VisualAge Pacbase 2.5

ENDEVOR INTERFACE – IBM MVS, CICS ENVIRONMENT & INSTALLATION

DDENDCOS251A

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1. GENERAL PRESENTATION

1.1. INTRODUCTION - VOCABULARY

INTRODUCTION

ENDEVOR is an integrated configuration management product which manipulates source programs, load modules, JCL, etc. It provides control functions and development guidelines for applications and for their operational implementation.

The VA Pac/ENDEVOR Interface enables to integrate VA Pac generated objects into the ENDEVOR management environment.

The Interface permits the user to know:

- in VA Pac, the ENDEVOR "target" contexts which manage the generated objects: Environment, Stage, System, Sub-system and Type;

- in ENDEVOR, the "source" context of these VA Pac objects: Library Code, Session Number, User Code, Generation Date and Time.

DEFINITIONS

From VA Pac entities, the Interface produces two objects which have to be imported into ENDEVOR:

- The first one is the generated source itself, coming from VA Pac entities;

- The second one contains the generation context of the first one (i.e. the Library Code, the Session Number, the User Code, and the Generation Date and Time). This object has a purely functional role, and cannot be manipulated by the user outside the Interface.

Throughout this manual, we name:

- VA Pac ELEMENT any Source or Load object that comes from a VA Pac generation and that is managed by ENDEVOR;

- INFOPAC ELEMENT the associated object that contains the context of the VA Pac ELEMENT generation.

To each VA Pac ELEMENT corresponds one INFOPAC ELEMENT, which has the same name, and is located in the same ENDEVOR context.

2. DESCRIPTION OF INTERFACE ELEMENTS

2.1. VA Pac ELEMENT

VA Pac ELEMENT

The VA Pac/ENDEVOR interface manages objects generated from the following VA Pac entities:

. Program entity (P)

. Screen entity (O)

. Database Block entity (B)

. the Copy clauses of the Data Structure entity (D)

Each generated VA Pac object becomes a VA Pac ELEMENT in ENDEVOR.

The VA Pac ELEMENT can be managed in ENDEVOR as a generated source compilable by an ENDEVOR Process, or as a Load form.

A VA Pac entity can correspond to several generated objects found in several different ENDEVOR contexts. The entity can therefore correspond to several VA Pac ELEMENTS in ENDEVOR.

2.2. INFOPAC ELEMENT

INFOPAC ELEMENT

A VA Pac ELEMENT is always accompanied by an INFOPAC ELEMENT in the same ENDEVOR environment. The INFOPAC ELEMENT contains the generation context of the VA Pac ELEMENT. Its presence in ENDEVOR allows the user to find the original corresponding VA Pac ELEMENT in VA Pac. The two ELEMENTs have the same code which is the external name of the VA Pac entity. The only difference between the ELEMENTs is the TYPE.

By using appropriate Before and After commands, the generation of a VA Pac entity produces the VA Pac ELEMENT followed automatically by the INFOPAC ELEMENT.

The INFOPAC ELEMENT contains the following information:

. Nature of the VA Pac ELEMENT (=Entity code: P, O, B, D)

. Generated VA Pac entity occurrence code

. VA Pac ELEMENT code (VA Pac external name)

. VA Pac database code

. Library code

. Generation session number

. Generation date

. Generation time

. User code

2.3. VA Pac OBJECT TYPES TABLE

VA Pac OBJECT TYPE TABLE

Objects coming from the generation of VA Pac entity occurrences must have specific TYPEs in ENDEVOR. These TYPEs permit to recognize the objects and to differentiate them from the other objects managed in ENDEVOR.

In an ENDEVOR context, a VA Pac ELEMENT is always accompanied by an INFOPAC ELEMENT which has the same code but a different TYPE. The interface relate them using the correspondence of pre-defined types in the TYPEs TABLE.

The TYPEs TABLE contains all the TYPEs reserved for VA Pac ELEMENTS managed by ENDEVOR and all the corresponding TYPEs of INFOPAC ELEMENTS.

A VA Pac ELEMENT TYPE corresponds to one and only one INFOPAC ELEMENT TYPE. A VA Pac ELEMENT TYPE already defined cannot be used as an INFOPAC ELEMENT TYPE, and vice versa.

WARNING: The Endevor administrator must update the VA Pac ELEMENTS TYPEs and the INFOPAC ELEMENTS TYPES in the TYPE DEFINITION screen BEFORE using the interface.

The Endevor administrator must also enter a 'I' in the regression severity field (REGR SEV field in the TYPE DEFINITION screen).

It is advisable not to reuse TYPEs that already exist in Endevor and assign them to VA Pac ELEMENTs.

2.4. TARGET LIBRARIES/SESSIONS TABLE

TARGET LIBRARY/SESSION TABLE

The ENDEVOR environments which manage the generated objects are stored in VA Pac in the form of occurrences of the predefined .NDVLM User Entity.

As for all entities in the VA Pac Specifications Dictionary, these occurrences (UEO) can be found in different libraries and sessions. By default, ENDEVOR data is uploaded to the same VA Pac environement (library/session) as the generation environment.

The TARGET LIBRARY/SESSION TABLE allows the administrator to personalize the library/session environments used to manage ENDEVOR data in VA Pac. The table makes it possible to choose a target library for one or more generation libraries and a target session for one or more ranges of generation sessions. The target session can be the current session or a frozen session.

Example: Target library

A sample VA Pac database can be represented as follows:

```
        CEN
         :
 -----------------
 :               :
A00             B00
 :               :
 :          -----------
 :          :         :
A01        B01       B02
```

The administrator can decide to store the ENDEVOR data of the generated objects from all the libraries in CEN, and to keep the data from the A00 library in A00.

For this example, the Target Library/Session Table must therefore contain the following parameters:

Target Library	Line Number	Generation Library	Comment
CEN	100	B00	
CEN	110	B01	
CEN	120	B02	
CEN	130	A01	
CEN	140	CEN	
A00	100	A00	

Example: Target session

In this example, the administrator decides that:

. the ENDEVOR data of the VA Pac objects generated in a session older than or equal to 1200T must uploaded into session 1200T;

. the data of a session between 1300T and 1400T must remain in the generation session;

. the data of a session between 1501T and 2100T must be be uploaded into session 2100T;

. the data of a session higher than 2100T must be uploaded into the current session.

For this example, the TARGET SESSION TABLE must contain the following values:

Target Session	Line Number	Generation Session (Start)	Generation Session (End)
1200T	100	0001T	1200T
1300T	110	1300T	1300T
1400T	120	1400T	1400T
2100T	130	1501T	2100T
9999Z	140	2101T	9999Z

2.5. PREDEFINED USER ENTITIES

THE INTERFACE PREDEFINED USER ENTITIES

The Endevor context of VA Pac generated objects is memorized in the VA Pac repository. The VA Pac user can then locate each generated object in the Endevor environment.

The default Endevor target environments where VA Pac ELEMENTs are imported can be defined in the predefined .NDENV User Entity. A default Endevor target environment corresponds to an occurrence of this User Entity. Each default Endevor target environment can present a list of VA Pac entities to be generated. This User Entity has a description for each entity type.

Data concerning the Endevor context of ONE VA Pac entity occurrence is stored in ONE occurrence of the predefined .NDVLM User Entity.

A VA Pac entity occurrence is related to an occurrence of the .NDVLM or .NDENV User Entity via the .NDVRL predefined relationship.

Before the first generation, the user must define the Endevor target environment where the VA Pac ELEMENT must be imported. This target environment may be defined at three different levels:

. in the definition of the .NDENV User Entity occurrence. The generated object must be present in one of the descriptions of the entity;

. in the definition of the .NDVLM User Entity occurrence;

. in the description of the .NDVLM User Entity occurrence.

Some parameters related to the processing of the generated object during its import into Endevor (the TYPE, the PROCESSOR, the GROUP, the CCID,...) may be defined at three different levels:

. in the definition of the .NDENV User Entity occurrence;

. in one of the descriptions of the .NDENV User Entity occurrence;

. in the definition of the .NDVLM User Entity occurrence.

The default Endevor target environment or the parameters related to the processing of the generated element are taken into account in the following priority order:

. the .NDVLM User Entity occurrence description;

. the .NDVLM User Entity occurrence definition;

. the .NDENV User Entity occurrence description;

. the .NDENV User Entity occurrence definition.

2.6. .NDENV PREDEFINED USER ENTITY

.NDENV USER ENTITY

The .NDENV User Entity supplied during installation allows the user to define the default Endevor Environments and the VA Pac ELEMENTs which are imported into them on generation. The call code of .NDVENV is 7M. Its structure comprises the following parts:

- the defintion of the default Endevor target environment for the generation of the VA Pac ELEMENT (definition);

- the list of the programs to be generated in this environment (-D1 description);

- the list of the screens to be generated in this environment (-D2 description);

- the list of the DBD blocks to be generated in this environment (-D3 description);

- the list of the Copy Data to be generated in this environment (-D4 definition).

DEFINITION OF THE DEFAULT ENDEVOR TARGET ENVIRONMENT

An occurrence of the .NDENV User Entity corresponds to an Endevor target environment into which the VA Pac ELEMENTs are imported. It must be defined in the VA Pac Library and Session which store the data concerning the Endevor environments, in the VA Pac ELEMENT which corresponds to an occurrence of the .NDVLM User Entity (see TARGET LIBRARIES AND SESSIONS TABLE).

The Endevor target environment comprises the following information:

. the ENVIRONMENT code

. the SYSTEM code

. the SUBSYSTEM code

. the VA Pac ELEMENT TYPE

. the PROCESSOR GROUP of the Processes to be activated

. the CCID number

. the OVERRIDE SIGNOUT option

. the DELETE INPUT SOURCE option

. the VA Pac ELEMENT version number

. the Comments

- The stage is implicit. The generated object is always imported into Endevor in stage 1.

- For a screen-type VA Pac ELEMENT, to differentiate the TYPE of the Screen Program from the TYPE of the Map, it is possible to code the TYPE of the Screen Program in the first 8 positions, and the TYPE of the Map in the last 8 positions of the "Element type" field.

- The PROCESSOR GROUP is optional. The user can indicate a Processor Group other than that defined by default in Endevor for the element TYPE. For a Screen-type VA Pac ELEMENT, it is possible to indicate a PROCESSOR GROUP for the Screen Program in the first 8 positions and a PROCESSOR GROUP for the MAP in the last 8 positions of the "Processor Group" field.

- The CCID number is optional. It is coded on the first 12 positions of the "CCID/OvSig/Del/Ver" field.

- The OVERRIDE SIGNOUT option imports into Endevor a new version of the VA Pac ELEMENT assigned to a user code different from that of the current version. To select this option specify the value "Y" in the 14th position of the "CCID/OvSig/Del/Ver" field. All other values are ignored.

- The DELETE INPUT SOURCE option deletes the object source once imported into Endevor. To select this option, specify the value "Y" in the 16th position of the "CCID/OvSig/Del/Ver" field. All other values are ignored.

- To assign a version number to the VA Pac ELEMENT to be imported into Endevor, specify a value included between 01 and 99 in positions 18 and 19 in the "CCID/OvSig/Del/Ver" field. You must reinitialize this value after the current generation to avoid conflicts between the version number in Endevor in the following generations.

- The comments in the COMMENTS field are optional.

--> VA Pac Choice: $7Meeeeee (with eeeeee: UEO occurrence code).

```
 --------------------------------------------------------------------------------
 !                                                                              !
 !                      DOCUMENTATION                         *PTXX.PDEV.BMS.651 !
 !                                                                              !
 ! TYPE               : 7M           USER ENTITY........: .NDENV                 !
 ! -----------------------------------------------------------------------------!
 ! Dflt Environ.        ENVIR1                                                  !
 ! U.E. ITEM NAME     : DEVELOPMENT                                             !
 !                                                                              !
 ! Environment        : DEMO                                                    !
 ! System             : FINANCE                                                 !
 ! Sub-system         : ACCTREC                                                 !
 ! Element Type       : PCOBOL                                                  !
 ! Processor Group    : PACPROC                                                 !
 ! CCID/OvSig/Del/Ver : 123456789012 Y Y                                        !
 ! Comments           : COMMENTS                                                !
 !                                                                              !
 !                                                                              !
 !                                                                              !
 !                                                                              !
 !                                                                              !
 ! EXPLICIT KEYWORDS..:                                                         !
 !                                                                              !
 ! SESSION NUMBER.....: 0721        LIBRARY......: BMS    LOCK....:             !
 !                                                                              !
 ! O: C1 CH: $7Menvir1                   ACTION:                                !
 --------------------------------------------------------------------------------
```

LIST OF VA Pac ENTITIES TO BE GENERATED

Several VA Pac entities can be generated in the same Endevor Environment. At this level the user indicates the list of VA Pac entities to be generated in this same Endevor Environment.

The .NDENV User Entity has 4 descriptions. Each corresponds to the list of an entity type to be generated. They are:

. the list of programs (-D1 description)

. the list of screens (-D2 description)

. the list of DBDs (-D3 description)

. the list of Copy Data (-D4 desription)

In each description, the user can indicate parameters different from those indicated on the target environment definition. The parameters defined at this level have priority over those defined at the occurrence definition level.

