Parameter update PMTA	OS JCL
TO2EXT	Ex. Table extraction EXTA	OS JCL
TO2TUT	Ex. Production turnover TUTA	OS JCL
	With ===SELV DTM	
TO2CD1	Ex. Description comparison CDT1	OS JCL
TO2CD2	Ex. Description comparison CDT2	OS JCL
TO2CVT	Ex. Tables updating CVTA	OS JCL
TO2LPT	Ex. Module list LPTA	OS JCL
TO2TTA	Ex. retrieval Tables 8.02 or 1.2 RTTA	OS JCL
TO2R73	Ex. retrieval Tables 7.3 R3TA	OS JCL
TO2R72	Ex. retrieval Tables 7.2 R2TA	OS JCL

22.8. JCL PARAMETERIZATION

TABLE OF PARAMETERS

===PRM PPPP=pppp .Comments

CODE PPPP	MEANING	DEFAULT pppp
	ON JOB CARDS	

PRFJ	4 character maxi. jobname prefix	PAC
CCPT	Job accounting code	<>
CLASSJ	Job execution class	1
MSGCL	JCL output class	A
	CODIFICATION OF FILE DSNs	

	All permanent VA Pac file names	
	(except for load module libraries)	
	have the following format:	
	INDUV.xx00ss : User VSAM.	
	INDUN.xx00ss : User non-VSAM.	
	INDSV.xx00ss : System VSAM.	
	INDSN.xx00ss : System non-VSAM.	
	IND-- Index of file names:	
INDSV	VSAM-system	
INDSN	NON-VSAM-system (SAM, PDS)	
INDUV	VSAM-user	
INDUN	NON-VSAM-user (SAM)	
	xx=ROOTT, ss=file code suffix	
ROOTT	ROOT OF THE PACTABLES SYSTEM	PM
	(2 characters other than PH)	

TABLE OF PARAMETERS (Continued)

CODE PPPP	MEANING	DEFAULT pppp
	CSD CICS update parameters (CICS/ESA V3 RDO only)	

CSDL	DFHCSDUP STEPLIB DSN	'CICS311.LOADLIB'
DFHCSD	Pactables CSD DSN	'PAC.DFHCSD'
GROUP	Pactables CSD input group	PACBASE
LIST	List where group is to be added	<>
	ON THE DD CARDS	

OUT	Sysout printing class	A
UTAPE	UNIT of the installation tape, copy of tape supplied with the prod.	TAPE
TAPEI	Name of the installation tape, copy of tape supplied with the prod.	<>
UWK	UNIT of work files used	SYSDA
UNITSN	UNIT of system non VSAM files	SYSDA
UNITUN	UNIT of user non VSAM files	SYSDA
VOLSN	Volume name of non-VSAM system files	<>
VOLSV	Volume name of VSAM system files	<>
VOLUN	Volume name of non-VSAM user files	<>
VOLUV	Volume name of VSAM user files	<>

TABLE OF PARAMETERS (End)

CODE	MEANING	DEFAULT
PPPP		pppp
	OTHER PARAMETERS	

RADP	Prefix of names of procedures to install (4 characters maximum)	PM80
VCAT	DSNAME of the VSAM catalog in which the installed Pactables test files are installed	
SCAT	DSNAME of the VSAM catalogue in which the Pactables TE file is installed	
RUS	File defined as REUSE or UNIQUE	RUS
MODB	DSNAME of Pactables 2.0 batch load-modules	PAC.T80.MBR8
MODT	DSNAME of Pactables 2.0 on-line load-modules	PAC.T80.MTR8
MODV	DSNAME of Pactables 2.0 access modules library (COBOL/VS)	PAC.T80.MBR8C1
BIBP	DSNAME of the procedure library in which the Pactables procedures are to be cataloged.	SYS1.PROCLIB
BIBT	DSNAME of the sort library	SYS1.SORTLIB
MACT	DSNAME of TUF-TP facility macro-structures library.	PAC.T25.MACT

NOTES: The '<>' indicates a required coded parameter.

The values of parameters containing special characters must be delimited by quotes.

22.9. JCL-MODULE SEPARATORS

JCL MODULE SEPARATORS

```
===BEGMOD
....1    )
.....    ) lines to insert before each JCL module
....n    )

===ENDMOD
....1    )
.....    ) lines to insert after each JCL module
....n    )
```

Lines may be inserted as input in the MM1JCL if the default option is not appropriate (see Subchapter 'Installation Default settings' above).

The purpose of these lines is to execute the separation of the JCL file created by the MM1JCL utility into as many members as there are JCL modules.

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

22.10. INSTALLATION PROCESS

INSTALLATION PROCESS

Once the JCL is obtained, the installation of the Pactables function includes twelve steps:

```
 0 . Update of CICS tables,

 1 . Allocation and loading of parameter PDS,

 2 . Allocation and loading of load-modules libraries,

 3 . Installation of error message and documentation file,

 4 . Installation of Pactables test Table backup,

 5 . Initialization of working file for TUF-TP,

 6 . Cataloging of operations procedures,

 7 . Test Table restoration,

 8 . Loading of VA Pac macro-structures for TUF-TP
     facility,

 9 . Update of user parameters,

10 . Operations complement,

11 . Listing installed programs.
```

0. UPDATE OF CICS TABLES

```
-Transactions codes:

    2 user transaction codes:

    xx00     xx90

    11 internal transaction codes (RETURN TRANSID):

    xx01   xx02   xx03   xx04   xx05   xx06   xx07   xx08
    xx09   xx91   xx92

-coded Programs:

    xxPnnn

    (Complete list in Chapter PACTABLES COMPONENTS.

-Files:

    1 Pactables system file:

    xx00TE: Error messages

    4 user files:

    xx00TV: Table contents file,
    xx00TD: Table description file,
    xx00TG: User parameter file.
    xx00TB: TUF-TP facility's working file
```

NOTES ON THE INSTALLATION:

CICS/ESA V3: Input is updated in the CSD by the $prfj.TCI job of the ===MOD TCICSD JCL module.

The option allowing for 'Dynamic Backout' is required for the TV, TD, and TG files.

The estimated numbers of STRINGs, INDEX BUFFERs and DATA BUFFERs defined are the minimu numbers necessary for the system.

The two 'xx' characters of the transaction codes, the map and program names, and the file codes are chosen by the user (default = 'PH').

Transaction xx00 allows all normal operations to be done on the tables (consultation, update).

Transaction xx90 allows Pactables users to modify their passwords. It also allows the Table manager to enter Pactables general parameters (language, date format, security system Interface) and to update user passwords and access authorization.

1. ALLOCATION AND LOADING OF SYSTEM PARAMETER PDS (SY)

===MOD TI1SY

JOB $prfj.TI1

STEP1 : IEHPROGM : SCRATCH/UNCATLG of parameter PDS
STEP2 : IEFBR14 : Allocation of SY parameter PDS
STEP3 : IEBUPDTE : Loading of the PDS which contains IDCAMS entries:

- DFxx00TV : DELETE/DEFINE contents of the tables,
- DFxx00TD : DELETE/DEFINE description of the tables,
- DFxx00TE : DELETE/DEFINE error messages,
- DFxx00TG : DELETE/DEFINE user parameters,
- DFxx00AD : DELETE/DEFINE descrip. for operation (TUTA),
- DFxx00AV : DELETE/DEFINE contents for operation (TUTA),
- DFxx00TB : DELETE/DEFINE work. file for TUF-TP facility
- VERIFTV : VERIFY PAC7TV,
- VERIFTD : VERIFY PAC7TD,
- VERIFTS : VERIFY PAC7TS,
- VERIFTE : VERIFY PAC7TE,
- VERIFTG : VERIFY PAC7TG,
- VERIFAD : VERIFY PAC7AD,
- VERIFAV : VERIFY PAC7AV,
- REPROTG : REPRO TG file (RPTG).

2. ALLOCATION AND LOADING OF LOAD-MODULE LIBRARIES

===MOD TI2PGM

JOB $prfj.TI2

STEP1 : IEHPROGM : SCRATCH/UNCATLG libraries
STEP2 : IEFBR14 : library allocation
STEP3 : IEBCOPY : Batch and on-line load-module loading

With the Security System Interface option (SEC)
STEP4 : IEBCOPY : loading of the PACSECU sub-program in an authorized program library.