The additional parameters defined in each entity to be generated are:

. the VA Pac ELEMENT TYPE

. the PROCESSOR GROUP of the Processes to be activated

. the CCID number

. the OVERRIDE SIGNOUT option

. the DELETE INPUT SOURCE option

. the VA Pac ELEMENT version number

. the Comments

- The stage is implicit. The generated object is always imported into Endevor by the stage 1.

- For the Screen-type VA Pac ELEMENT, to differentiate the Screen Program TYPE from the Map TYPE, it is possible to code the Screen Program TYPE in the first 8 positions, and the Map TYPE in the last 8 positions of the "Element Type" field.

- The PROCESSOR GROUP is optional. The user can indicate a Processor Group other than that defined by default in Endevor for the element TYPE. For a Screen-type VA Pac ELEMENT, it is possible to indicate a PROCESSOR GROUP for the Screen Program in the first 8 positions and a PROCESSOR GROUP for the MAP in the last 8 positions of the "Processor Group" field.

- The CCID number is optional. It is coded on the first 12 positions of the "CCID/OvSig/Del/Ver" field.

- The OVERRIDE SIGNOUT option imports into Endevor a new version of the VA Pac ELEMENT assigned to a user code different to that of the current version. To select this option specify the value "Y" in the 14th position of the "CCID/OvSig/Del/Ver" field. All other value is ignored.

- The DELETE INPUT SOURCE option deletes the object source once imported into Endevor. To select this option, specify the value "Y" in the 16th position of the "CCID/OvSig/Del/Ver" field. All other value is ignored.

- To assign a version number to a VA Pac ELEMENT to be imported into Endevor, specify a value included between 01 and 99 in positions 18 and 19 of the "CCID/OvSig/Del/Ver" field. You must reinitialize this value after the current generation to avoid conflict of version number in Endevor in the following generations.

- The comments in the COMMENTS field are optional.

--> VA Pac Choice: $7MeeeeeeDn (with eeeeee: EUO occurrence code and n: the description number).

```
--------------------------------------------------------------------------------
!                                                                              !
!                       DOCUMENTATION                       *PTXX.PDEV.BMS.651 !
! Program                        7M ENVIR1 1 DEVELOPMENT                       !
!                                                                              !
! A LIN : Progr. Type     Process  CCID/OvSig/Del/Ver  Comments                !
!   001 : PROGR1                                                               !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
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!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ _____________________   !
!       : ______ ________ ________ ___________________ _____________________   !
! *** END ***                                                                  !
! O: C1 CH: $7Menvir1 D1                                                       !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                                                                              !
!                       DOCUMENTATION                       *PTXX.PDEV.BMS.651 !
! Screen                         7M ENVIR1 2 DEVELOPMENT                       !
!                                                                              !
! A LIN : Screen Screen/Map Type  Screen/Map Proc. CCID/OvSig/Del/Ver  Comments!
!   001 : SCR1                                                                 !
!       : ______ ________________ ________________ ___________________ ________!
!       : ______ ________________ ________________ ___________________ ________!
!       : ______ ________________ ________________ ___________________ ________!
!       : ______ ________________ ________________ ___________________ ________!
!       : ______ ________________ ________________ ___________________ ________!
!       : ______ ________________ ________________ ___________________ ________!
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!       : ______ ________________ ________________ ___________________ ________!
!       : ______ ________________ ________________ ___________________ ________!
!       : ______ ________________ ________________ ___________________ ________!
!       : ______ ________________ ________________ ___________________ ________!
!       : ______ ________________ ________________ ___________________ ________!
!       : ______ ________________ ________________ ___________________ ________!
!       : ______ ________________ ________________ ___________________ ________!
! *** END ***                                                                  !
! O: C1 CH: $7Menvir1 D2                                                       !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                                                                              !
!                       DOCUMENTATION                       *PTXX.PDEV.BMS.651 !
! DBD                               7M ENVIR1 3 DEVELOPMENT                    !
!                                                                              !
! A LIN : DBD    Type     Process  CCID/OvSig/Del/Ver  Comments                !
!   001 : DBD1                                                                 !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
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!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ _____________________   !
!       : ______ ________ ________ ___________________ _____________________   !
! *** END ***                                                                  !
! O: C1 CH: $7Menvir1 D3                                                       !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                                                                              !
!                       DOCUMENTATION                       *PTXX.PDEV.BMS.651 !
! Copy Data                         7M ENVIR1 4 DEVELOPMENT                    !
!                                                                              !
! A LIN : Data   Type     Process  CCID/OvSig/Del/Ver  Comments                !
!   001 : DBD1                                                                 !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
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!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ ___________________     !
!       : ______ ________ ________ ___________________ _____________________   !
!       : ______ ________ ________ ___________________ _____________________   !
! *** END ***                                                                  !
! O: C1 CH: $7Menvir1 D4                                                       !
--------------------------------------------------------------------------------
```

2.7. .NDVLM PREDEFINED USER ENTITY

THE .NDVLM USER ENTITY

The .NDVLM User Entity supplied at the time of installation supports the Endevor information of a VisualAge Pacbase ELEMENT. The call type of .NDVLM is 7N. It is constituted of the following parts:

- the definition of the default Endevor target environment for the generation of the VisualAge Pacbase ELEMENT (definition),

- the description of the Endevor environments where the generated objects of the VisualAge Pacbase ELEMENT are managed (-D1 description),

- the characteristics of the last action carried out on the objects of the VisualAge Pacbase ELEMENT (-D2 description),

- the characteristics of the different versions of the VisualAge Pacbase ELEMENT in Endevor (-D9 description).

If there is no occurrence of the .NDVLM User Entity corresponding to the occurrence of the VisualAge Pacbase entity to manage, the Interface creates it when the Endevor contexts of the entity are updated in VisualAge Pacbase. Then the Interface updates the contents of this UEO after the successive generations.

DEFINITION OF THE DEFAULT ENDEVOR TARGET ENVIRONMENT

Before the first generation, if the definition of the VA PAC ELEMENT is not in the list of entities to be genreated in an occurrence of the .NDENV User Entity, the user must create an occurrence of the .NDVLM User Entity to indicate the ENDEVOR target environment where the VA Pac ELEMENT will be generated. The occurrence must be defined in the VA Pac library and session where the ENDEVOR target environment information is stored (see 'Target Libraries/Sessions Table').

Rule: The User Entity Occurrence code that is created must be identical to the VA Pac entity code to be generated.

The ENDEVOR target environment must include the following information:

. ENVIRONMENT code

. SYSTEM code

. SUB-SYSTEM code

. VA Pac ELEMENT TYPE

. PROCESSOR GROUP of the Process to activate

. VA Pac ELEMENT (Program) code or

. VA Pac ELEMENT (Screen) code or

. VA Pac ELEMENT (Database Block) code or

. VA Pac ELEMENT (Copy Data) code

. CCID number

. OVERRIDE SIGNOUT option

. DELETE INPUT SOURCE option

. VA Pac ELEMENT version number

. Comments

The VA Pac ELEMENT code allows to associate the User Entity Occurrence with the VA Pac Entity. The VA Pac entity must then be defined in a library whose level is equal to or higher than that of the occurrence.

The Stage is implicit. The generated object is always imported into ENDEVOR in Stage 1.

The PROCESSOR GROUP is optional. It allows the user to indicate a PROCESSOR GROUP other than that defined by defulat in Endevor for the ELEMENT TYPE. . For a VA Pac ELEMENT of Screen type, it is possible to indicate a PROCESSOR GROUP for the Screen Program on the first 8 positions and a PROCESSOR GROUP for the MAP on the last 8 positions of the PROCESSOR GROUP area.

For a VA Pac ELEMENT of Screen type, to differentiate the TYPE of the Screen Program from the TYPE of the MAP, it is possible to enter the TYPE of the Screen Program on the first 8 positions, and the TYPE of the MAP on the last 8 positions of the ELEMENT TYPE field.

The CCID number is optional. It is coded on the first 12 positions of the "CCID/OvSig/Del/Ver" field.

The OVERRIDE SIGNOUT option enables you to import, into Endevor, a new version of the VA Pac ELEMENT assigned to a user code different from that of the current version. To select this option, enter a "Y" in the 14th position of the "CCID/OvSig/Del/Ver" field. Any other value will be ignored for this option.

The DELETE INPUT SOURCE option deletes the source of the object imported into Endevor. To select this option, enter a "Y" in the 16th position of the "CCID/OvSig/Del/Ver" field. Any other value will be ignored for this option.

The VA Pac ELEMENT to be imported in Endevor can be assigned a version number by coding a value between 01 and 99 in positions 18 and 19 in the "CCID/OvSig/Del/Ver" field. You must reinitialize this number after the current generation in order to avoid conflicting version numbers in Endevor in the next generations.

The comments in the COMMENTS field are optional.

Upon generation before import, this description enables the Interface to complete the Endevor context with the chosen options.

The call type of the .NDVLM User Entity is 7N.
VA Pac choice: $7Neeeeee (with eeeeee: UEO occurrence code)

```
--------------------------------------------------------------------------------
!                                                                              !
!                       DOCUMENTATION                       *PTXX.PDEV.BMS.651 !
!                                                                              !
! TYPE               : 7N           USER ENTITY........: .NDVLM                !
! ------------------------------------------------------------------------------
! ENDEVOR ELEMENT      PROGR1                                                  !
! U.E. ITEM NAME     : COMMAND CHECK                                           !
!                                                                              !
! ENVIRONMENT        : DEMO                                                    !
! SYSTEM             : FINANCE                                                 !
! SUB-SYSTEM         : ACCTREC                                                 !
! ELEMENT TYPE       : PCOBOL                                                  !
! PROGRAM CODE       : PPROGR1                                                 !
! SCREEN CODE        :                                                         !
! DBD CODE           :                                                         !
! DATA CODE          :                                                         !
! PROCESS GROUP      : PACPROC                                                 !
! CCID/OVSIG/DEL/VER : 123456789012                                            !
! COMMENTS           : COMMENTS                                                !
!                                                                              !
! EXPLICIT KEYWORDS..:                                                         !
!                                                                              !
! SESSION NUMBER.....: 0721        LIBRARY......: BMS    LOCK....:             !
!                                                                              !
! O: C1 CH: $7NPROGR1                   ACTION:                                !
--------------------------------------------------------------------------------
```

DESCRIPTION OF THE ENTITY'S ENDEVOR ENVIRONMENTS

To a VA Pac entity can correspond several generated objects managed in several ENDEVOR environments. This description allows the user to:

- consult the list of ENDEVOR environments of the entity,

- define other possible ENDEVOR target environments.

The interface recognizes the first target environment whose validation indicator is set.

NOTE: The definition of the same environment on two different description lines can have unpredictable results.

The description of ENDEVOR entity target environments contains the following information:

. VALIDATION indicator (v or blank)

. ENVIRONMENT code

. STAGE code (display only)

. SYSTEM code

. SUB-SYSTEM code

. VA Pac ELEMENT TYPE

. VA Pac ELEMENT nature and code

. presence indicator of INFOPAC ELEMENT characteristics

The presence indicator of INFOPAC ELEMENT characteristics is automatically displayed if the VA Pac ELEMENT is present in this environment.

The Stage is not recognized if a target environment other than the environment defined by default is validated. It will be completed, for information, once the generated entity is taken into account in ENDEVOR.

--> VA Pac Choice: $7N eeeeee D1 (with eeeeee: UEO occurrence code).

```
--------------------------------------------------------------------------------
!                                                                              !
!                       DOCUMENTATION                       *PTXX.PDEV.BMS.651 !
! ENVIRONMENT                    7N PROGR1 1 COMMAND CHECK                     !
!                                                                              !
! A LIN : V ENVIRON. S SYSTEM   SUBSYST. TYPE     NAT.+ELEM *                  !
!   001 :   DEMO     P FINANCE  ACCTREC  PCOBOL   PPROGR1EX *                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!       : _ ________ _ ________ ________ ________ _________ _                  !
!                                                                              !
! O: C1 CH: $7NPROGR1 D1                                                       !
--------------------------------------------------------------------------------
```

DESCRIPTION OF THE LAST ACTION ON THE ENTITY OBJECTS

This description is updated upon Endevor return. So it is in read-only mode. It memorizes the characteristics related to the last action carried out on the entity's generated objects.

It comprises the following information:

```
. the code of the last action

. the date of the last action

. the time of the last action

. the user code who carried out the last action
```

To each description line of the Endevor target environment where the "presence indicator of the INFOPAC element characteristics" is displayed, corresponds a description line (with the same number) of the VA Pac entity in Endevor.

--> VA Pac Choice: $7N eeeeee D2 (with eeeeee: OEU occurrence code).

```
--------------------------------------------------------------------------------
!                                                                              !
!                       DOCUMENTATION                       *PTXX.PDEV.BMS.651 !
! Last Action                     7N PROGR1 2 COMMAND CHECK                     !
!                                                                              !
! A LIN : Action   Date       Time  User                                       !
!   001 : ADD      1999/10/23 11:12 PTXX                                       !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
!       : ________ __________ _____ ________                                   !
! *** END ***                                                                  !
! O: C1 CH: $7Nprogr1 D2                                                       !
--------------------------------------------------------------------------------
```

DESCRIPTION OF THE VA Pac ENTITY IN ENDEVOR

Endevor automatically updates this description which is therefore in read-only mode. This description permits the storage of the characteristics of a VA Pac generated entity in ENDEVOR.