PACSECRA for RACF
PACSECTS for TOP SECRET

3. ERROR MESSAGE AND DOCUMENTATION FILE INSTALLATION

===MOD TI3SFI

JOB $prfj.TI3

STEP1 : IDCAMS : DELETE/DEFINE TE file.
STEP2 : IDCAMS : REPRO of TE error message file.

4. PACTABLES TEST FILE INSTALLATION

===MOD TI4PRE

JOB $PRFJ.TI4

STEP1 : IEHPROGM : SCRATCH UNCATLG of the model DSCB file
STEP2 : IEFBR14 : Allocation of the model DSCB file
STEP3 : IDCAMS : GDG of TC file
STEP4 : IEBGENER : Test backup loading

5. INITIALIZATION OF WORKING FILE FOR TUF-TP

===MOD TI5ITB

JOB $prfj.TI5
STEP 1: IDCAMS: DELETE/DEFINE of TB file
STEP 2: IDCAMS: Loading of TB file

6. CATALOGING OF OPERATING PROCEDURES : IEBUPDTE

===MOD TI6PRO

It is recommended to catalogue the table operation procedures in a PROCLIB. The JOB '$prfj.TI6' creates a member per procedure.

Each member is coded '$radp.proc' with '$radp.' being the root chosen during installation and 'proc' being the name of a standard procedure in the product. These procedures are described in previous chapters.

7. TEST TABLE RESTORATION

===MOD TI7TAB

JOB $prfj.TI7

This job executes the RSTA procedure with, as input, the backup loaded on disk during the STEP4 of the '$prfjTI4'job.

8. VA PAC MACRO-STRUCTURES FOR THE USE OF TUF FACILITY

```
===MOD TI8CTF

JOB $prfj.TI8

This facility loads VA Pac Macro-structures required for
the use of TUF-TP facility.

These Macros-structures are supplied in the form of
transactions for the UPDT procedure in input. To take into
account these Macro-structures, you must update VA Pac
Database before using TUF-TP facility.

STEP1: IDCAMS: DELETE Macro-structures library
STEP2: IDCAMS: Allocation dof Macro-structures library
STEP3: IEBCOPY: Loading of Macro-structures in the library
already allocated
```

9. UPDATE OF USER PARAMETERS

The system is operational when user parameters are entered in the Pactables Database.

Before any test, it is necessary to update user parameters in the TG file using the PMTA procedure. An initial general user code is provided for the installation phase and is found in the TG file:

```
        '********SUPER    '
```

10. USER OPERATION COMPLEMENTS

Since tables are rather stable files undergoing few updates, the Pactables function does not provide a journal file. However, update transactions can be retrieved from the standard CICS file.

22.11. JCL: CICS CSD UPDATE

```
//$PRFJ.TCI JOB ($CCPT),'PACTABLES DFHCSDUP',CLASS=$CLASSJ,
//      MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*             --- BATCH UPDATE OF THE DFHCSD ---                    *
//*********************************************************************
//DFHCSDUP EXEC PGM=DFHCSDUP
//STEPLIB  DD DSN=$CSDL,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//DFHCSD   DD DSN=$DFHCSD,DISP=SHR
//SYSIN    DD *
*********************************************************************
*              --- CSD CICS  $ROOTT. FILES ---                       *
*********************************************************************
DEFINE FILE($ROOTT.00TB) GROUP($GROUP)
DESCRIPTION(PACTABLE WORK FILE)
       DSNAME($INDUV..$ROOTT.00TB)
       STRINGS(2)
       STATUS (ENABLED) OPENTIME(STARTUP)
       DATABUFFERS(3) INDEXBUFFERS(2)
       RECORDFORMAT(V)
       ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
       RECOVERY(BACKOUTONLY)
DEFINE FILE($ROOTT.00TV) GROUP($GROUP)
DESCRIPTION(PACTABLE DATA FILE)
       DSNAME($INDUV..$ROOTT.00TV)
       STRINGS(2)
       STATUS (ENABLED) OPENTIME(STARTUP)
       DATABUFFERS(3) INDEXBUFFERS(2)
       RECORDFORMAT(V)
       ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
       RECOVERY(BACKOUTONLY)
DEFINE FILE($ROOTT.00TD) GROUP($GROUP)
DESCRIPTION(PACTABLE DESCRIPTION FILE)
       DSNAME($INDUV..$ROOTT.00TD)
       STRINGS(2)
       STATUS (ENABLED) OPENTIME(STARTUP)
       DATABUFFERS(3) INDEXBUFFERS(2)
       RECORDFORMAT(F)
       ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
       RECOVERY(BACKOUTONLY)
DEFINE FILE($ROOTT.00TG) GROUP($GROUP)
DESCRIPTION(PACTABLE USERS FILE)
       DSNAME($INDUV..$ROOTT.00TG)
       STRINGS(2)
       STATUS (ENABLED) OPENTIME(STARTUP)
       DATABUFFERS(3) INDEXBUFFERS(2)
       RECORDFORMAT(F)
       ADD(YES) BROWSE(YES) DELETE(YES) READ(YES) UPDATE(YES)
       RECOVERY(BACKOUTONLY)
DEFINE FILE($ROOTT.00TE) GROUP($GROUP)
DESCRIPTION(PACTABLE ERROR MESSAGES AND DOC FILE)
       DSNAME($INDSV..$ROOTT.00TE)
       STRINGS(1)
       STATUS (ENABLED) OPENTIME(STARTUP)
       DATABUFFERS(2) INDEXBUFFERS(1)
       RECORDFORMAT(F)
       ADD(NO) BROWSE(YES) DELETE(NO) READ(YES) UPDATE(NO)
       RECOVERY(BACKOUTONLY)
*********************************************************************
*            CSD CICS  $ROOTT. PROGRAMS                             *
*********************************************************************
DEFINE PROGRAM($ROOTT.FT00) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.FT90) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P500) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P510) GROUP($GROUP)
```

```
DEFINE PROGRAM($ROOTT.P520) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P530) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P540) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P550) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P560) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P570) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P580) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P590) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P599) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P600) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P610) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P620) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P820) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.P920) GROUP($GROUP)
DEFINE PROGRAM($ROOTT.R980) GROUP($GROUP)
===SEQ FOR SEC
DEFINE PROGRAM($ROOTT.SECT) GROUP($GROUP)
===SEQ
*********************************************************************
*     ROUTINE FOR ACCES TO TABLES VIA ON-LINE PROGRAM               *
*********************************************************************
DEFINE PROGRAM($ROOTT.PLNK) GROUP($GROUP)
*********************************************************************
*         CSD CICS  $ROOTT.-- TRANSACTIONS                          *
*********************************************************************
DEFINE TRANSACTION($ROOTT.00) GROUP($GROUP)
DESCRIPTION(PACTABLE $ROOTT.00 TRANSACTION) PROGRAM($ROOTT.P500)
DEFINE TRANSACTION($ROOTT.01) GROUP($GROUP)
DESCRIPTION(PACTABLE $ROOTT.01 TRANSACTION) PROGRAM($ROOTT.P510)
DEFINE TRANSACTION($ROOTT.02) GROUP($GROUP)
DESCRIPTION(PACTABLE $ROOTT.02 TRANSACTION) PROGRAM($ROOTT.P520)
DEFINE TRANSACTION($ROOTT.03) GROUP($GROUP)
DESCRIPTION(PACTABLE $ROOTT.03 TRANSACTION) PROGRAM($ROOTT.P530)
DEFINE TRANSACTION($ROOTT.04) GROUP($GROUP)
DESCRIPTION(PACTABLE $ROOTT.04 TRANSACTION) PROGRAM($ROOTT.P540)
DEFINE TRANSACTION($ROOTT.05) GROUP($GROUP)
DESCRIPTION(PACTABLE $ROOTT.05 TRANSACTION) PROGRAM($ROOTT.P550)
DEFINE TRANSACTION($ROOTT.06) GROUP($GROUP)
DESCRIPTION(PACTABLE $ROOTT.06 TRANSACTION) PROGRAM($ROOTT.P560)
DEFINE TRANSACTION($ROOTT.07) GROUP($GROUP)
DESCRIPTION(PACTABLE $ROOTT.07 TRANSACTION) PROGRAM($ROOTT.P570)
DEFINE TRANSACTION($ROOTT.08) GROUP($GROUP)
DESCRIPTION(PACTABLE $ROOTT.08 TRANSACTION) PROGRAM($ROOTT.P580)
DEFINE TRANSACTION($ROOTT.09) GROUP($GROUP)
DESCRIPTION(PACTABLE $ROOTT.09 TRANSACTION) PROGRAM($ROOTT.P590)
DEFINE TRANSACTION($ROOTT.90) GROUP($GROUP)
DESCRIPTION(PACTABLE $ROOTT.90 TRANSACTION) PROGRAM($ROOTT.P600)
DEFINE TRANSACTION($ROOTT.91) GROUP($GROUP)
DESCRIPTION(PACTABLE $ROOTT.91 TRANSACTION) PROGRAM($ROOTT.P610)
DEFINE TRANSACTION($ROOTT.92) GROUP($GROUP)
DESCRIPTION(PACTABLE $ROOTT.92 TRANSACTION) PROGRAM($ROOTT.P620)
ADD GROUP($GROUP) LIST($LIST)
```