The description contains the following information:

. Update date in ENDEVOR

. Update time and Version in ENDEVOR

. Entity generation date

. Entity generation time

. VA Pac User Code

. Library code and generation session number

The library code is useful if the generation library is different from that in which the information about the ENDEVOR environments is stored.

For each description line of the ENDEVOR target environment where the "presence indicator of INFOPAC ELEMENT characteristics" is displayed, there is a VA Pac entity description line (with the same number) in Endevor.

--> VA Pac Choice: $7N eeeeee D9 (with eeeeee: UEO occurrence code).

```
--------------------------------------------------------------------------------
!                                                                              !
!                       DOCUMENTATION                       *PTXX.PDEV.BMS.651 !
! INFORMATION                     7N PROGR1 9 COMMAND CHECK                    !
!                                                                              !
! A LIN : NDV.DATE   NDV.T VV.LL GEN.DATE   GEN.TIME USER     LIB SESSI       !
!   001 : 1999/10/23 11:12 01.00 23/10/1999 11:10:21 PTXX     BMS 0730         !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
!       : __________ ___________ __________ ________ ________ _________        !
! *** END ***                                                                  !
! O: C1 CH: $7NPROGR1 D9                                                       !
--------------------------------------------------------------------------------
```

2.8. .NDVRL PREDEFINED USER RELATIONSHIP

.NDVRL RELATIONSHIP

The .NDVRL predefined User Relationship which is supplied at installation creates links between the VA Pac entity and the occurrence of the .NDENV or .NDVLM User Entity.

The existence of these links at the entity level allows the user to know if the generated results are managed in ENDEVOR.

This relationship is set by the presence of the entity code in the description of the default environment when creating the occurrence of the .NDENV or .NDVLM User Entity.

The VA Pac entity must be defined in a library whose level is equal to or higher than that of the UEO, and in the same session (See "Target Libraries/Sessions Table").

```
--> VA Pac choice : P pppppp XQ (with pppppp: prog. code)
                    O oooooo XQ (with oooooo: screen code)
                    ...
```

2.9. ENDEVOR INTERFACE PROCESSORS

INTERFACE PROCESSORS

Warning:

The processors supplied by the interface may be used without modification. However, the user may adapt them after having understood the functionalities described below. A bad adaptation of these processors can have unpredictable consequences.

INTRODUCTION

Any action on the VA Pac ELEMENT generally triggers a similar action on the INFOPAC ELEMENT and archives the transaction in the interface's journal file. These tasks are performed by the Interface's ENDEVOR PROCESSORS which are supplied at installation. The processors belong to Processor Groups related to the ACTION and to the TYPEs of VA Pac objects.

The interface has five processor types:

- MOVE PROCESSOR, activated by default by the MOVE action on VA Pac ELEMENTs. It can also be activated by the TRANSFER action on the same elements.

- DELETE PROCESSOR, activated by default by the DELETE action on VA Pac ELEMENTs. It can also be activated by the GENERATE action with the choice of a different Group of Processors, or by the MOVE/TRANSFER actions on option on the same elements.

- GENERATE PROCESSOR of source-type VA Pac ELEMENTs, activated by the ADD/GENERATE/TRANSFER/UPDATE actions on VA Pac ELEMENTs.

- GENERATE PROCESSOR of load-type VA Pac ELEMENTs, activated by the ADD/GENERATE/TRANSFER/UPDATE actions on VA Pac ELEMENTs.

- GENERATE PROCESSOR of INFOPAC ELEMENTs activated by the ADD/UPDATE actions on INFOPAC ELEMENTs.

1. MOVE PROCESSOR

The interface MOVE processor, supplied at installation in the PRCSMOVP member of the SY library, must be the MOVE processor of the processor groups which can be activated by the MOVE action on VA Pac ELEMENTs.

The MOVE PROCESSOR moves the INFOPAC ELEMENT into the same ENDEVOR environment as the VA Pac ELEMENT and at the same time. Also, the transaction is archived in the interface journal.

2. DELETE PROCESSOR

The interface DELETE processor, supplied in the PRCSDELP member of the SY library, must be the DELETE processor of the processor groups which can be activated by the DELETE action on VA Pac ELEMENTs.
The DELETE PROCESSOR deletes the INFOPAC ELEMENT in the same ENDEVOR environment as the VA Pac ELEMENT. Also, the transaction is archived in the interface journal.

3. GENERATE PROCESSOR OF SOURCE-TYPE VA Pac ELEMENTS

The interface GENERATE processor of source-type VA Pac ELEMENTs supplied in the PRCSGEPP member of the SY library, can be the GENERATE processor of the processor groups which can be activated by the ADD/GENERATE/TRANSFER/UPDATE actions on VA Pac ELEMENTs.
The different steps of a processor in operation are conditioned by the TRANSFER or GENERATE action.

This processor moves the INFOPAC ELEMENT into the same Endevor environment as the VA Pac ELEMENT in the case of the TRANSFER action, and archives the transaction in the interface journal file.

4. GENERATE PROCESSOR OF LOAD-TYPE VA Pac ELEMENTS

The interface GENERATE processor of load-type INFOPAC ELEMENTs supplied in the PRCSGEPP member of the SY library must be the GENERATE processor of the processor groups which can be activated by the ADD/GENERATE/TRANSFER/UPDATE actions on the VA Pac ELEMENTs.

This processor compiles the VA Pac ELEMENT, moves the INFOPAC ELEMENT into the same Endevor environment as the VA Pac ELEMENT in the case of the TRANSFER action, and archives the transaction in the interface journal file.

5. GENERATE PROCESSOR OF INFOPAC ELEMENTS

The interface GENERATE processor of INFOPAC ELEMENTs supplied by the PRCSGENP member of the SY library, must be the GENERATE processor of the processor groups which can be activated by the ADD/UPDATE actions on the INFOPAC ELEMENTs.

This processor archives the transaction of the VA Pac ELEMENT in the interface journal file when being imported in Endevor.

6. OTHER PROCESSORS

The user can define several GENERATE processors which are activated by the ADD/UPDATE actions on VA Pac ELEMENTS. Each fills a different function related to the nature of the generated source. The user must carefully add the steps related to the processing of the corresponding INFOPAC ELEMENTs. These processors can be a call to pre-processors, a compilation, or a linkedit for example, and can be used when importing a VA Pac ELEMENT into ENDEVOR.

These processors are to be allocated to processor groups (see Chapter INSTALLATION, Subchapter ENVIRONMENT PREPARATION, Paragraph ALLOCATION OF PROCESSORS TO THE PROCESSOR GROUP).

In the definition of the processor groups related to the TYPEs of INFOPAC ELEMENTs, the MOVE action must use the MOVE processor, and the TRANSFER action the GENERATE processor.

In the definition of the processor groups related to the TYPEs of VA Pac ELEMENTs, the MOVE action must use the MOVE processor, and the TRANSFER action may use either the GENERATE processor or the MOVE processor.

In VA Pac, the choice of the processor group used to import a VA Pac ELEMENT into ENDEVOR must be indicated in the default target description of the .NDVLM User Entity occurrence or the .NDENV User Entity occurrence before the generation.

2.10. DESCRIPTION OF THE INTERFACE PROCESSORS

DESCRIPTION OF THE INTERFACE PROCESSORS

1.DESCRIPTION OF THE MOVE PROCESSOR

The MOVE processor of the processor groups which can be activated by the MOVE/TRANSFER action on the VA Pac ELEMENTs comprises the following steps:

- Allocation of message files: BC1PDSIN

- Preparation of the source context if TRANSFER action: PNTRAN

This step is executed only if the processor is activated by the TRANSFER action. It retrieves the parameters of the Endevor source context memorized by EXIT2 in the UP file in order to archive the action. The source context is not supplied in the symbolic parameter blocks during the TRANSFER action.

- Preparation of the source context if MOVE action: IEBGENER

Retrieval of the source context parameters from the Endevor symbolic parameters if the processor is activated by the MOVE action.

- Preparation of the action on the INFOPAC ELEMENT: PNPR10

With the parameters of the source context supplied by one of the two previous steps and those of the target context supplied by Endevor symbolic parameter blocks, the INFOPAC ELEMENT write commands are generated for the following step, as well as the action on the INFOPAC ELEMENT itself.

- Writing of the contents of the INFOPAC ELEMENT: CONWRITE

Execution of the commands generated by the PNPR10 step with the writing of the contents of the INFOPAC ELEMENT in a sequential file to prepare the action archiving.

- Memorization of the INFOPAC ELEMENT contents: PNPR11

Retrieval of the INFOPAC ELEMENT contents from the sequential file and memorization in the UP workfile which will be copied via EXIT3 in the UQ file, to archive the action.

- Execution of the action on the INFOPAC ELEMENT: C1BM300

Execution of the action on the INFOPAC ELEMENT with the commands prepared by the PNPR10 step.

- Printing of the messages from the various steps of the processor: CONLIST

2.DESCRIPTION OF THE DELETE PROCESSOR

The DELETE processor of the processor groups which can be activated by the DELETE/GENERATE/MOVE/TRANSFER actions on VA Pac ELEMENTS comprises the following steps:

- Allocation of message files: BC1PDSIN

- Preparation of the action on the INFOPAC ELEMENT: PNPR10

  Generation of the print commands of the INFOPAC ELEMENT for the next step, as well as the action on the INFOPAC ELEMENT itself.

- Writing of the INFOPAC ELEMENT contents: CONWRITE

  Execution of the commands generated by the PNPR10 step with the writing of the INFOPAC ELEMENT contents in a sequential file to prepare the action archiving.

- Memorization of the INFOPAC ELEMENT contents: PNPR11

  Retrieval of the INFOPAC ELEMENT contents from the sequential file and memorization in the UP workfile which will be copied into the UQ file, via EXIT3, for journal archiving.

- Execution of the action on the INFOPAC ELEMENT: C1BM300

  With the commands prepared by the PNPR10 step, execution of the action on the INFOPAC ELEMENT if the processor is not activated by the GENERATE action.

- Printing of the messages from the various steps of the processor: CONLIST

The various steps of the processor are executed only if the COMMENT field does not contain the '*IBM*' value. This makes it possible, in the execution of the 'Integrity Validation' procedure, not to delete the INFOPAC ELEMENT.

3.DESCRIPTION OF THE GENERATE PROCESSOR OF SOURCE-TYPE VA Pac ELEMENTS

The GENERATE processor of the processor groups which can be activated by the ADD/UPDATE/GENERATE/TRANSFER actions on the Source-type VA Pac ELEMENTs is effective only for the TRANSFER or GENERATE action. The different steps of the processor are executed only if the processor is activated by the TRANSFER or GENERATE action. It comprises the following steps:

- Allocation of the message files: BC1PDSIN

- Preparation of the source context: PNTRAN

This step is executed only if the processor is activated by the GENERATE or TRANSFER action. The Endevor source context parameters memorized via EXIT2 in the UP file are retrieved in order to archive the action. The source context is not supplied in the symbolic parameter blocks during the TRANSFER action.

- Preparation of the action on the INFOPAC ELEMENT: PNPR10

This step is executed only if the processor is activated by the GENERATE or TRANSFER action. With the parameters of the source context supplied by the previous steps and those of the target context supplied by Endevor symbolic parameters, the action on the INFOPAC ELEMENT itself is generated.

- Writing of the INFOPAC ELEMENT contents: CONWRITE

This step is executed only if the processor is activated by the GENERATE action. Execution of the commands generated by the previous step with the writing of the contents of the INFOPAC ELEMENT in a sequential file to prepare for archiving. In the case of the TRANSFER action, there is no need to archive the action as this is done by the MOVE processor.

- Memorization of the INFOPAC ELEMENT contents: PNPR11

This step is executed only if the processor is activated by the GENERATE action. The INFOPAC ELEMENT contents are retrieved from the sequential file and the element is memorized in the UP workfile. This file will be copied, via EXIT3, in the UQ journal file.

- Execution of the action on the INFOPAC ELEMENT: C1BM300

  This step is executed only if the processor is activated by the TRANSFER action. The action is executed on the INFOPAC ELEMENT with the commands prepared by the PNPR10 step.

- Pringing of the messages of the various steps of the processor: CONLIST

  This step is executed only if the processor is activated by the GENERATE or TRANSFER action.

This processor cannot be activated by the MOVE action as the symbolic parameters of the source environment used in the processor are not supplied by Endevor.

4.DESCRIPTION OF THE GENERATE PROCESSOR OF LOAD-TYPE VA Pac ELEMENTS

The GENERATE processor of the processor groups which can be activated by the ADD/UPDATE/GENERATE/MOVE/TRANSFER actions on the Load-type VA Pac ELEMENTs comprises the following steps:

- Compilation of the VA Pac ELEMENT: IKFCBL00

- Linkedit of the VA Pac ELEMENT: IEWL

- Allocation of the messages files: BC1PDSIN

  This step is executed only if the processor is activated by the GENERATE or TRANSFER action.

- Preparation of the source context: PNTRAN

  This step is executed only if the processor is activated by the GENERATE or TRANSFER action. It retrieves the Endevor source context parameters memorized via EXIT2 in the UP file in order to archive the action. The source context is not supplied in the symbolic parameter blocks during the TRANSFER action.

- Preparation of the action on the INFOPAC ELEMENT: PNPR10

  This step is executed only if the processor is activated by the GENERATE or TRANSFER action. With the parameters of the source context supplied by the previous steps and those of the target context supplied by Endevor symbolic parameters, the action on the INFOPAC ELEMENT itself is prepared.