22.12. JCL: PARAMETER-PDS LOADING

```
//$PRFJ.TI1 JOB ($CCPT),'TABLE PARAMETERS',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*    ALLOCATION OF PACTABLES PARAMETER PDS                          *
//*     .STEP1 : SCRATCH UNCATLG                                      *
//*     .STEP2 : ALLOCATION                                           *
//*     .STEP3 : LOADING OF PACTABLES PARAMETERS                      *
//*                                                                   *
//*  ->NOTE                                                           *
//*    ----                                                           *
//*  THIS PDS CONTAINS THE SYSINS FOR ALLOCATING THE FILES THAT       *
//*  MAKE UP THE PACTABLES TABLE FILES                                *
//*  THE INDICATED SIZES CAN BE ADAPTED ACCORDING TO YOUR NEEDS       *
//*                                                                   *
//*                                                                   *
//*********************************************************************
//*
//STEP1    EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
 DELETE ($INDSN..$ROOTT.$ROOTT.SY)
//*
//STEP2    EXEC PGM=IEFBR14
//SY       DD DSN=$INDSN..$ROOTT.$ROOTT.SY,
//         DISP=(,CATLG,DELETE),
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//         VOL=SER=$VOLSN,
//         SPACE=(6080,(10,,10)),UNIT=$UNITSN
//*
//STEP3  EXEC PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD SYSOUT=$OUT
//SYSUT2   DD DSN=$INDSN..$ROOTT.$ROOTT.SY,
//         DISP=SHR
//SYSIN    DD *
:/     ADD NAME=DF$ROOTT.00TB
 DELETE ($INDUV..$ROOTT.00TB) CLUSTER
 DEFINE CLUSTER ( NAME ($INDUV..$ROOTT.00TB)          -
                  SHR (2,3) $RUS  KEYS (63,3)         -
                  CYL (1,1)              -
                  VOL ($VOLUV)           -
                  RECSZ (80,1140) )                   -
        INDEX   ( NAME ($INDUV..$ROOTT.00TB.I)        -
                  CISZ (1024) )                       -
        DATA    ( NAME ($INDUV..$ROOTT.00TB.D)        -
                  FSPC (10,5)                         -
                CISZ (2048) )
:/     ADD NAME=DF$ROOTT.00TV
 DELETE ($INDUV..$ROOTT.00TV) CLUSTER
 DEFINE CLUSTER ( NAME ($INDUV..$ROOTT.00TV)          -
                  SHR (2,3) $RUS  KEYS (35,4)         -
                  CYL (1,1)              -
                  VOL ($VOLUV)           -
                  RECSZ (80,1100) )                   -
        INDEX   ( NAME ($INDUV..$ROOTT.00TV.I)        -
                  CISZ (1024) )                       -
        DATA    ( NAME ($INDUV..$ROOTT.00TV.D)        -
                  FSPC (10,5)                         -
                CISZ (2048) )
:/     ADD NAME=DF$ROOTT.00TD
 DELETE ($INDUV..$ROOTT.00TD) CLUSTER
 DEFINE CLUSTER ( NAME ($INDUV..$ROOTT.00TD)          -
                  SHR (2,3)  $RUS  KEYS (21,0)        -
                  CYL (1,1)              -
                  VOL ($VOLUV)           -
                  RECSZ (240,240) )                   -
        INDEX   ( NAME ($INDUV..$ROOTT.00TD.I)        -
```

```
                  CISZ (1024) )                        -
         DATA    ( NAME ($INDUV..$ROOTT.00TD.D)        -
                   FSPC (10,5)                         -
                   CISZ (2048) )
   :/     ADD NAME=DF$ROOTT.00TE
    DELETE ($INDSV..$ROOTT.00TE) CLUSTER
    DEFINE CLUSTER ( NAME ($INDSV..$ROOTT.00TE)         -
                   KEYS (17,0)  SHR (2,3) RUS           -
                   CYL (1,1)             -
                   VOL ($VOLSV)          -
                   RECSZ (90,90) )                      -
         INDEX   ( NAME ($INDSV..$ROOTT.00TE.I)         -
                   CISZ (1024) )                        -
         DATA    ( NAME ($INDSV..$ROOTT.00TE.D)         -
                   CISZ (1024) )
   :/     ADD NAME=DF$ROOTT.00TG
    DELETE ($INDUV..$ROOTT.00TG) CLUSTER
    DEFINE CLUSTER ( NAME ($INDUV..$ROOTT.00TG)         -
                   SHR (2,3) $RUS  KEYS (22,0)          -
                   CYL (1,1)             -
                   VOL ($VOLUV)          -
                   RECSZ (85,85) )                      -
         INDEX   ( NAME ($INDUV..$ROOTT.00TG.I)         -
                   CISZ (1024) )                        -
         DATA    ( NAME ($INDUV..$ROOTT.00TG.D)         -
                   FSPC (10,5)                          -
                   CISZ (2048) )
   :/     ADD NAME=DF$ROOTT.00AV
    DELETE ($INDUV..$ROOTT.00AV) CLUSTER
    DEFINE CLUSTER ( NAME ($INDUV..$ROOTT.00AV)         -
                   SHR (2,3) $RUS  KEYS (35,4)          -
                   CYL (1,1)             -
                   VOL ($VOLUV)          -
                   RECSZ (80,1100) )                    -
         INDEX   ( NAME ($INDUV..$ROOTT.00AV.I)         -
                   CISZ (1024) )                        -
         DATA    ( NAME ($INDUV..$ROOTT.00AV.D)         -
                   FSPC (10,5)                          -
                CISZ (2048) )
   :/     ADD NAME=DF$ROOTT.00AD
    DELETE ($INDUV..$ROOTT.00AD) CLUSTER
    DEFINE CLUSTER ( NAME ($INDUV..$ROOTT.00AD)         -
                   SHR (2,3)  $RUS  KEYS (21,0)         -
                   CYL (1,1)             -
                   VOL ($VOLUV)          -
                   RECSZ (240,240) )                    -
         INDEX   ( NAME ($INDUV..$ROOTT.00AD.I)         -
                   CISZ (1024) )                        -
         DATA    ( NAME ($INDUV..$ROOTT.00AD.D)         -
                   FSPC (10,5)                          -
                   CISZ (2048) )
   :/       ADD NAME=VERIFTV
    VERIFY FILE (PAC7TV)
   :/       ADD NAME=VERIFTD
    VERIFY FILE (PAC7TD)
   :/       ADD NAME=VERIFTE
    VERIFY FILE (PAC7TE)
   :/       ADD NAME=VERIFTG
    VERIFY FILE (PAC7TG)
   :/       ADD NAME=VERIFAV
    VERIFY FILE (PAC7AV)
   :/       ADD NAME=VERIFAD
    VERIFY FILE (PAC7AD)
   :/       ADD NAME=REPROTG
    REPRO INFILE(PAC7IG) OUTFILE(PAC7TG)
   /*
   //
```

22.13. JCL: LOAD-MODULE LOADING

```
//$PRFJ.TI2 JOB ($CCPT),'MBR8 MTR8 PDS',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*    INITIAL ALLOCATING OF THE MBR8 AND MTR8 PDS                    *
//*    OF THE BATCH AND ON-LINE PROGRAMS                              *
//*     .STEP1 : SCRATCH UNCATLG                                      *
//*     .STEP2 : ALLOCATION                                           *
//*     .STEP3 : LOADING BATCH AND TP PROGRAMS                        *
//*********************************************************************
//*
//STEP1    EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
 DELETE ($MODT)
 DELETE ($MODB)
 DELETE ($MODV)
//*
//STEP2    EXEC PGM=IEFBR14
//LNKB     DD DSN=$MODB,
//         DISP=(,CATLG,DELETE),UNIT=$UNITSN,
//         VOL=SER=$VOLSN,
//         SPACE=(6144,(400,10,20)),DCB=(RECFM=U,BLKSIZE=6144)
//LNKT     DD DSN=$MODT,
//         DISP=(,CATLG,DELETE),UNIT=$UNITSN,
//         VOL=SER=$VOLSN,
//         SPACE=(6144,(400,10,20)),DCB=(RECFM=U,BLKSIZE=6144)
//LNKV     DD DSN=$MODV,
//         DISP=(,CATLG,DELETE),UNIT=$UNITSN,
//         VOL=SER=$VOLSN,
//         SPACE=(6144,(400,10,20)),DCB=(RECFM=U,BLKSIZE=6144)
//*
//STEP3   EXEC PGM=IEBCOPY
//******* LOADING OF BATCH AND ON-LINE PROGRAMS ******
//SYSPRINT DD  SYSOUT=$OUT
//SYSUT3   DD  UNIT=$UWK,SPACE=(CYL,(2,1))
//OUTB     DD  DSN=$MODB,                BATCH
//         DISP=OLD
//OUTT     DD  DSN=$MODT,                ON LINE
//         DISP=OLD
//OUTV     DD  DSN=$MODV,                COBOL/VS
//         DISP=OLD
//INB      DD  DSN=PACT.MBR8,DISP=SHR,
//         VOL=(,RETAIN,SER=$TAPEI),UNIT=$UTAPE,LABEL=(5,SL)
//INT      DD  DSN=PACT.MTR8,DISP=SHR,
//         VOL=(,RETAIN,SER=$TAPEI),UNIT=$UTAPE,LABEL=(6,SL)
//INV      DD  DSN=PACT.MBR8C1,DISP=SHR,
//         VOL=(,RETAIN,SER=$TAPEI),UNIT=$UTAPE,LABEL=(7,SL)
//INP      DD  DSN=PACB.MBR8,DISP=SHR,
//         VOL=(,RETAIN,SER=$TAPEI),UNIT=$UTAPE,LABEL=(8,SL)
//SYSIN    DD  *
  C   I=((INB,R)),O=OUTB
          S M=PTU001
===SEQ FOR DTM
          S M=PTAD05
          S M=PTAD10
          S M=PTAD20
===SEQ
          S M=PTAINI
          S M=PTARSD
          S M=PTARSG
          S M=PTARSV
          S M=PTARTG
          S M=PTAR20
          S M=PTASVD
          S M=PTASVG
```

```
            S M=PTASVV
            S M=PTATCD
            S M=PTATCG
            S M=PTATCV
            S M=PTATC1
            S M=PTATC2
            S M=PTAU80
            S M=PTAXVD
            S M=PTAXVG
            S M=PTAXVV
   ===SEQ FOR DTM
            S M=PTAV10
            S M=PTAV20
   ===SEQ
            S M=PTA100
            S M=PTA120
            S M=PTA150
            S M=PTA160
            S M=PTA250
            S M=PTA290
            S M=PTA300
            S M=PTA302
            S M=PTA310
            S M=PTA312
            S M=PTA320
            S M=PTA350
            S M=PTA360
            S M=PTA400
            S M=PTA410
            S M=PTA420
            S M=PTA430
            S M=PTA800
            S M=PTA900
            S M=PACXDT
   ===SEQ FOR SEC
            S M=PACSECB
   ===SEQ
     C   I=((INT,R)),O=OUTT
            S M=((PHPLNK,$ROOTT.PLNK))
            S M=((PHFT00,$ROOTT.FT00))
            S M=((PHFT90,$ROOTT.FT90))
            S M=((PHP500,$ROOTT.P500))
            S M=((PHP510,$ROOTT.P510))
            S M=((PHP512,$ROOTT.P512))
            S M=((PHP520,$ROOTT.P520))
            S M=((PHP522,$ROOTT.P522))
            S M=((PHP530,$ROOTT.P530))
            S M=((PHP540,$ROOTT.P540))
            S M=((PHP550,$ROOTT.P550))
            S M=((PHP560,$ROOTT.P560))
            S M=((PHP570,$ROOTT.P570))
            S M=((PHP580,$ROOTT.P580))
            S M=((PHP590,$ROOTT.P590))
            S M=((PHP599,$ROOTT.P599))
            S M=((PHP600,$ROOTT.P600))
            S M=((PHP610,$ROOTT.P610))
            S M=((PHP620,$ROOTT.P620))
            S M=((PHP820,$ROOTT.P820))
            S M=((PHP920,$ROOTT.P920))
            S M=((PHR980,$ROOTT.R980))
   ===SEQ FOR SEC
            S M=((PHSECT,$ROOTT.SECT))
   ===SEQ
     C   I=((INV,R)),O=OUTV
            S M=PTA800
            S M=PTA900
            S M=PACSECB
            S M=((PHP820,$ROOTT.P820))
            S M=((PHP920,$ROOTT.P920))
            S M=((PHSECT,$ROOTT.SECT))
     C   I=((INP,R)),O=OUTB
            S M=PACTIN
            S M=PACT40
```

```
          S M=PACT45
          S M=PACT50
//STEP4   EXEC PGM=IEBCOPY
//*******************************************************************
//*    LOADING OF THE RACF SECURITY SYSTEMS INTERFACE MODULE         *
//*    CAUTION:  BEFORE SUBMITTING THE JOB, SELECT                   *
//*                PACSECRA FOR RACF                                 *
//*                PACSECTS FOR TOPSECRET                            *
//*     .STEP4:  LOADING                                             *
//*******************************************************************
//SYSPRINT DD  SYSOUT=$OUT
//SYSUT3   DD  UNIT=$UWK,SPACE=(CYL,(2,1))
//OUTB     DD  DSN=-----,DISP=OLD  <--- AUTHORIZED LIBRARY
//INB      DD  DSN=PACT.MBR8,DISP=SHR,
//         VOL=(,RETAIN,SER=$TAPEI),UNIT=$UTAPE,LABEL=(5,SL)
//SYSIN    DD  *
  C   I=((INB,R)),O=OUTB
  S M=((PACSECRA,PACSECU8))
  S M=((PACSECTS,PACSECU8))
//*
```

22.14. JCL: ERROR-MESSAGES / DOCUMENTATION LOADING

```
//$PRFJ.TI3 JOB ($CCPT),'SYSTEM FILES',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*    LOADING OF PACTABLES ERROR-MESSAGES AND DOCUMENTATION          *
//*********************************************************************
//STEP1    EXEC PGM=IDCAMS
//*****  DELETE DEFINE 'TE' FILE
//*
//*:STEPCAT DD DSN=$SCAT,DISP=SHR
//SYSPRINT DD  SYSOUT=$OUT
//SYSIN DD DSN=$INDSN..$ROOTT.$ROOTT.SY(DF$ROOTT.00TE),
//         DISP=SHR
//STEP2    EXEC PGM=IDCAMS
//*****  LOADING 'TE' FILE
//*
//*:STEPCAT DD DSN=$SCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//TEO DD  DSN=$INDSV..$ROOTT.00TE,
//        DISP=SHR
//TEI DD  DSN=PACT.TE,DISP=SHR,
//        VOL=(,RETAIN,SER=$TAPEI),UNIT=$UTAPE,LABEL=(4,SL),
//        DCB=(RECFM=FB,LRECL=90,BLKSIZE=1800)
//SYSIN    DD  *
  REPRO INFILE (TEI)   OUTFILE (TEO)
//*
```