- Writing of the INFOPAC ELEMENT contents: CONWRITE

  This step is executed only if the processor is activated by the GENERATE action. Execution of the commands generated by the previous step with the writing of the INFOPAC ELEMENT contents in a sequential file to prepare for archiving. In the case of the TRANSFER action, there is no need to archive the action as this is done by the MOVE processor.

- Memorization of the INFOPAC ELEMENT contents: PNPR11

  This step is executed only if the processor is activated by the GENERATE action. The INFOPAC ELEMENT contents are retrieved from the sequential file and the element is memorized in the UP workfile. This file will be copied, via EXIT3, in the UQ journal file.

- Execution of the action on the INFOPAC ELEMENT: C1BM300

  This step is executed only if the processor is activated by the TRANSFER action. The action is executed on the INFOPAC ELEMENT with the commands prepared by the PNPR10 step.

- Printing of the messages of the various steps of the processor: CONLIST

  This step is executed only if the processor is activated by the GENERATE or TRANSFER action.

This processor cannot be activated by the MOVE action as the symbolic parameters of the source environment used in the processor are not supplied by Endevor.

5.DESCRIPTION OF THE GENERATE PROCESSOR OF THE INFOPAC ELEMENTS

The GENERATE processor of the processor groups which can be activated by the ADD/UPDATE actions on the INFOPAC ELEMENTS include the following steps:

- Allocation of the message files: BC1PDSIN

- Preparation of the source context: PNTRAN

  Retrieval of the ENDEVOR source context parameters memorized, via EXIT2, in the UP file, and deletion of the source context memorized in UP file thanks to the 'I' value in the last parameter of the step.

- Preparation of the action on INFOPAC ELEMENT: PNPR10

  With the parameters of the source context supplied by the preceding step and those of the target context supplied by Endevor symbolic parameter blocks, generation of the write commands of the INFOPAC ELEMENT for next step.

- Writing of the contents of the INFOPAC ELEMENT: CONWRITE

  Execution of the commands generated by the previous step with the writing of the INFOPAC ELEMENT contents in a sequential file to prepare for archiving.

- Memorization of the INFOPAC ELEMENT contents: PNPR11

  The contents of the INFOPAC ELEMENT are retrieved from the sequential file and the element is memorized in the UP workfile. This file will be copied, via EXIT3, in the UQ journal file.

- Printing of the messages from the various steps of the processor: CONLIST

The various steps of the processor are executed only if the COMMENT field does not contain the '*RND*' value. This makes it possible, for an action generated by the Interface during a retrieval of existing data, not to delete the INFOPAC ELEMENT.

2.11. INTERFACE EXITS

THE INTERFACE EXITS

The Interface has two exits: EXIT2 and EXIT3. They allow to control the different Endevor actions that are carried out on the VA Pac ELEMENTs or the INFOPAC ELEMENTs, and to finish the tasks started by the processors, such as the archiving of transactions. They are supplied respectively under the C1UEXT02 and C1UEXT03 members in the Interface load-modules library.

EXIT2 FUNCTIONS: C1UEXT02

Executed before the processing of the Endevor action, C1UXT02 controls the validity of all the actions performed on the VA Pac ELEMENTs recognized via the Types table.

It rejects all Endevor actions on INFOPAC ELEMENTs except the actions generated by the Interface procedures.

It rejects the ADD action on VA Pac ELEMENTs if it is not generated by the Interface procedures.

In the case of the TRANSFER action, it memorizes the source context of the element to be processed in the UP workfile in order to transmit it to the processors. This context is not supplied in the symbolic parameter blocks for archiving at the time of this action.

EXIT3 FUNCTIONS: C1UEXT03

Executed after the Endevor action is processed, C1UEXT03 retrieves the transaction corresponding to the Endevor action which is being memorized in the UP workfile by the different processors, deletes it from the UP file and records this transaction in the UQ Interface Journal file.

3. FUNCTIONS

3.1. INTRODUCTION

INTRODUCTION

The VA Pac/ENDEVOR Interface permits:

- the automatic recognition and acceptance in ENDEVOR of VA Pac generated objects.

- the standard management of these objects in ENDEVOR.

- On-line consultation in VA Pac of the ENDEVOR environments in which the objects are managed.

- consultation in ENDEVOR of the VA Pac source environments of these objects.

The interface has two phases:

- Generation of VA Pac entities: import into ENDEVOR, and archiving of the transactions in the interface's journal.

- Impact of these transactions into VA Pac: formatting of the interface's journal in the form of batch update transactions and actual VA Pac batch update performed by the UPDT procedure.

3.2. GENERATION AND IMPORT OF A VA Pac ELEMENT

GENERATION AND IMPORT OF A VA Pac ELEMENT

VA Pac objects are imported or manipulated in ENDEVOR by ENDEVOR Actions. All transactions concerning these objects are archived in an interface journal file. These transactions are reformatted as VA Pac batch update transactions by the MEND procedure. The batch update brings back into VA Pac, the ENDEVOR environments where the generated entities are managed.

IMPORT INTO ENDEVOR

VA Pac objects are imported into ENDEVOR directly by a VA Pac GPRT generation procedure which produces a generated source. The source is preceded and followed by JCL lines which come from the VA Pac Before/After command options (see the VA Pac USER'S MANUAL).

The user must indicate the following JCL lines in the After program commands:

- the execution of the UPND procedure, followed by:

- the $PACPDS parameter containing the name of the temporary library in which the generated VA Pac ELEMENT is found as follows:

$PACPDS='-'

- the $PACINF parameter containing the contents of the INFOPAC ELEMENT as follows:

$PACINF=-

The GPND procedure uses the file resulting from the generation, completes it with ENDEVOR ADD actions before submitting it for execution using the parameters indicated above. The procedure imports two objects into ENDEVOR: the VA Pac ELEMENT and the INFOPAC ELEMENT.

The ADD action of the INFOPAC ELEMENT stores the VA Pac ELEMENT transaction in the Journal file of the Interface.

As a reminder, the following options are authorized for this Action:

- the OVERRIDE SIGNOUT option to import a new version of the VA Pac ELEMENT under a user code which is different from that assigned to the current version of the same element;

- the DELETE INPUT SOURCE option to delete the source object once it is imported into Endevor;

- the NEW VERSION option to assign a version number to the imported VA Pac ELEMENT;

- the name of the processor group to select a processor other than that defined by default at the element TYPE level;

- the CCID number;

- and the comments of the COMMENT option.

VA Pac Before/After Command Example

The following is an example of the use of the Before/After commands in a batch program (see the USER MANUAL, Chapter DATABASE MANAGEMENT; or the OPERATIONS MANUAL, Chapter CONTROL CARDS FOR GENERATED JCL for more detail on 'x' option types and the examples of 'y' option codes defined below).

.COMMANDS AT THE BEGINNING OF THE GENERATED PROGRAMS FLOW

They permit to allocate a temporary storage PDS before all generations.

```
         1         2         3         4        7    7    8
(x) (y) 8-0---------0---------0---------0----//--0----5----0

 A   E  //- JOB (-),-,CLASS=-,MSGCLASS=-,            12U34-
 A   E  // NOTIFY=-                                  U    -
 A   E  //*
 A   E  //*--- TEMPORARY PDS CREATION ---
 A   E  //*
 A   E  //STEP01   EXEC PGM=IEFBR14
 A   E  //DD1      DD   DSN=-,DISP=(,CATLG,DELETE),   5    -
 A   E  //             UNIT=3390,VOL=SER=STM480,
 A   E  //             DCB=(RECFM=FB,LRECL=80,
 A   E  //                  BLKSIZE=9440,DSORG=PO),
 A   E  //             SPACE=(TRK,(20,05,05),RLSE)
```

.GENERATED PROGRAM BEFORE COMMANDS

They permit to store the generated source in the temporary PDS allocated here above.

```
         1         2         3         4        7    7    8
(x) (y) 8-0---------0---------0---------0----//--0----5----0

 D   E  //*
 D   E  //*--- SOURCE BACKUP ---
 D   E  //*
 D   E  //STEP02   EXEC PGM=IEBUPDTE,PARM=NEW
 D   E  //SYSUT1   DD   DSN=-,DISP=SHR               1    -
 D   E  //SYSUT2   DD   DSN=-,DISP=SHR               1    -
 D   E  //SYSPRINT DD SYSOUT=*
 D   E  //SYSIN    DD *
 D   E  ./ADD NAME=-                                 P    -
```

.GENERATED PROGRAM AFTER COMMANDS

They permit to execute the import preparation procedure for generated objects in ENDEVOR UPND. The user must define the ACPDS parameter to indicate the name of the temporary PDS, and ACINF to indicate the contents of the INFOPAC ELEMENT. The value of the INFOPAC ELEMENT contents parameter is 'L'.

```
          1         2         3         4        7    7    8
(x) (y) 8-0---------0---------0---------0----//--0----5----0

 F   E  //*
 F   E  //*--- IMPORT INTO ENDEVOR ---
 F   E  //*
 F   E  //UPND     EXEC NDVRUPND
 F   E  //*
 F   E  $PACPDS='-'                                   1    -
 F   E  $PACINF=-                                     L    -
```

.COMMANDS AT THE END OF THE GENERATED PROGRAMS FLOW

They permit to delete the temporary storage PDS.

```
          1         2         3         4        7    7    8
(x) (y) 8-0---------0---------0---------0----//--0----5----0

 Z   E  //*
 Z   E  //*--- CLEAR TEMPORARY STORAGE ---
 Z   E  //*
 Z   E  //STEP03   EXEC PGM=IEHPROGM,COND=EVEN
 Z   E  //DD1      DD   UNIT=3390,VOL=SER=STM480,DISP=SHR
 Z   E  //SYSIN    DD   *
 Z   E   UNCATLG DSNAME=-                             5    -
 Z   E   SCRATCH DSNAME=-,VOL=3390=STM480             5    -
 Z   E  /*
 Z   E  //SYSPRINT DD   SYSOUT=*
 Z   E  //*
 Z   E  //
```

EXAMPLE: Job generation submit screens

1. Validated JCL lines for the execution of the generation procedure ('C4' operation code),

2. Corresponding generation command lines of the screen obtained with the 'GP' choice ('C1' operation code).

See the 'USER'S MANUAL', Chapter 'GENERATION PRINT' for more details on job generation submit screens.

GPRT (see the JCL lines below) initiates the generation of the VA Pac element.
GPND (see same JCL) submits a job which imports into Endevor the VA Pac element and the INFOPAC element.

```
!--------------------------------------------------------------------------------!
!                                                                                !
!                      DOCUMENTATION                           *PTXX.PDEV.BMS.651 !
! JCL LINES FOR THE COMMANDS                                   USER: PTXX         !
!                                                                                !
! A    COM  LIGNE  :    V C CONTINUATION OF THE REQUEST                          !
!      JCL  000001 :    V   //PTXXGPRT JOB (111,1111,XX,CLASS=X,MSGCLASS=X,      !
!      JCL  000002 :    V   //      NOTIFY=PTXX                                  !
!      JCL  000003 :    V   /*JOBPARM LINES=100                                  !
!      JCL  000004 :    V   //GPRT    EXEC D280GPRT,ROOT=D2,FILE=80,OUT=*,       !
!      JCL  000005 :    V   //        INDUV='PT$PDV.PAC802',                     !
!      JCL  000006 :    V   //        COND.LNK=(00,LE,PAC)                       !
!      JCL  700000 :    V   //*                                                  !
!      JCL  700010 :    V   //GPND    EXEC NDVRGPND,USER=PTXX,                   !
!      JCL  700020 :    V   //        PAC7GB=PAC7GB                              !
!      JCL  700030 :    V   //PNDV10.PAC7JB DD DSN=*.GPRT.PAC.PAC7GB,            !
!      JCL  700040 :    V   //        DISP=(OLD,PASS)                            !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
! *** END ***                                                                    !
! O: C4 CH:                       JOB:                                           !
!                                                                                !
----------------------------------------------------------------------------------
```

```
!--------------------------------------------------------------------------------!
!                                                                                !
!                      DOCUMENTATION                           *PTXX.PDEV.BMS.651 !
! GENERATION AND PRINT COMMANDS                                USER: PTXX         !
!                                                                                !
! A SO COM  ENTITY : OP V C CONTINUATION OF THE REQUEST                          !
!   90 FLP         : C1 V * PROGRAM JOB CARD / JOB DELIM  ENV: _ (CCF:E CCB:E) !
!                  :        1=PTXXGPND_2=111,1111_3=X_4=X_5=PTXX.NDVR.TEMP     !
!   90 GCP  PTU001 : C1 V * SOURCE CODE FOR SELECTED PROGRAM     (CCF:E CCB:E) !
!                  :        1=PTXX.NDVR.TEMP                                     !
!   90 GCP  PTU002 : C1   * SOURCE CODE FOR SELECTED PROGRAM     (CCF:E CCB:E) !
!                  :        1=PTXX.NDVR.TEMP                                     !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
!                  :                                                             !
! *** END ***                                                                    !
! O: C1 CH:                       JOB:                                           !
!                                                                                !
----------------------------------------------------------------------------------
```

3.3. MANAGEMENT OF A VA Pac ELEMENT IN ENDEVOR

MANAGEMENT OF A VA Pac ELEMENT IN ENDEVOR

TRANSFER OF VA Pac ELEMENT IN ENDEVOR

Once imported into ENDEVOR, only VA Pac ELEMENTs can be manipulated by ENDEVOR Actions. They can be transferred from one Stage to another with the Endevor 'MOVE' Action, or from one environment to another with the Endevor 'TRANSFER' Action. The interface accompanies the transfer of the VA Pac ELEMENT with the transfer of the corresponding INFOPAC ELEMENT to the same ENDEVOR target environment using the various MOVE or GENERATE processors of the interface.