22.15. JCL: TEST-BACKUP INSTALLATION

```
//$PRFJ.TI4 JOB ($CCPT),'PREPAR',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*   JOB TO BE RUN ONLY AT THE FIRST INSTALLATION OF THE PACTABLE    *
//*   SYSTEM                                                          *
//*    . BUILDING OF DSCB MODEL AND INDEX DATA-GROUP FOR BACKUP       *
//*    . LOADING OF TEST BACKUP ON 'TC' FILE                          *
//*********************************************************************
//STEP1    EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
 DELETE ($DSCB)
//*
//STEP2    EXEC PGM=IEFBR14
//DSCB     DD DISP=(,CATLG),SPACE=(TRK,0),
//            UNIT=$UNITSN,
//            VOL=SER=$VOLSN,
//            DSN=$DSCB
//*
//STEP3    EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=$VCAT,DISP=SHR
//GDGMOD   DD DSN=$INDUN..$ROOTT.00TC,
//         DISP=(,KEEP,DELETE),SPACE=(TRK,0),
//         UNIT=$UNITUN,
//         VOL=SER=$VOLUN,
//         DCB=($DSCB,RECFM=VB,LRECL=1067,BLKSIZE=10674)
//SYSPRINT DD SYSOUT=$OUT
//SYSIN DD *
  DEFINE GENERATIONDATAGROUP -
         (NAME ($INDUN..$ROOTT.00TC) LIMIT (3) SCR)
//*
//STEP4    EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD DUMMY
//SYSUT1   DD DSN=PACT.TCENG,DISP=SHR,
//         VOL=(,RETAIN,SER=$TAPEI),UNIT=$UTAPE,LABEL=(10,SL)
//SYSUT2   DD DSN=$INDUN..$ROOTT.00TC(+1),
//         DISP=(,CATLG,DELETE),
//         UNIT=$UNITUN,
//         VOL=SER=$VOLUN,
//         SPACE=(TRK,(15,5),RLSE),
//         DCB=($DSCB,RECFM=VB,LRECL=1067,BLKSIZE=10674)
//
```

22.16. INITIALISATION DU FICHIER TB

```
//$PRFJ.TI5 JOB ($CCPT),'FILE TB',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*    LOADING OF TB WORK FILE                                        *
//*********************************************************************
//STEP1    EXEC PGM=IDCAMS
//*****  DELETE DEFINE 'TB' FILE
//*
//*:STEPCAT DD DSN=$SCAT,DISP=SHR
//SYSPRINT DD  SYSOUT=$OUT
//SYSIN DD DSN=$INDSN..$ROOTT.$ROOTT.SY(DF$ROOTT.00TB),
//         DISP=SHR
//STEP2    EXEC PGM=IDCAMS
//*****  LOADING 'TB' FILE
//*
//*:STEPCAT DD DSN=$SCAT,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//TBO DD  DSN=$INDSV..$ROOTT.00TB,
//        DISP=SHR
//TBI DD  DSN=PACT.TB,DISP=SHR,
//        VOL=(,RETAIN,SER=$TAPEI),UNIT=$UTAPE,LABEL=(11,SL),
//        DCB=(RECFM=VB,LRECL=1136,BLKSIZE=11364)
//SYSIN    DD  *
  REPRO INFILE (TBI)   OUTFILE (TBO)
//*
```

22.17. JCL: PROCEDURE LOADING

```
//$PRFJ.TI6 JOB ($CCPT),'PROCEDURES ',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*        --- CATALOGING OF PACTABLES PROCEDURES ---                 *
//*********************************************************************
//  EXEC PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD SYSOUT=$OUT
//SYSUT2 DD DSN=$BIBP,DISP=SHR
//SYSIN   DD   DATA,DLM='F+'
:/ ADD NAME=$RADP.INTA
:/ ADD NAME=$RADP.GETT
:/ ADD NAME=$RADP.LDTA
:/ ADD NAME=$RADP.UPTA
:/ ADD NAME=$RADP.IMTA
:/ ADD NAME=$RADP.PRTA
:/ ADD NAME=$RADP.RETA
:/ ADD NAME=$RADP.PMTA
:/ ADD NAME=$RADP.EXTA
:/ ADD NAME=$RADP.TUTA
:/ ADD NAME=$RADP.SVTA
:/ ADD NAME=$RADP.RSTA
:/ ADD NAME=$RADP.CDT1
:/ ADD NAME=$RADP.CDT2
:/ ADD NAME=$RADP.CVTA
:/ ADD NAME=$RADP.LPTA
:/ ADD NAME=$RADP.TCTA
:/ ADD NAME=$RADP.R2TA
:/ ADD NAME=$RADP.R3TA
:/ ADD NAME=$RADP.GETA
:/ ADD NAME=$RADP.GETD
:/ ADD NAME=$RADP.GETI
F+
//
```

22.18. JCL: TEST-FILE RESTORATION

```
//$PRFJ.TI7 JOB ($CCPT),'TABLE FILES',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*  --- LOADING OF THE PACTABLES TEST FILES ---                       *
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//STEP1    EXEC $RADP.RSTA
```

22.19. LOADING OF THE MACRO-STRUCTURES FOR TUF-TP

```
//$PRFJ.TI8 JOB ($CCPT),'MBR8 MTR8 PDS',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*    ALLOCATION INITIALE DE LA BIBLIOTHEQUE DE STOCKAGE DES         *
//*    MACROS-STRUCTURES POUR TUF-TP, SOUS FORME DE MOUVEMENTS        *
//*    D'ENTREE DE LA PROCEDURE UPDT DE VA Pac                        *
//*     .STEP1 : SCRATCH UNCATLG                                      *
//*     .STEP2 : ALLOCATION                                           *
//*     .STEP3 : CHARGEMENT DES MACROS-STRUCTURES                     *
//*********************************************************************
//*
//STEP1    EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
 DELETE ($MACT)
//*
//STEP2    EXEC PGM=IEFBR14
//MACT     DD DSN=$MACT,
//         DISP=(,CATLG,DELETE),UNIT=$UNITSN,
//         VOL=SER=$VOLSN,
//         SPACE=(6144,(20,2,2)),
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=32000)
//*
//STEP3   EXEC PGM=IEBCOPY
//******* CHARGEMENT DES MACROS-STRUCTURES ***************
//SYSPRINT DD  SYSOUT=$OUT
//SYSUT3   DD  UNIT=$UWK,SPACE=(CYL,(2,1))
//OUTM     DD  DSN=$MACT,                MACROS-STRUCTURES
//         DISP=OLD
//INM      DD  DSN=PACT.MACT,DISP=SHR,
//         VOL=(,RETAIN,SER=$TAPEI),UNIT=$UTAPE,LABEL=(12,SL),
//         DCB=(RECFM=FB,LRECL=80,BLKSIZE=32000)
//SYSIN    DD  *
  C   I=((INM,R)),O=OUTM
         S M=((AAATUFA,AATUFA))
         S M=((AAATUFL,AATUFL))
         S M=((AAATUFS,AATUFS))
         S M=((AAATUFX,AATUFX))
/*
```

22.20. AATUFA MACRO-STRUCTURE

```
 *USER    PASSW   LIBSESSI                                          N
X0    AATUFAAATUFATUF: DATA ELEMENT DESCRIPTION N       AATUFA  P
XM01 /AATUFATHIS MACRO DESCRIBES THE CHARACTERISTICS
XM02 /AATUFAOF THE DATA ELEMENTS OF THE TABLE ACCESSED
XM03 /AATUFAIT MUST BE USED IN ADDITION TO THE 'AATUFX'
XM04 /AATUFAMACRO.
XM05 /AATUFAIT CAN BE CALLED AS MANY TIMES AS THERE ARE EL.
XM06 /AATUFADATA ELEMENTS THAT DESCRIBE THE TABLE OR THE
XM07 /AATUFASUB-SCHEMA OF THE TABLE IN A READ-ONLY MODE.
XM10 /AATUFA$1 = CURSOR CODE ON 4 C.
XM12 /AATUFA$2 = BEG. OF WORKING ON 2C.
XM14 /AATUFA$3 = SEQ. OF WORKING ON 2C   (30 <    < 90)
XM16 /AATUFA$4 = DATA ELEMENT CODE ON 6C.
X7  $2$3A     03           G-$1-$4-I   PICTURE X(6).
X7  $2$3B     03           G-$1-$4-L   PICTURE X(18).
X7  $2$3C     03           G-$1-$4-C   PICTURE X(18) OCCURS 3.
X7  $2$3D     03           G-$1-$4-X   PICTURE X.
X7  $2$3E     03           G-$1-$4-T   PICTURE 999.
X7  $2$3F     03           G-$1-$4-D   PICTURE 99.
X7  $2$3G     03           G-$1-$4-B   PICTURE X.
X7  $2$3H     03           G-$1-$4-S   PICTURE X.
X7  $2$3I     03           G-$1-$4-V   OCCURS  2.
X7  $2$3J       04         G-$1-$4-VL  PICTURE X.
X7  $2$3K       04         G-$1-$4-VN  PICTURE X.
X7  $2$3L       04         G-$1-$4-VS  PICTURE X.
X7  $2$3M       04         G-$1-$4-VV  PICTURE X(10).
X7  $2$3N     03           G-$1-$4-A   PICTURE X.
```