The user can consult the contents of the INFOPAC ELEMENT, but cannot perform ENDEVOR Actions on it.

The 'MOVE' or 'TRANSFER' Action memorizes the VA Pac ELEMENT transaction in the interface's journal file.

The following options are authorized for the 'MOVE' action:

- the DELETE 'FROM' ELEMENT option to delete the VA Pac ELEMENT from the source Stage after the transfer. Only "Y", the option's default value, is valid. The element is deleted from the source Stage;

- the RETAIN SIGNOUT option to keep the user code assigned to the VA Pac ELEMENT in the target Stage. By default, the element loses the assignment after the transfer;

- the SIGNOUT TO option to assign a user code other than that being used by the VA Pac ELEMENT in the target Stage;

- the CCID number;

- the comments of the COMMENT option.

The following options are authorized for the 'TRANSFER' action:

- the DELETE 'FROM' ELEMENT option to delete the VA Pac ELEMENT from the source Stage after the transfer. Only "Y", the option's default value, is valid. The element is deleted from the source Stage;

- the GENERATE ELEMENT option to regenerate or recompile the VA Pac ELEMENT after transfer;

- the OVERRIDE SIGNOUT option to allow the user to transfer the VA Pac ELEMENT carrying a user code different from her/his own;

- the PROCESSOR GROUP option to associate a group of processors to the VA Pac ELEMENT to be transferred;

- the WITH HISTORY option;

- the RETAIN SIGNOUT option to keep the user code assigned to the VA Pac ELEMENT in the target Stage. By default the element loses the assignment after the transfer;

- the SIGNOUT TO option to assign to the VA Pac ELEMENT of the target Stage a user code different from that of the source Stage;

- the CCID number;

- and the comments of the COMMENT option.

RE-EXECUTING THE GENERATE PROCESS OF THE VA Pac ELEMENT IN ENDEVOR

The 'GENERATE' Action enables you to execute again the GENERATE process on the VA Pac ELEMENT in its current environment, which may be a recompilation for example. The Action first suppresses the VA Pac ELEMENT from its current environment before regenerating it. No action is performed on the INFOPAC ELEMENT.

This action memorizes the VA Pac transaction in the Interface Journal file to record the last date of the action.

The following options are authorized for this action:

- OVERRIDE SIGNOUT to enable the user to perform the operation on the VA Pac ELEMENT which bears a user code different from his/her own,

- PROCESSOR GROUP fo associate a processor group of the selected VA Pac ELEMENT,

- the CCID number,

- and the comments of the COMMENT option.

DELETING THE VA Pac ELEMENT IN ENDEVOR

The VA Pac ELEMENT can be deleted from the ENDEVOR environment with the 'DELETE' Action. The interface accompanies the deletion of the VA Pac ELEMENT with the deletion of the corresponding INFOPAC ELEMENT using the 'PACD' processor.

The 'DELETE' Action stores the VA Pac ELEMENT transaction in the interface's journal file.

The following options are authorized for this Action:

- the OVERRIDE SIGNOUT option to allow the user to delete the VA Pac ELEMENT assigned to a user code different from the one in use;

- the CCID number;

- and the comments of the COMMENT option.

3.4. UPDATE OF THE ENDEVOR CONTEXT IN VA Pac

UPDATE OF THE ENDEVOR CONTEXT IN VA Pac

The VA Pac ELEMENT transactions in ENDEVOR by the ADD/UPDATE, DELETE, GENREATE, MOVE and TRANSFER Actions are archived in the interface's journal file.

To return the ENDEVOR information to VA Pac, the administrator must prepare the VA Pac batch update transactions based on the journal file using the MEND procedure, followed by the VA Pac update procedure, UPDT.

The ENDEVOR environments of the generated VA Pac objects are memorized in the description of the .NDVML User Entity Occurrence. The occurrence has the same code as the generated entity.

The choice of the library and session to save the ENDEVOR information can be parameterized in the TARGET LIBRARY/SESSION TABLE. By default, the ENDEVOR contexts are saved in the same library and the same session as that used for generation.

IMPORTANT NOTE: The VA Pac Database must be closed.

4. INTEGRITY VALIDATIONS

4.1. INTRODUCTION

INTRODUCTION

Integrity validation enables you to test the validity of the data related to the ENDEVOR environments where the VA Pac and INFOPAC ELEMENTS are managed, and those recorded in VA Pac as .NDVLM User Entity Occurrences.

There are two types of integrity validation:

- Intra-ENDEVOR integrity validation,

- Inter-Environment integrity validation.

4.2. INTRA-ENDEVOR VALIDATION

INTRA-ENDEVOR INTEGRITY VALIDATION

In the same ENDEVOR environment, a VA Pac ELEMENT must be accompanied by an INFOPAC ELEMENT having the same code. This validation checks the presence of these two elements in the same ENDEVOR context.

The Intra-ENDEVOR integrity validation procedure produces an error report, and generates a transaction file of the deleted VA Pac ELEMENTS or INFOPAC ELEMENTS that are wrongly present.

REMINDER: The VA Pac and INFOPAC ELEMENTS can only be deleted using transactions generated by the interface.

4.3. INTER-ENVIRONMENTS VALIDATION

INTER-ENVIRONMENT INTEGRITY VALIDATION

The administrator updates

the Endevor data related to the contexts where VA Pac generated objects are managed. The transfer of VA Pac ELEMENTS in ENDEVOR and the update of the .NDVLM User Entity Occurrences are performed in two distinct phases.

For this reason, the inter-environment integrity validation checks the validity of the ENDEVOR data stored in VA Pac against the real contexts where the VA Pac ELEMENTS are generated in ENDEVOR.

This procedure produces an error report and proposes corrective transactions for the invalid data stored in the .NDVLM User Entity Occurrences.

These corrections are VA Pac batch update transactions used by the UPDT procedure.

5. EXISTING DATA RETRIEVAL FACILITY

RETRIEVAL FACILITY

For sites which operated with both VA Pac and ENDEVOR without the interface described in this manual, it is possible to use the Retrieval Facility.

This facility recognizes VA Pac ELEMENTs (batch or on-line programs) managed in ENDEVOR and creates:

- VA Pac batch update transactions which contain the ENDEVOR data related to these elements. These transactions are to be taken into account in VA Pac by the UPDT procedure,

- INFOPAC ELEMENTs creation transactions related to these VA Pac ELEMENTs in ENDEVOR. They are contained in a batch job constituted of ENDEVOR ADD actions which the user must complete before submission.

The user must supply the list of ENDEVOR environments where the generated objects coming from VA Pac are managed. The following procedures must then be executed in order:

- Search of the VA Pac ELEMENTs managed in ENDEVOR and preparation of the creation job of the corresponding INFOPAC ELEMENTs (RRND procedure),

- Update and submission of the job mentioned in the preceding step in order to actually create the INFOPAC ELEMENTs in ENDEVOR (RIND procedure),

- Generation of VA Pac update transactions in order to create the .NDVLM user entity occurrences which contain data about the ENDEVOR context of these VA Pac ELEMENTs (RPND procedure).

NOTE: The source of the VA Pac objects managed in ENDEVOR must be available. The retrieval procedure detects the source objects coming from VA Pac thanks to the presence of the 'PACBASE-CONSTANTS' string.

The VA Pac TYPE Table and the TARGET LIBRARY/SESSION Table must be updated beforehand.

6. RETRIEVAL 1.6 -> 2.5

INTERFACE RETRIEVAL 1.6 -> 2.5

The 2.5 release of the interface ensures the Year 2000 compatibility with Endevor 3.7.2 (including the Year2000 PTF) and 3.8 releases.

After the product is installed, two retrievals must be performed:

1. Retrieval of the 'QU' archived journal (sse the JJND procedure).

2. Retrieval of Endevor User Entity Occurrences in Va Pac.

The 2.5 release takes into account the year 2000 roll over for the user occurrences managed by Endevor.

So the 'REND' procedure recognizes all the $7N occurrences of the .NDVLM user entity from the 1.6 release and applies the new date format to them:

1. last action CCYY/MM/DD instead of YY/MM/DD

2. current action CCYY/MM/DD instead of YY/MM/DD

3. element generation DD/MM/CCYY instead of DD/MM/YY

Note: All libraries and sessions are updated.

Before executing this procedure:

1. upon installation, you must execute the '$PRFJ.VINS' job under the ===MOD NDVRVINS module name. This job updates the new descriptions of the Endevor User Entities, release Year2000.

2. it is highly recommended to save the VA Pac database.

For more detail, see the 'REND' procedure.

7. BATCH OPERATION PROCEDURES

7.1. INTRODUCTION

INTRODUCTION

BATCH processing is divided into various procedures. The following sub-chapters present each of the procedures with their specific execution conditions.

The description of each procedure includes:

. A general presentation with:

- an introduction
- the execution conditions
- the actions to be taken in case of abnormal execution.

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

. A description of steps with:

- symbolics and parameters,
- list of the files used (temporary and permanent),
- JCL lines.

PROCEDURE CLASSIFICATION

The procedures associated with batch operations are classified into various categories:

IMPORT PROCEDURES OF ELEMENTS GENERATED IN ENDEVOR

. Retrieval of the result of VA Pac generation-print procedure (GPRT), import preparation of the elements generated in ENDEVOR (GPND) and actual import in ENDEVOR (UPND).

GENERATION PROCEDURES OF VA Pac UPDATE TRANSACTIONS

. Formatting of VA Pac batch update transactions, archiving and re-initialization of UQ journal (MEND).

UTILITY PROCEDURES

. Updating of the element TYPES table managed by the interface (TYND).

. Updating of TARGET LIBRARY/SESSION table (LSND).

. List of the interface program dates (INND)

. Retrieval of the journal transactions already archived (JRND).

INTEGRITY VALIDATION PROCEDURES

. Intra-ENDEVOR integrity validation (CEND).

. Inter-Environment integrity validation (CIND).

RETRIEVAL PROCEDURES OF PREVIOUS RELEASES

. Retrieval of the 8.0.2 V02I archived journal file (JJND).

. Retrieval of TS and TY files from 1.6 release (RPTS).

ABNORMAL EXECUTIONS

Input-output errors on Interface files can generate an abnormal execution of a batch program.

In most cases the return code and the error message allow the user to find the cause of the ABEND (resources not free, file too small, etc.).

Some of the frequent values for 'STATUS' and 'OP' are:

OO	OPERATION
W	WRITE
RW	REWRITE
RU	READ UP
OP	OPEN
CL	CLOSE
D	DELETE
R	READ
P	START
RN	READ NEXT

NN	STATUS
21	Sequence error
22	Duplicate key
23	No record found
24	Boundary violation (KSDS-RRDS)
30	System error
34	Boundary violation (sequential)
92	Logic error (e.g. opening of of an already open file)
93	File still open in CICS
95	Invalid or incomplete file information

If this message is absent and if the type of ABEND generated signals a problem directly in the system programs, contact the Technical support. Be sure to keep all printouts which may be useful in analyzing the problem.

7.2. CEND: INTRA-ENDEVOR INTEGRITY VALIDATION

CEND: INTRA-ENDEVOR INTEGRITY VALIDATION

The CEND procedure validates the consistency and existence of INFOPAC ELEMENTs and the corresponding VA Pac ELEMENTs in the same ENDEVOR environment. Each VA Pac ELEMENT must have an INFOPAC ELEMENT which includes the VA Pac generation context.

EXECUTION CONDITION

The interface must not be in use.

USER INPUT

. One identification line per environment.

ENVIRONMENT PARAMETER LINE

Pos.	Length	Value	Meaning
11	8	eeeeeeee	ENDEVOR environment

REPORT PRINTING

This procedure prints a report of the Intra-ENDEVOR integrity validation showing detected anomalies.

SYMBOLICS IN USE

SYMBOLIC	MEANING
&ROOT	SYSTEM ROOT
&ROOTX	VA Pac SYSTEM ROOT
&INDSV	VSAM SYSTEM FILE INDEX
&INDSVX	VA Pac VSAM SYSTEM FILE INDEX
&STEPLIB	LOAD MODULE LIBRARY
&LOADLIB	ENDEVOR LOAD MODULE LIBRARY
&CONLIB	ENDEVOR CONLIB LIBRARY
&SORTLIB	SORT LIBRARY
&CYL	SORT WORKS SIZE
&OUT	OUTPUT CLASS
&UWK	WORK UNIT
&SPABS	'BSTIPT01' TRANSACTIONS SPACE
&SPAMS	NDVRC1 'C1MSGS1 AND C1PRINT' SPACE

DESCRIPTION OF STEPS

This procedure includes the following steps:

. Recognitionof user input : PTU001

. Preparation of ENDEVOR 'LIST' requests of
VA Pac and INFOPAC ELEMENTs : PNCI10

. Listing of VA Pac and INFOPAC ELEMENTs : NDVRC1

. Validation, printing of anomalies and
generation of ENDEVOR update requests : PNCI20

RECOGNITION OF USER INPUT: PTU001

. List of environments : CARTE
DSN=SYSIN

. Output file : PAC7MB
DSN=&&CENDMB

PREPARATION OF ENDEVOR LIST REQUESTS: PNCI10

```
. Input files:
 - Work file                                   : PAC7IN
   DSN=&&CENDMB
 - Interface TYPES file                        : PAC7TY
   DSN=&INDSV..&ROOT.&ROOT.TY

. Output file:
 - ENDEVOR LIST requests of VA Pac and INFOPAC
   ELEMENTS                                    : PAC7BS
   DSN=&&PAC7BS
```

LISTING OF VA Pac AND INFOPAC ELEMENTS: NDVRC1

```
. Input file:
 - Interface TYPES file                        : PAC7TY
   DSN=&INDSV..&ROOT.&ROOT.TY

. Input-output file:
 - Interface work file                         : PAC7PU
   DSN=&INDSV..&ROOT.&ROOT.UP
 - Interface work file                         : PAC7UP
   DSN=&INDSV..&ROOT.&ROOT.UP

. Output file:
 - Printing of ENDEVOR 'LIST' requests         : C1MSGS1
   DSN=&&C1MSGS1
```

INTRA-ENDEVOR INTEGRITY VALIDATION: PNCI20

```
. Input files:
 - Printing of ENDEVOR 'LIST' requests         : PAC7MS
   DSN=&&C1MSGS1
 - Interface TYPES file                        : PAC7TY
   DSN=&INDSV..&ROOT.&ROOT.TY
 - VA Pac error message file                  : PAC7AE
   DSN=&INDSVX..&ROOTX.&ROOTX.AE

. Output files:
 - ENDEVOR update requests                     : PAC7BS
   DSN=&&PAC7BT
 - Integrity validation report                 : PAC7CR
   SYSOUT=&OUT
```

```
//**********************************************************************
//* VA PAC-ENDEVOR 2.5   : INTRA-ENDEVOR INTEGRITY VALIDATION          *
//**********************************************************************
//$RADP.CEND PROC ROOT=$ROOT,         ROOT OF THE SYSTEM
//         ROOTX=$ROOTX,              ROOT OF 'VA PAC' SYSTEM
//         INDSV='$INDSV',            INDEX OF VSAM SYSTEM FILES
//         INDSVX='$INDSVX',          INDEX OF VA PAC VSAM SYSTEM  FILE
//*:       VSAMCAT='$CATU',           USER VSAM CATALOG
//*:       SYSTCAT='$CATV',           SYSTEM VSAM CATALOG
//         STEPLIB='$MODB',           LIBRARY OF LOAD-MODULES
//         LOADLIB='$LDLIB',          ENDEVOR LOADLIB
//         CONLIB='$CONLIB',          EDEVOR CONLIB
//         SORTLIB='$BIBT',           SORT LIBRARY
//         CYL=1,                     SORT WORKS SIZE
//         OUT=$OUT,                  OUTPUT CLASS
//         UWK=$UWK,                  WORK UNIT
//         SPABS='(TRK,(02,01),RLSE)',  SPACE TRANSACTIONS FOR 'BSTIPT0
//         SPAMS='(TRK,(05,05),RLSE)'   SPACE 'C1MSGS1 & C1PRINT' NDVRC
//*--------------------------------------------------------------------*
//*
//INPUT   EXEC PGM=PTU001
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//PAC7MB   DD DSN=&&CENDMB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(1,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//*
//PNCI10  EXEC PGM=PNCI10,PARM=' '
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7IN   DD DSN=&&CENDMB,DISP=(OLD,PASS)
//PAC7BS   DD DSN=&&PAC7BS,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=&SPABS
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//NDVRC1  EXEC PGM=NDVRC1,DYNAMNBR=1500,REGION=4096K,PARM='C1BM3000'
//STEPLIB  DD DSN=&LOADLIB,DISP=SHR
//CONLIB   DD DSN=&CONLIB,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK04 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//C1TPDD01 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPDD02 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPLSIN DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//C1TPLSOU DD UNIT=SYSDA,SPACE=(CYL,5)
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7PU   DD DSN=&INDSV..&ROOT.&ROOT.UP,DISP=SHR
//PAC7UP   DD DSN=&INDSV..&ROOT.&ROOT.UP,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&ROOT.UQ,DISP=SHR
//C1PLMSGS DD SYSOUT=&OUT
//*1MSGS1  DD SYSOUT=&OUT
//C1MSGS1  DD DSN=&&C1MSGS1,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FBA,LRECL=133,BLKSIZE=26600),
//            SPACE=&SPAMS
```

```
//C1PRINT  DD SYSOUT=&OUT,DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171)
//SYSABEND DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//BSTIPT01 DD DSN=&&PAC7BS,DISP=(OLD,PASS)
//*
//PNCI20  EXEC PGM=PNCI20
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//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)
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7MS   DD DSN=&&C1MSGS1,DISP=(OLD,PASS)
//PAC7BS   DD DSN=&&PAC7BT,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=&SPABS
//PAC7CR   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
```

7.3. CIND: INTER-ENVIRONMENTS INTEGRITY VALIDATION

INTER-ENVIRONMENT INTEGRITY VALIDATION

The CIND procedure validates the integrity of ENDEVOR data stored in VA Pac and the actual presence of VA Pac ELEMENTs in these environments. This procedure performs appropriate VA Pac update transactions.

EXECUTION CONDITION

The interface must not be in use.

USER INPUT

FIRST INPUT FLOW

. One administrator identification line.

USER PARAMETER LINE

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

SECOND INPUT FLOW

. One identification line per environment.

ENVIRONMENT PARAMETER LINE

Pos.	Length	Value	Meaning
11	8	eeeeeeee	ENDEVOR environment

REPORT PRINTING

This procedure prints an inter-environment integrity validation report.

RESULT

The procedure generates a VA Pac UPDT batch update transactions file to update the ENDEVOR information stored in VA Pac.

SYMBOLICS IN USE

SYMBOLIC	MEANING
&FILEX	VA Pac PHYSICAL DATABASE NUMBER
&ROOT	SYSTEM ROOT
&ROOTX	VA Pac SYSTEM ROOT
&INDSV	VSAM SYSTEM FILE INDEX
&INDSVX	VA Pac VSAM SYSTEM FILE INDEX
&INDSN	NON-VSAM SYSTEM FILE INDEX
&INDUVX	VA Pac VSAM USER FILE INDEX
&STEPLIB	LOAD MODULE LIBRARY
&LOADLIB	ENDEVOR LOAD MODULE LIBRARY
&CONLIB	ENDEVOR CONLIB LIBRARY
&SORTLIB	SORT LIBRARY
&BCOB	COBOL II ROUTINES LIBRARY
&CYL	SORT WORK SIZE
&OUT	OUTPUT CLASS
&UWK	WORK UNIT
&USER	USER CODE
&SYSPAF	VSAM KSDS PREFIX OF PAF WORK FILE
&SPAMB	'BSTIPT01' TRANSACTIONS SPACE
&SPAMS	NDVRC1 'C1MSGS1 & C1PRINT' SPACE
&SPART	TEMPORARY FILE SPACE
&SPAMV	VA Pac UPDATE TRANSACTION FILE SPACE

DESCRIPTION OF STEPS

```
This procedure includes the following steps:
 . Recognition of the administrator
   identification                                 : PTU001
 . Recognition of the list of ENDEVOR environments  : PTU001
 . Preparation of allocation of PAF processor
   work file                                      : PRMSYS
 . Allocation of PAF workfile                     : IDCAMS
 . Initial loading of PAF file                    : IDCAMS
 . Extraction of $7N call-type occurrences        : PNDC10
 . Preparation of ENDEVOR list requests           : PNDC50
 . Listing of VA Pac ELEMENTs in ENDEVOR          : NDVRC1
 . Formatting of the printed ENDEVOR report       : PNDC60
 . Retrieval of the date of the last action       : PNDC70
 . Comparison between VA Pac and ENDEVOR
   environments and generation of possible
   corrective transactions                        : PNDC90
 . Formatting of VA Pac corrective transactions
   resulting from the comparison                  : PNDM10
```

RECOGNITION OF THE ADMINISTRATOR CODE: PTU001

```
 . Input data                                          : CARTE
   DSN=SYSIN

 . Output file                                         : PAC7MB
   DSN=&&CINDMB1
```

RECOGNITION OF THE ENVIRONMENTS LIST: PTU001

```
 . Input data                                          : CARTE
   DSN=SYSIN

 . Output file                                         : PAC7MB
   DSN=&&CINDMB2
```

PREPARATION OF PAF WORK FILE ALLOCATION: PRMSYS

```
 . Input file
  - Definition file of PAF workfile                    : PACRIN
    DSN=&INDSN..&ROOT.&ROOT.SY(DFSYSPAF)

 . Output file                                         : PACROU
   DSN=&DFSYSPAF
```

ALLOCATION OF PAF WORK FILE: IDCAMS

```
 . Input file
  - PRMSYS output file                                 : SYSIN
    DSN=&&DFSYSPAF
```

INITIAL LOADING OF PAF FILE:IDCANS

```
 . Input files
  - C1, max.                                           : MAXKEY
    DSN=&INDSN..&ROOT.&ROOT.SY(MAXKEY)
  - Sysin for Repro                                    : SYSIN
    DSN=&INDSN..&ROOT.&ROOT.SY(REPRO999)

 . Input/output files
  - PAF file to be loaded                              : SYSPAF
    DSN=&SYSPAF..&USER
```

EXTRACTION OF $7 CALL-TYPE OCCURRENCES: PNDC10

```
 . Input files:
  - Administrator identification                     : PAC7CA
    DSN=&&CINDMB1
  - VA Pac error message file                        : PAC7AE
    DSN=&INDSVX..&ROOTX.&ROOTX.AE
  - VA Pac index file                                : PAC7AN
    DSN=&INDUVX..&ROOTX.&FILEX.AN
  - VA Pac data file                                 : PAC7AR
    DSN=&INDUVX..&ROOTX.&FILEX.AR
  - LIBRARY and SESSION file                         : PAC7TS
    DSN=&INDSV..&ROOT.&ROOT.TS
  - PAF workfile                                     : SYSPAF
    DSN=&SYSPAF..&USER

 . Output files:
  - extracted transaction file                       : PAC7RT
    DSN=&&PAC7RT
  - Error report                                     : PAC7ET
    SYSOUT=&OUT
```

PREPARATION OF VA Pac ELEMENT LISTING REQUESTS: PNDC50

```
 . Input files:
  - List of ENDEVOR environments                     : PAC7IN
    DSN=&&CINDMB2
  - interface TYPES file                             : PAC7TY
    DSN=&INDSV..&ROOT.&ROOT.TY

 . Output files:
  - ENDEVOR 'LIST' request of VA Pac ELEMENTS        : PAC7BS
    DSN=&&PAC7BS
  - ENDEVOR 'LIST' request of VA Pac ELEMENTS        : PAC7BT
    DSN=&&PAC7BT
```

LISTING OF VA Pac ELEMENTS IN ENDEVOR: NDVRC1

```
 .Input files
  - Interface TYPES file                             : PAC7TY
    DSN=&INDSV..&ROOT.&ROOT.TY
  - ENDEVOR 'LIST' requests of INFOPAC ELEMENTS    : BSTIPT01
    DSN=&&PAC7BS

 . Input-output files:
  - Interface workfile                               : PAC7PU
    DSN=&INDSV..&ROOT.&ROOT.UP
  - Interface workfile                               : PAC7UP
    DSN=&INDSV..&ROOT.&ROOT.UP

 . Output file:
  - 'C1MSGS1' print file                             :C1MSGS1
    DSN=&&C1MSGS1
  - 'C1PRINT' print file                             :C1PRINT
    DSN=&&C1PRINT
```