22.21. AATUFL MACRO-STRUCTURE

```
 *USER    PASSW   LIBSESSI                                          N
X0    AATUFLAATUFLTUF: 'LT' OR 'LH' LISTS       N       AATUFL  P
XM01 /AATUFLTHIS MACRO DESCRIBES THE WORKING AREA CORRESPON-
XM02 /AATUFLDING TO THE READ-ONLY FUNCTIONS OF THE TABLE
XM03 /AATUFLLIST 'LT' OR 'LH'.
XM10 /AATUFL$1 = CURSOR CODE ON 4C.
XM12 /AATUFL$2 = BEG. OF WORKING ON 2C.
XM14 /AATUFL$3 = NUMBER OF LIST ITEMS.
XM16 /AATUFL$4 = READ-ONLY FUNCTION 'LT' OR 'LH'.
X7  $2000 01              G-$1-CURSOR.
X7  $2010   02            G-$1-LENGTH PICTURE S9(4) COMP.
X7  $2100   02            G-$1-CURID  PICTURE X(4) VALUE '$1'.
X7  $2110   02            G-$1-IDENT  PICTURE X(25).
X7  $2120   02            G-$1-USER   PICTURE X(8).
X7  $2130   02            G-$1-PASSW  PICTURE X(8).
X7  $2140   02            G-$1-CTRAN  PICTURE X(4).
X7  $2150   02            G-$1-CBASE  PICTURE X(4).
X7  $2160   02            G-$1-FUNCT  PICTURE XX   VALUE '$4'.
X7  $2170   02            G-$1-RETCOD PICTURE XX.
X7  $2180   02            G-$1-ERRCOD PICTURE X(5).
X7  $2190   02            G-$1-ERRLAB PICTURE X(66).
X7  $2200   02            G-$1-NUTAB  PICTURE X(6).
X7  $2210   02            G-$1-DATEC.
X7  $2220     03          G-$1-DATECC PICTURE XX.
X7  $2230     03          G-$1-DATECY PICTURE XX.
X7  $2240     03          G-$1-DATECM PICTURE XX.
X7  $2245     03          G-$1-DATECD PICTURE XX.
X7  $2250   02            G-$1-NBOCC  PICTURE 9(4) VALUE $3.
X7  $2260   02            FILLER      PICTURE X(178).
X7  $2270   02            G-$1-DESCR.
X7  $2300     03          G-$1-ELMNT  OCCURS  $3.
X7  $2400       04        G-$1-TABLE  PICTURE X(6).
X7  $2410       04        G-$1-LABTB  PICTURE X(36).
X7  $2420       04        G-$1-DATEH.
X7  $2430         05      G-$1-DATEHC PICTURE XX.
X7  $2440         05      G-$1-DATEHY PICTURE XX.
X7  $2450         05      G-$1-DATEHM PICTURE XX.
X7  $2460         05      G-$1-DATEHD PICTURE XX.
X7  $2470       04        G-$1-DATEM.
X7  $2480         05      G-$1-DATEMC PICTURE XX.
X7  $2490         05      G-$1-DATEMY PICTURE XX.
X7  $2500         05      G-$1-DATEMM PICTURE XX.
X7  $2510         05      G-$1-DATEMD PICTURE XX.
X7  $2520       04        G-$1-DATED.
X7  $2530         05      G-$1-DATEDC PICTURE XX.
X7  $2540         05      G-$1-DATEDY PICTURE XX.
X7  $2550         05      G-$1-DATEDM PICTURE XX.
X7  $2560         05      G-$1-DATEDD PICTURE XX.
X7  $2570       04        G-$1-LIB    PICTURE XXX.
X7  $2580       04        G-$1-SESSI  PICTURE X(5).
X7  $2590       04        G-$1-SEGM   PICTURE X(4).
```

22.22. AATUFS MACRO-STRUCTURE

```
 *USER    PASSW   LIBSESSI                                          N
X0    AATUFSAATUFSTUF/ 'LS' OR 'LC' LIST        N       AATUFS  P
XM01 /AATUFSTHIS MACRO DESCRIBES THE WORKING AREA CORRESPON-
XM02 /AATUFSDING TO THE READ-ONLY FUNCTIONS OF
XM03 /AATUFSTHE SUB-SCHEMA OR SUB-SYSTEM LIST 'LC' OR 'LS'.
XM10 /AATUFS$1 = CURSOR CODE ON 4 C.
XM12 /AATUFS$2 = BEG. OF WORKING ON 2C.
XM14 /AATUFS$3 = NBRE OF LIST ITEMS.
XM16 /AATUFS$4 = READ-ONLY FUNCTION 'LS' OR 'LC'.
X7  $2000 01              G-$1-CURSOR.
X7  $2010   02            G-$1-LENGTH PICTURE S9(4) COMP.
X7  $2100   02            G-$1-CURID  PICTURE X(4) VALUE '$1'.
X7  $2110   02            G-$1-IDENT  PICTURE X(25).
X7  $2120   02            G-$1-USER   PICTURE X(8).
X7  $2130   02            G-$1-PASSW  PICTURE X(8).
X7  $2140   02            G-$1-CTRAN  PICTURE X(4).
X7  $2150   02            G-$1-CBASE  PICTURE X(4).
X7  $2160   02            G-$1-FUNCT  PICTURE XX   VALUE '$4'.
X7  $2170   02            G-$1-RETCOD PICTURE XX.
X7  $2180   02            G-$1-ERRCOD PICTURE X(5).
X7  $2190   02            G-$1-ERRLAB PICTURE X(66).
X7  $2200   02            G-$1-NUTAB  PICTURE X(6).
X7  $2210   02            G-$1-DATEC.
X7  $2220     03          G-$1-DATECC PICTURE XX.
X7  $2230     03          G-$1-DATECY PICTURE XX.
X7  $2240     03          G-$1-DATECM PICTURE XX.
X7  $2245     03          G-$1-DATECD PICTURE XX.
X7  $2250   02            G-$1-NBOCC  PICTURE 9(4) VALUE $3.
X7  $2260   02            FILLER      PICTURE X(178).
X7  $2270   02            G-$1-DESCR.
X7  $2300     03          G-$1-ELMNT  OCCURS  $3.
X7  $2400       04        G-$1-TABLE  PICTURE X(6).
X7  $2410       04        G-$1-LABTB  PICTURE X(36).
X7  $2420       04        G-$1-NUSCY  PICTURE X.
X7  $2430       04        G-$1-LABSCY PICTURE X(36).
```

22.23. AATUFX MACRO-STRUCTURE

```
 *USER    PASSW   LIBSESSI                                          N
X0    AATUFXAATUFXTUF: LIST ITEMS              N       AATUFX  P
XM01 /AATUFXTHIS MACRO DESCRIBES THE WORKING CORRESPONDING TO
XM02 /AATUFXA READ-ONLY FUNCTION USED FOR UPDATING OR READING
XM03 /AATUFXTHE TABLE.
XM04 /AATUFXIT IS NECESSARY TO USE THE 'AATUFA'MACRO AS WELL.
XM05 /AATUFX
XM10 /AATUFX$1 = CURSOR CODE ON 4C.
XM12 /AATUFX$2 = BEG. OF WORKING ON 2C.
XM14 /AATUFX$3 = NUMBER OF TABLE ITEMS EXTRACTED ON 4C.
XM16 /AATUFX$4 = NB OF DATA ELEMENTS OF THE TABLE ON 2C.
XM18 /AATUFX$5 = TABLE CODE ON 6C.
X7  $2000 01              G-$1-CURSOR.
X7  $2010   02            G-$1-LENGTH PICTURE S9(4) COMP.
X7  $2100   02            G-$1-CURID  PICTURE X(4) VALUE '$1'.
X7  $2110   02            G-$1-IDENT  PICTURE X(25).
X7  $2120   02            G-$1-USER   PICTURE X(8).
X7  $2130   02            G-$1-PASSW  PICTURE X(8).
X7  $2140   02            G-$1-CTRAN  PICTURE X(4).
X7  $2150   02            G-$1-CBASE  PICTURE X(4).
X7  $2160   02            G-$1-FUNCT  PICTURE XX.
X7  $2170   02            G-$1-RETCOD PICTURE XX.
X7  $2180   02            G-$1-ERRCOD PICTURE X(5).
X7  $2190   02            G-$1-ERRLAB PICTURE X(66).
X7  $2200   02            G-$1-NUTAB  PICTURE X(6) VALUE '$5'.
X7  $2210   02            G-$1-DATEC.
X7  $2215     03          G-$1-DATECC PICTURE XX.
X7  $2220     03          G-$1-DATECY PICTURE XX.
X7  $2225     03          G-$1-DATECM PICTURE XX.
X7  $2230     03          G-$1-DATECD PICTURE XX.
X7  $2235   02            G-$1-NBOCC  PICTURE 9(4) VALUE $3.
X7  $2245   02            G-$1-LABTB  PICTURE X(36).
X7  $2250   02            G-$1-NUSSC  PICTURE X.
X7  $2260   02            G-$1-LABSC  PICTURE X(36).
X7  $2270   02            G-$1-NUSSY  PICTURE X.
X7  $2280   02            G-$1-LABSY  PICTURE X(36).
X7  $2285   02            G-$1-DAHTB.
X7  $2290     03          G-$1-DAHTBC PICTURE XX.
X7  $2295     03          G-$1-DAHTBY PICTURE XX.
X7  $2300     03          G-$1-DAHTBM PICTURE XX.
X7  $2305     03          G-$1-DAHTBD PICTURE XX.
X7  $2310   02            G-$1-KEY    PICTURE X(20).
X7  $2320   02            FILLER      PICTURE X(40).
X7  $2330   02            G-$1-DESCR.
X7  $2335     03          G-$1-ELTNB  PICTURE 99 VALUE $4.
X7  $2340   02            G-$1-ELTD.
X7  $2345     03          FILLER      PICTURE X(113) OCCURS $4.
X7  $2350   02            G-$1-ELTR   REDEFINES G-$1-ELTD.
X7  $2900   02            G-$1        OCCURS $3.
X7  $2910     03          G-$1-CODMV  PICTURE X.
X7  $2920     03          G-$1-ERROR  PICTURE X(66).
```

22.24. LIST OF INSTALLED PROGRAMS

LIST OF INSTALLED PROGRAMS

This list is obtained through the $prfj.LPTA job which executes the $radp.LPTA procedure (see the procedure and JCL above).

It includes batch and on-line programs with their compilation date.

This list must be kept since you may be asked for installation references by IBM in case of a problem in the operation of Pactables.

```
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*       ---  LIST OF INSTALLED PROGRAMS ---                         *
//*********************************************************************
//$RADP.LPTA PROC ROOTT=$ROOTT, ROOT OF PACTABLES SYSTEM              *
//         INDUV='$INDUV',      INDEX OF PACTABLES FILES              *
//         INDSN='$INDSN',      NON VSAM FILES INDEX                  *
//*:       VSAMCAT='$VCAT',     VSAM USER CATALOG                     *
//         STEPLIB='$MODB',     LOAD-MODULE LIBRARY                   *
//         MODT='$MODT',        ON-LINE PROGRAM LIBRARY               *
//         OUT=$OUT,            UTILITIES AND ERRORS OUTPUT CLASS     *
//         OUTL=$OUT,           REPORT OUTPUT CLASS                   *
//         UWK=$UWK,            WORK UNIT                             *
//         SPAMB='(TRK,(5,1),RLSE)'  REQUEST-FILE SPACE               *
//*********************************************************************
//*   INPUT :                                                         *
//*   - FOR A LIST OF ALL PROGRAMS:  ONE LINE SPECIFYING THE          *
//*     PACTABLES SYSTEM ROOT (COL.3, LENGTH 2)                       *
//*   - FOR A SELECTION OF PROGRAMS:                                  *
//*     ONE LINE PER PROGRAM:  PROGRAM CODE (COL.3, LENGTH: 6)        *
//*********************************************************************
//INPUT  EXEC PGM=PTU001
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7MB   DD DSN=&&LPTAMB,DISP=(,PASS),UNIT=&UWK,
//            DCB=BLKSIZE=1600,SPACE=&SPAMB
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//VERIFY  EXEC PGM=IDCAMS
//**********************
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//PAC7TD   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOTT.&ROOTT.SY(VERIFTD),
//         DISP=SHR
//PACXDT  EXEC  PGM=PACXDT
//**********************
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=&MODT,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//PAC7DT   DD DSN=&INDUV..&ROOTT.00TD,
//         DISP=SHR
//PAC7DS   DD SYSOUT=&OUTL
//PAC7MB   DD DSN=&&LPTAMB,DISP=(OLD,DELETE)
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
```

```
//$PRFJ.LPTA JOB ($CCPT),'PROGR.',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*            --- LIST OF INSTALLED PROGRAMS  ---
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//LPTA     EXEC $RADP.LPTA
  $ROOTT
/*
```

22.25. UTILIZATION TESTS

UTILIZATION TESTS

The tests contain the following steps:

. On-line utilization tests,
. Batch tests for update, printing and reorganization,
. Tests for tables generation.

The tests contain 3 tables:

. 'TEMPER' without historical account,
. 'CUSTOM' with historical accounts dated 03/01/85 and 03/10/85.
. 'ARTICL' with historical account dated 01/15/87

On-line tests of the Pactables function:

Open Pactables test files.
Read-only access to all screens,
Perform some updates.

Batch tests:

Execute the PRTA procedure.
Execute the EXTA procedure.
Close Pactables files.
Execute the UPTA procedure.

Reorganization of test tables:

- Backup (IDCAMS) TV and TD.

- Execute the reorganization (RETA) which contains:
. Reorganization of TV (prog. PTA400 and PTA410)
. Reorganization of TD (prog. PTA420)
. Building of TC backup file (prog. PTA430T)

- Restore TV and TD (RSTA)
. Execute a printing of the tables (PRTA) for verification.
. Open the files and perform some on-line reorganization validation tests.

Test for table generation (GETT procedure)

-Close the files.

-Execute extraction within VA PAC (GETA or GETD).

-Execute GETT.

-Verify the execution.

-Re-open the files under CICS and perform some verification tests.