FORMATTING OF NDVRC1 OUTPUT REPORTS: PNDC60

```
 . Input files:
  - Interface TYPES file                             : PAC7TY
```

```
        DSN=&INDSV..&ROOT.&ROOT.TY
      - NDVRC1 output 'C1MSGS1' file                    : PAC7LT
        DSN=&&C1MSGS1
      - NDVRC1 output 'C1PRINT' file                    : PAC7PT
        DSN=&&C1PRINT

     . Output file:
      - Formatted VA Pac ELEMENT file                   : PAC7RS
        DSN=&&PAC7RS


    LISTING OF VA Pac ELEMENTS IN ENDEVOR: NDVRC1

     .Input files
      - Interface TYPES file                            : PAC7TY
        DSN=&INDSV..&ROOT.&ROOT.TY
      - ENDEVOR 'LIST' requests of VA Pac ELEMENTS    : BSTIPT01
        DSN=&&PAC7BS

     . Input-output files:
      - Interface workfile                              : PAC7PU
        DSN=&INDSV..&ROOT.&ROOT.UP
      - Interface workfile                              : PAC7UP
        DSN=&INDSV..&ROOT.&ROOT.UP

     . Output file:
      - 'C1MSGS1' print file                            :C1MSGS1
        DSN=&&C1MSGS1



      - 'C1PRINT' print file                            :C1PRINT
        DSN=&&C1PRINT


    FORMATTING OF NDVRC1 OUTPUT REPORTS: PNDC70

     . Input files:
      - Interface TYPES file                            : PAC7TY
        DSN=&INDSV..&ROOT.&ROOT.TY
      - NDVRC1 output 'C1MSGS1' file                    : PAC7LT
        DSN=&&C1MSGS1
      - NDVRC1 output 'C1PRINT' file                    : PAC7PT
        DSN=&&C1PRINT
      - INFOPAC ELEMENTS file                           : PAC7RR
        DSN=&&PAC7RR

     . Output file:
      - Completed INFOPAC ELEMENTS file                 : PAC7RS
        DSN=&&PAC7RS


    INTER-ENVIRONMENT VALIDATION: PNDC90

     . Input files:
      - Administrator identification transaction        : PAC7CA
        DSN=&&CINDMB1
      - VA Pac error message file                       : PAC7AE
        DSN=&INDSVX..&ROOTX.&FILEX.AE
      - LIBRARY and SESSION file                        : PAC7TS
        DSN=&INDSV..&ROOT.&ROOT.TS
      - list of VA Pac ELEMENTs in ENDEVOR              : PAC7UN
        DSN=&&PAC7RT
      - list of occurrences stored in VA Pac           : PAC7UM
        DSN=&&PAC7RS

     . Output files:
      - VA Pac corrective transactions file            : PAC7UR
        DSN=&&PAC7UR
      - Error report                                   : PAC7ET
        SYSOUT=&OUT


    FORMATTING OF VA Pac BATCH UPDATE TRANSACTIONS: PNDM10

     . Input files:
      - Corrective transactions file                  : PAC7UR
        DSN=&&PAC7UR
      - VA Pac index file                              : PAC7AN
        DSN=&INDUVX..&ROOTX.&FILEX.AN
      - VA Pac data file                               : PAC7AR
        DSN=&INDUVX..&ROOTX.&FILEX.AR
      - VA Pac error messages file                     : PAC7AE
        DSN=&INDSVX..&ROOTX.&FILEX.AE
      - PAF processor temporary file                   : SYSPAF
        DSN=&SYSPAF..&USER

     . Output files:
      - VA Pac update transactions file                : PAC7MV
        DSN=&&PAC7MV
      - validation report                              : PAC7ET
        DSN=&OUT
```

```
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : INTER-ENVIRONMENT INTEGRITY CONTROL        *
//*********************************************************************
//$RADP.CIND PROC FILEX=$FILEX,       NUMBER OF 'VA PAC' PHYSICAL DBASE
//         ROOT=$ROOT,                ROOT OF THE SYSTEM
//         ROOTX=$ROOTX,              ROOT OF 'VA PAC' SYSTEM
//         INDSV='$INDSV',            INDEX OF VSAM SYSTEM FILES
//         INDSVX='$INDSVX',          INDEX OF VA PAC VSAM SYSTEM FILES
//         INDSN='$INDSN',            INDEX OF NON VSAM SYSTEM FILES
//         INDUVX='$INDUVX',          INDEX OF VA PAC VSAM USER FILES
//*:       VSAMCAT='$CATU',           USER VSAM CATALOG
//*:       SYSTCAT='$CATV',           SYSTEM VSAM CATALOG
//         STEPLIB='$MODB',           LIBRARY OF LOAD-MODULE
//         LOADLIB='$LDLIB',          ENDEVOR LOADLIB
//         CONLIB='$CONLIB',          ENDEVOR CONLIB
//         SORTLIB='$BIBT',           SORT LIBRARY
//         BCOB='$BCOB',              COBOL II ROUTINES LIBRARY
//         CYL=1,                     SORT WORKS SIZE
//         OUT=$OUT,                  OUTPUT CLASS
//         UWK=$UWK,                  WORK UNIT
//         USER=,                     USER CODE
//         SYSPAF='$INDUV..SYSPAF',   DSN PREFIX VSAM KSDS WORK FILE
//         SPAMB='(TRK,(02,01),RLSE)', TRANSACTION SPACE FOR 'BSTIPT01'
//         SPAMS='(TRK,(05,05),RLSE)', SPACE 'C1MSGS1 &  C1PRINT' NDVRC
//         SPART='(TRK,(02,01),RLSE)', TEMPORARY FILES SPACE
//         SPAMV='(TRK,(05,01),RLSE)'  SPACE TRANSACTIONS FOR UPDT
//*-------------------------------------------------------------------*
//*
//INPUT1  EXEC PGM=PTU001
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//PAC7MB   DD DSN=&&CINDMB1,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(1,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//*
//INPUT2  EXEC PGM=PTU001
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//PAC7MB   DD DSN=&&CINDMB2,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(1,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//*
//PRMSYS  EXEC PGM=PRMSYS,PARM='&USER'
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PACRIN   DD DSN=&INDSN..&ROOT.&ROOT.SY(DFSYSPAF),DISP=SHR
//PACROU   DD DSN=&&DFSYSPAF,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(1,1),RLSE)
//SYSOUT   DD SYSOUT=&OUT
//*
//DEFINE  EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSIN    DD DSN=&&DFSYSPAF,DISP=(OLD,DELETE)
//SYSPRINT DD SYSOUT=&OUT
//*
//MAXKEY  EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPAF   DD DSN=&SYSPAF..&USER,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//MAXKEY   DD DSN=&INDSN..&ROOT.&ROOT.SY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOT.&ROOT.SY(REPRO999),DISP=SHR
//*
//PNDC10  EXEC PGM=PNDC10,REGION=4096K
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
```

```
//         DD DSN=&BCOB,DISP=SHR
//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)
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7AN   DD DSN=&INDUVX..&ROOTX.&FILEX.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUVX..&ROOTX.&FILEX.AR,DISP=SHR
//PAC7TS   DD DSN=&INDSV..&ROOT.&ROOT.TS,DISP=SHR
//SYSPAF   DD DSN=&SYSPAF..&USER,DISP=SHR
//PAC7CA   DD DSN=&&CINDMB1,DISP=(OLD,PASS)
//PAC7RT   DD DSN=&&PAC7RT,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=25500),
//            SPACE=&SPART
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PNDC50  EXEC PGM=PNDC50
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7IN   DD DSN=&&CINDMB2,DISP=(OLD,PASS)
//PAC7BS   DD DSN=&&PAC7BS,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=&SPAMB
//PAC7BT   DD DSN=&&PAC7BT,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=&SPAMB
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//NDVRC1A EXEC PGM=NDVRC1,DYNAMNBR=1500,REGION=4096K,PARM='C1BM3000'
//STEPLIB  DD DSN=&LOADLIB,DISP=SHR
//CONLIB   DD DSN=&CONLIB,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK04 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//C1TPDD01 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPDD02 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPLSIN DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//C1TPLSOU DD UNIT=SYSDA,SPACE=(CYL,5)
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7PU   DD DSN=&INDSV..&ROOT.&ROOT.UP,DISP=SHR
//PAC7UP   DD DSN=&INDSV..&ROOT.&ROOT.UP,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&ROOT.UQ,DISP=SHR
//C1PLMSGS DD SYSOUT=&OUT
//*1MSGS1  DD SYSOUT=&OUT
//C1MSGS1  DD DSN=&&C1MSGS1I,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FBA,LRECL=133,BLKSIZE=26600),
//            SPACE=&SPAMS
//*1PRINT  DD SYSOUT=&OUT,DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171)
//C1PRINT  DD DSN=&&C1PRINTI,DISP=(,PASS),UNIT=&UWK,
//             DCB=(RECFM=FBA,LRECL=133,BLKSIZE=26600),
//             SPACE=&SPAMS
//SYSABEND DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//BSTIPT01 DD DSN=&&PAC7BS,DISP=(OLD,PASS)
//*
//PNDC60  EXEC PGM=PNDC60
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//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)
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7LT   DD DSN=&&C1MSGS1I,DISP=(OLD,PASS)
//PAC7PT   DD DSN=&&C1PRINTI,DISP=(OLD,PASS)
//PAC7RS   DD DSN=&&PAC7RR,DISP=(,PASS),UNIT=&UWK,
//             DCB=(RECFM=FB,LRECL=170,BLKSIZE=25500),
//             SPACE=&SPART
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//NDVRC1B EXEC PGM=NDVRC1,DYNAMNBR=1500,REGION=4096K,PARM='C1BM3000'
//STEPLIB  DD DSN=&LOADLIB,DISP=SHR
//CONLIB   DD DSN=&CONLIB,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK04 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//C1TPDD01 DD UNIT=SYSDA,SPACE=(CYL,5),
//             DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPDD02 DD UNIT=SYSDA,SPACE=(CYL,5),
//             DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPLSIN DD UNIT=SYSDA,SPACE=(CYL,5),
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//C1TPLSOU DD UNIT=SYSDA,SPACE=(CYL,5)
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7PU   DD DSN=&INDSV..&ROOT.&ROOT.UP,DISP=SHR
//PAC7UP   DD DSN=&INDSV..&ROOT.&ROOT.UP,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&ROOT.UQ,DISP=SHR
//C1PLMSGS DD SYSOUT=&OUT
//*1MSGS1  DD SYSOUT=&OUT
//C1MSGS1  DD DSN=&&C1MSGS1P,DISP=(,PASS),UNIT=&UWK,
//             DCB=(RECFM=FBA,LRECL=133,BLKSIZE=26600),
//             SPACE=&SPAMS
//*1PRINT  DD SYSOUT=&OUT,DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171)
//C1PRINT  DD DSN=&&C1PRINTP,DISP=(,PASS),UNIT=&UWK,
//             DCB=(RECFM=FBA,LRECL=133,BLKSIZE=26600),
//             SPACE=&SPAMS
//SYSABEND DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//BSTIPT01 DD DSN=&&PAC7BT,DISP=(OLD,PASS)
//*
//PNDC70  EXEC PGM=PNDC70
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//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)
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
```

```
//PAC7LT   DD DSN=&&C1MSGS1P,DISP=(OLD,PASS)
//PAC7PT   DD DSN=&&C1PRINTP,DISP=(OLD,PASS)
//PAC7RR   DD DSN=&&PAC7RR,DISP=(OLD,PASS)
//PAC7RS   DD DSN=&&PAC7RS,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=25500),
//            SPACE=&SPART
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PNDC90  EXEC PGM=PNDC90
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//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)
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7AR   DD DSN=&INDUVX..&ROOTX.&FILEX.AR,DISP=SHR
//PAC7TS   DD DSN=&INDSV..&ROOT.&ROOT.TS,DISP=SHR
//PAC7CA   DD DSN=&&CINDMB1,DISP=(OLD,PASS)
//PAC7UM   DD DSN=&&PAC7RT,DISP=(OLD,PASS)
//PAC7UN   DD DSN=&&PAC7RS,DISP=(OLD,PASS)
//PAC7UR   DD DSN=&&PAC7UR,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=183,BLKSIZE=18300),
//            SPACE=&SPAMV
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PNDM10  EXEC PGM=PNDM10
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=&BCOB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7AN   DD DSN=&INDUVX..&ROOTX.&FILEX.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUVX..&ROOTX.&FILEX.AR,DISP=SHR
//PAC7UR   DD DSN=&&PAC7UR,DISP=(OLD,PASS)
//SYSPAF   DD DSN=&SYSPAF..&USER,DISP=SHR
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//            SPACE=&SPAMV
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
```

7.4. GPND: PREPARATION OF IMPORT INTO ENDEVOR

GPND: PREPARATION FOR IMPORT TO ENDEVOR

The GPND procedure completes the file resulting from VA Pac generation-print procedure (GPRT) and prepares the import job into ENDEVOR of the generated VA Pac and INFOPAC ELEMENTs to be processed.

EXECUTION CONDITION

GPRT procedure must be executed first.

RESULT

This procedure formats a transactions list for the update of ENDEVOR by the UPND procedure (executed automatically when indicated in the control commands after the program).