22.26. TEST JCL: INTA

```
//$PRFJ.INTA JOB ($CCPT),'INIT',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*           --- TEST OF THE INTA PROCEDURE ---                      *
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//INTA     EXEC $RADP.INTA
C.G.I. ESSAI                       F 1234567  ABC
```

22.27. TEST JCL: GETT

```
//$PRFJ.GETT JOB ($CCPT),'GENERATION',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*            --- TEST OF THE GETT PROCEDURE ---                     *
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//**** INSERT HERE GETA OR GETD (SEE VA PAC 2.5)
//GETT     EXEC $RADP.GETT,MD='&&MD'
```

22.28. TEST JCL: PRTA

```
//$PRFJ.PRTA JOB ($CCPT),'PRINT',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*            --- TEST OF THE PRTA PROCEDURE ---
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//PRTA     EXEC $RADP.PRTA
 *********SUPER
EACUSTOM03101985
EATEMPER
```

22.29. TEST JCL: IMTA

```
//$PRFJ.IMTA JOB ($CCPT),'IMPORT',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*          --- TEST OF THE IMTA PROCEDURE ---
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//IMTA     EXEC $RADP.IMTA,TABF='...'
 *********SUPER
 A??????
```

22.30. TEST JCL: UPTA

```
//$PRFJ.UPTA JOB ($CCPT),'UPDATE',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*          --- TEST OF THE UPTA PROCEDURE ---                       *
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//UPTA     EXEC $RADP.UPTA
 *********SUPER
 ACUSTOM03101985  *
AV 44190
 V 5555333***ATHENS*
 V 6666333***MOSCOW*
 V 8899000***PEKING*
AV 3333111
 V 6666111*MARAVEN*BOLIVAR*CARACAS*22300*VENEZUELA*3
 ATEMPER        /
 V GUAYAQUIL/0F 75 0C 24/0F 75 0C 24/0F 78 0C 25/0F 78 0C 25
 V-/0F 78 0C 25
 V-/0F 78 0C 25/0F 80 0C 27/0F 80 0C 27/0F 78 0C 25/0F 78 0C 25
 V-/0F 78 0C 25/0F 75 0C 24/
 V PARIS/////0F 58 0C 14/
 V FRANKFURT/0F 30 0C -1/0F 32 0C  0/0F 39 0C  4/0F 46 0C  7
 V-/0F 55 0C 13
 V-/0F 60 0C 15/0F 64 0C 18/0F 63 0C 17/0F 57 0C 14/0F 48 0C  9
 V-/0F 38 0C  4
 V-/0F 33 0C 1/
AV FRANKFORT
```

22.31. TEST JCL: SVTA

```
//$PRFJ.SVTA JOB ($CCPT),'SVTA',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*            --- TEST OF THE SVTA PROCEDURE ---                     *
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//SVTA     EXEC $RADP.SVTA
```

22.32. TEST JCL: RSTA

```
//$PRFJ.RSTA JOB ($CCPT),'RSTA',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*           --- TEST OF THE RSTA PROCEDURE ---                      *
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//RSTA     EXEC $RADP.RSTA
```

22.33. TEST JCL: RETA

```
//$PRFJ.RETA JOB ($CCPT),'REORG',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*            --- TEST OF THE RETA PROCEDURE ---                     *
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//RETA     EXEC $RADP.RETA
 *********SUPER
GACUSTOM03101985
GATEMPER
```

22.34. TEST JCL: PMTA

```
//$PRFJ.PMTA JOB ($CCPT),'PARAM.',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*          --- TEST OF THE PMTA PROCEDURE ---                       *
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//PMTA     EXEC $RADP.PMTA
 ********TASUPER
 ********TJ000100//$PRFJ.PRTA JOB ($CCPT),'PRTA',CLASS=$CLASSJ,
 ********TJ000200//           MSGCLASS=$MSGCL
 ********TJ000300//PRTA  EXEC $RADP.PRTA
 USER1   TAUSER1   2
```

22.35. TEST JCL: EXTA

```
//$PRFJ.EXTA JOB ($CCPT),'EXTRACTION',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*            --- TEST OF THE EXTA PROCEDURE ---                     *
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//EXTA     EXEC $RADP.EXTA
 *********SUPER
 ACUSTOM03101985
/*
//* EXTRACTED TRANSACTIONS FILE
//PTA160.PAC7NU DD DSN=---.---.---,DISP=SHR
```

22.36. TEST JCL: TUTA

```
//$PRFJ.TUTA JOB ($CCPT),'EXPLOI.',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*          --- TEST OF THE TUTA PROCEDURE ---                       *
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//TUTA     EXEC $RADP.TUTA
 *********SUPER
 ACUSTOM31101985
 ATEMPER
```

22.37. TEST JCL: TCTA

```
//$PRFJ.TCTA JOB ($CCPT),'TCTA',CLASS=$CLASSJ,
//      MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*           --- TEST OF THE TCTA PROCEDURE ---                      *
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//TCTA EXEC $RADP.TCTA,SAVIN=---.---.---
//* (DEFAULT:  SAVIN = GENERATION 0 OF TC'S DATA GROUP)
//* OUTPUT TC FILE (DEFAULT:  GENERATION +1 OF DATA GROUP)
//PTATC2.PAC7TC DD DSN=---.---.---,DISP=SHR
```

22.38. TEST JCL: CDT1 (DTM)

```
//$PRFJ.CDT1 JOB ($CCPT),'EXPLOI.',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*             --- TEST OF THE CDT1 PROCEDURE ---                    *
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//CDT1     EXEC $RADP.CDT1,
//* TDMAST = 'MASTER' TABLE-DESCRIPTION FILE
//* TDSLAV = 'SLAVE' TABLE-DESCRIPTION FILE
//* XD     = EXTRACTED-DESCRIPTION FILE
// TDMAST=---.---.---,TDSLAV=---.---.---,XD=---.---.---
 *********SUPER
 ACUSTOM
 ATEMPER
/*
```

22.39. TEST JCL: CDT2 (DTM)

```
//$PRFJ.CDT2 JOB ($CCPT),'EXPLOI.',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*            --- TEST OF THE CDT2 PROCEDURE ---                     *
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//CDT2     EXEC $RADP.CDT2,
//* TDSLAV = 'SLAVE' TABLE-DESCRIPTION FILE
//* TVSLAV = TABLES ASSOCIATED TO 'SLAVE' DESCRIPTION
//* XD     = FILE OF TABLE-DESCRIPTIONS EXTRACTED IN CDT1
//  TDSLAV=---.---.---,TVSLAV=---.---.---,XD=---,---,---
```

22.40. TEST JCL: CVTA (DTM)

```
//$PRFJ.CVTA JOB ($CCPT),'EXPLOI.',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*********************************************************************
//* VisualAge Pacbase Pactable  2.5                                   *
//*********************************************************************
//*********************************************************************
//*           --- TEST OF THE CVTA PROCEDURE ---
//*********************************************************************
// JCLLIB ORDER=($BIBP)
//CVTA     EXEC $RADP.CVTA,
//* TD = TABLE-DESCRIPTION FILE
//* TV = FILE OF TABLES ASSOCIATED TO DESCRIPTIONS
//  TD=---.---.---,
//  TV=---.---.---
 *********SUPER
SACUSTOM31101985    31101987
```

22.41. PACTABLES STANDARD REINSTALLATION

STANDARD REINSTALLATION OF THE SYSTEM

The Pactables function should be reinstalled when a new sub-release is shipped containing improvements upon the preceding release.

The new version is identified by a number and is delivered in the following form:

. A complete installation tape of the product,
. The list of corrected bugs,
. Possibly, a note completing the set of instructions described in this subchapter.

Generally, only the program libraries and the error and documentation file (TE) are affected by the new version.

Therefore, re-installation most often involves execution of the following jobs (using either the tape's JCLs or those used in previous (re-)installation):

1. COPY OF THE INSTALLATION TAPE

PACBASE0 job on the initial tape (INST.JCL, (1,SL)).

2. RETRIEVAL OF INSTALLATION JCL

PACBASE2 job on the initial tape (INST.JCL, (1,SL)).

NOTE: If the JCL modules required for the installation were kept since the previous (re-)installation, the PACBASE2 job need not be executed.

It executes the MM1JCL utility with the parameters provided at installation, but to which will be added the JCL module selection lines that follow:

Add in the SYSIN the following JCL module selection lines:

```
===SELM TO1PGM
===SELM TO1SFI
```

ADDITIONAL selection lines may be also be required: in this case, they are precised in a set of instructions provided with the tape.

The JCL modules being either obtained by this job or retrieved from previous (re-)insatallation, the reinstallation is carried out through the jobs described below. below.

3. LOADING OF BATCH AND ON-LINE LOAD-MODULES

$prfj.TI2 job (===MOD TI2PGM)

Warning: This jobs deletes all load-module libraries, allocates them and copies all programs. Two procedural methods may be used:

. Complete job execution: In this case, programs stored in the library which are not directly originated from the installation tape (user programs) must be backed up before execution of the job.

. Execution of the COPY step (IEBCOPY): In this case, it is recommended to previously delete the programs which are to be copied, in order to avoid space problems in the library.

4. RELOADING OF THE ERROR MESSAGE AND DOCUMENTATION FILE

$prfj.TI3 job (===MOD TI3SFI)