SYMBOLICS IN USE

SYMBOLIC	MEANING
&FILEX	VA Pac PHYSICAL DATABASE NUMBER
&ROOT	SYSTEM ROOT
&ROOTX	VA Pac SYSTEM ROOT
&INDSV	VSAM SYSTEM FILE INDEX
&INDSVX	VA Pac VSAM SYSTEM FILE INDEX
&INDSN	NON-VSAM SYSTEM FILE INDEX
&INDUVX	VA Pac VSAM USER FILE INDEX
&STEPLIB	LOAD MODULE LIBRARY
&OUT	OUTPUT CLASS
&UWK	WORK UNIT
&PAC7GB	VA Pac GPRT PROC. PAC7GB DSN
&USER	USER CODE
&SYSPAF	KSDS VSAM WORKFILE PREFIX
&SPABJ	GENERATION FILE SPACE

DESCRIPTION OF STEPS

This procedure includes the following steps:

```
 . Preparation of PAF work file allocation          : PRMSYS

 . PAF work file allocation                         : IDCAMS

 . Inital loading of PAF file                       : IDCAMS

 . Completion of the generated output file
   and preparation of import into ENDEVOR           : PNDV10
```

```
PREPARATION OF PAF WORKFILE ALLOCATION: PRMSYS

 . Input file
  - Definition file of PAF workfile                 : PACRIN
    DSN=&INDSN..&ROOT.&ROOT.SY(DFSYSPAF)

 . Output file                                      : PACROU
    DSN=&&DFSYSPAF


ALLOCATION OF PAF WORKFILE: IDCAMS

 . Input file
    DSN=&&DFSYSPAF                                  : SYSIN


INITIAL LOADING OF PAF file: IDCAMS

. Input files:
  - C1, maxi.                                       : MAXKEY
    DSN=&INDSN..&ROOT.&ROOT(MAXKEY)
  - Sysin for repro                                 : SYSIN
    DSN=&INDSN..&ROOT.&ROOT(REPRO999)

. Input/output files:
  - PAF file to be loaded                           : SYSPAF
    DSN=&SYSOAF..&USER


PREPARATION OF IMPORT INTO ENDEVOR: PNDV10

. Input files:
  - VA Pac error message  file                      : PAC7AE
    DSN=&INDSVX..&ROOTX.&ROOTX.AE
  - VA Pac index file                               : PAC7AN
    DSN=&INDUVX..&ROOTX.&FILEX.AN
  - VA Pac data file                                : PAC7AR
    DSN=&INDUVX..&ROOTX.&FILEX.AR
  - Interface TYPES file                            : PAC7TY
    DSN=&INDSV..&ROOT.&ROOT.TY
  - LIBRARY and SESSION file                        : PAC7TS
    DSN=&INDSV..&ROOT.&ROOT.TS
  - VA Pac COBOL lines file                         : PAC7JB
    DSN=&&PAC7JB
  - PAF workfile                                    : SYSPAF
    DSN=&SYSPAF..&USER

 . Output files:
  - Execution error report                          : PAC7ET
    DSN=&OUT
  - Import file into ENDEVOR to be executed
    DSN=&PAC7BJ                                     : PAC7BJ
```

```
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : PARAMETERS VALORIZATION                    *
//*********************************************************************
//$RADP.GPND PROC FILEX=$FILEX,       NUMBER OF VA PAC PHYSICAL DBASE
//         ROOT=$ROOT,                ROOT OF THE SYSTEM
//         ROOTX=$ROOTX,              ROOT OF 'VA PAC' SYSTEM
//         INDSV='$INDSV',            INDEX OF SYSTEM VSAM FILE
//         INDSVX='$INDSVX',          INDEX OF VA PAC VSAM SYSTEM FILE
//         INDSN='$INDSN',            INDEX OF NON VSAM SYSTEM FI
//         INDUVX='$INDUVX',          INDEX OF VA PAC VSAM YSER FILE
//*:       VSAMCAT='$CATU',           USER VSAM CATALOG
//*:       SYSTCAT='$CATV',           SYSTEM VSAM CATALOG
//         STEPLIB='$MODB',           LIBRARY OF LOAD-MODULES
//         BCOB='$BCOB',              COBOL II ROUTINES LIBRARY
//         OUT=$OUT,                  OUTPUT CLASS
//         UWK=$UWK,                  WORK UNIT
//         PAC7GB='????',             DSN 'PAC7GB' FROM VA PAC  GPRT
//         USER=,                     USER CODE
//         SYSPAF='$INDUV..SYSPAF',   DSN PREFIX VSAM KSDS WORK FILE
//         SPABJ='(TRK,(02,01),RLSE)'        GENERATION FILE SPACE
//*-------------------------------------------------------------------*
//*
//PRMSYS  EXEC PGM=PRMSYS,PARM='&USER'
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PACRIN   DD DSN=&INDSN..&ROOT.&ROOT.SY(DFSYSPAF),DISP=SHR
//PACROU   DD DSN=&&DFSYSPAF,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(1,1),RLSE)
//SYSOUT   DD SYSOUT=&OUT
//*
//DEFINE  EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSIN    DD DSN=&&DFSYSPAF,DISP=(OLD,DELETE)
//SYSPRINT DD SYSOUT=&OUT
//*
//MAXKEY  EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPAF   DD DSN=&SYSPAF..&USER,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//MAXKEY   DD DSN=&INDSN..&ROOT.&ROOT.SY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOT.&ROOT.SY(REPRO999),DISP=SHR
//*
//PNDV10  EXEC PGM=PNDV10,REGION=4096K
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=&BCOB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7AN   DD DSN=&INDUVX..&ROOTX.&FILEX.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUVX..&ROOTX.&FILEX.AR,DISP=SHR
//PAC7TS   DD DSN=&INDSV..&ROOT.&ROOT.TS,DISP=SHR
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//SYSPAF   DD DSN=&SYSPAF..&USER,DISP=SHR
//PAC7JB   DD DSN=&PAC7GB,DISP=(OLD,PASS)
//PAC7BJ   DD DSN=&&PAC7BJ,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=8000),
//            SPACE=&SPABJ
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//IEBGN   EXEC PGM=IEBGENER
```

```
//SYSUT1   DD DSN=&&PAC7BJ,DISP=(OLD,PASS)
//SYSUT2   DD SYSOUT=(&OUT,INTRDR)
//SYSIN    DD DUMMY
//SYSOUT   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//*
```

7.5. INDD: LIST OF PROGRAM DATES

INDD: LIST OF PROGRAM DATES

The INDD procedure supplies the list of the interface programs' generation dates.

EXECUTION CONDITION

None.

SYMBOLICS IN USE

SYMBOLIC	MEANING
&ROOTX	'VA Pac' SYSTEM ROOT
&INDSVX	INDEX OF 'VA Pac' VSAM SYSTEM FILE
&STEPLIB	LOAD-MODULE LIBRARY
&OUT	OUTPUT CLASS

DESCRIPTION OF STEPS

This procedure includes the following step:

. List of program dates : PNXDAT

LIST OF PROGRAM DATES: PNXDAT

. Input files:
- VA Pac error message file : PAC7AE
  DSN=&INDSVX..&ROOTX.&ROOTX.AE
- Transaction file : PAC7MB
  DUMMY
- Program library : STEPLIB
  DSN=&STEPLIB

. Output file:
- List of program dates report : PACDDS
  DSN=&OUT

```
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : DATES OF LOAD MODULES                      *
//*********************************************************************
//$RADP.INND PROC ROOTX=$ROOTX,      ROOT OF 'VA PAC' SYSTEM
//         INDSVX='$INDSVX',          INDEX OF VA PAC VSAM SYSTEM FILE
//*:       SYSTCAT='$CATV',           SYSTEM VSAM CATALOG
//         STEPLIB='$MODB',           LIBRARY OF LOAD-MODULES
//         OUT=$OUT                   OUTPUT CLASS
//*-------------------------------------------------------------------*
//*
//PNXDAT  EXEC PGM=PNXDAT,REGION=4096K
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&SYSTCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PACDDS   DD SYSOUT=&OUT
//PAC7MB   DD DUMMY
//SYSOUT   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
```

7.6. JJND: RETRIEVAL OF ARCHIVED JOURNAL 1.6 -> 2.5

JJND: RETRIEVAL OF ARCHIVED JOURNAL FILE

The JJND procedure retrieves the archived journal file from release 1.6 and transforms it into a journal operational in 2.5. It adapts the date of the last action to make it compatible with the Year 2000 reqirements.

EXECUTION CONDITION

This procedure is executed when switching from release 1.6 to release 2.5.

SYMBOLICS IN USE

SYMBOLIC	MEANING
&ROOT	SYSTEM ROOT
&INDUN	INDEX OF NON VSAM USER FILE
&STEPLIB	LOAD-MODULES LIBRARY
&OUT	OUTPUT CLASS
&UNITS	QU FILE BACKUP UNIT
&VOLS	QU FILE BACKUP VOLUME
&SPAQU	QU FILE BACKUP SPACE
&JNARCH	ARCHIVED JOURNAL DSNAME (1.6 RELEASE)

DESCRIPTION OF STEPS

This procedure includes one step:

```
 . Conversion of archived journal             : PNRJ10
```

RETRIEVAL OF ARCHIVED JOURNAL: PNRJ10

```
. Input files:
 - Old archived journal file (V1.6)           : PAC7QI
   DSN: indicated when valorizing
   &JNARCH parameter
   (Record length = 185)
 - Programs library                           : STEPLIB
   DSN=&STEPLIB

. Output file:
 - New archived journal file (V2.5)           : PAC7QR
   (generation +1)
   DSN=&INDUN..&ROOT.&ROOT.QU(+1)
   (Record length = 187)
```

```
//*******************************************************************
//*  VA PAC-ENDEVOR 2.5   : ARCHIVED JOURNAL RETRIEVAL                *
//*******************************************************************
//$RADP.JJND PROC ROOT=$ROOT,          SYSTEM ROOT
//         INDUN='$INDUN',             INDEX OF NON VSAM USER FILE
//         STEPLIB='$MODB',            LOAD-MODULES LIBRARY
//         OUT=$OUT,                   OUTPUT CLASS
//         UNITS=$UNITS,               'QU' SAVE UNIT
//         VOLS=$VOLS,                 'QU' SAVE VOLUME
//         SPAQU='(TRK,(10,05),RLSE)', 'QU' SAVE SPACE
//         JNARCH='????????'           SAVE OF ANTERIOR ARCHIVAL
//*
//*-----------------------------------------------------------------*
//*
//PNRJ10  EXEC PGM=PNRJ10
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7QI   DD DSN=&JNARCH,DISP=SHR
//PAC7QR   DD DSN=&INDUN..&ROOT.&ROOT.QU(+1),DISP=(,CATLG,DELETE),
//         UNITS=$UNITS,               'QU' SAVE UNIT
//         VOLS=$VOLS,                 'QU' SAVE VOLUMN
//         SPAQU='(TRK,(10,05),RLSE)', 'QU' SAVE SPACE
//         JNARCH='????????'           SAVE OF ANTERIOR ARCHIVAL
//*                                    JOURNAL VERSION
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
```

7.7. JRND: RETRIEVAL OF ARCHIVED JOURNAL TRANSACTIONS

INTRODUCTION

The JRND procedure retrieves the journal transactions which have already been archived in QU and prepares the VA Pac Batch update transactions by selecting the archiving date and time.

EXECUTION CONDITION

None.

USER INPUT

.One administrator identification line.

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

.One selection line of the archived transactions to be retrieved.

Pos.	Len.	Value	Meaning
1	8		Selection starting date, formatted CCYYMMDD
9	6		Seletion starting time, formatted HHMMSS
15	8		Selection ending date, formatted CCYYMMDD
23	6		Selection ending time, formatted HHMMSS

OUTPUT REPORT

Generation result report.

RESULT

This procedure generates a VA Pac Batch update transactions file for the UPDT procedure.

SYMBOLIC IN USE

SYMBOLIC	MEANING
&FILE	NUMBER OF PHYSICAL DATABASE
&FILEX	NUMBER OF VA PAC PHYSICAL DATABASE
&ROOT	SYSTEM ROOT
&ROOTX	VA PAC SYSTEM ROOT
&INDSV	INDEX OF VSAM SYSTEM FILE
&INDSVX	INDEX OF VA PAC VSAM SYSTEM FILE
&INDSN	INDEX OF NON VSAM SYSTEM FILE
&INDUN	INDEX OF NON VSAM USER FILE
&INDUVX	INDEX OF VA PAC VSAM USER FILE
&STEPLIB	LOAD-MODULES LIBRARY
&BCOB	COBOL II ROUTINES LIBRARY
&SORTLIB	SORT LIBRARY
&CYL	SORT WORKS SIZE
&OUT	OUTPUT CLASS
&UWK	WORK UNIT
&USER	USER CODE
&SYSPAF	PAF WORKFILE
&SPAUR	SPACE OF TEMPORARY FILE
&SPAMV	SPACE OF UPDATE TRANSACTIONS FILE

DESCRIPTION OF STEPS

This procedure comprises the following steps:

. Recognition of input : PTU001

. Initialization of UU selected transactions file: PNINUQ

. Retrieval of QU journal transactions on UU : PNDJ10

. Preparation for update transactions generation : PNDM05

. Generation of VA Pac update transactions : PNDM10

. Deletion of the selected transactions file : IDCAMS

RECOGNITION OF INPUT: PTU001

. Input data : CARTE
DSN=SYSIN

. Output file : PAC7MB
DSN=&&JRNDMB

ALLOCATION OF UU SELECTED TRANSACTIONS FILE: IDCAMS

. Input file:
- Definition of selected transactions file : SYSIN
DSN=&INDSN..&ROOT.&ROOT.SY(DF&ROOT.&FILE.UU)

INITIALIZATION OF UU FILE: PNINUQ

. Output file:
- UU selected transactions file : PAC7UQ
DSN=&INDSV..&ROOT.&FILE.UU

```
RETRIEVAL OF ARCHIVED JOURNAL TRANSACTIONS: PNDJ10

. Input files:
 - LIBRARY and SESSIONS file                     : PAC7IN
   DSN=&INDSV..&ROOT.&FILE.TS
 - UU selected transactions file                 : PAC7UQ
   DSN=&INDSV..&ROOT.&FILE.UU
 - Archived journal file                         : PAC7US
   DSN=&INDSV..&ROOT.&FILE.QU(0)
 - VA Pac error messages file                    : PAC7AE
   DSN=&INDSVX..&ROOTX.&ROOTX.AE
 - User input file                               : PAC7MB
   DSN=&&JRNDMB

. Output file:
 - Administrator identification transaction     : PAC7MV
   DSN=&INPUT
 - Anomaly report                                : PAC7ET
   DSN=&OUT


PREPARATION FOR UPDATE TRANSACTIONS GENERATION: PNDM05

. Input files:
 - VA Pac data file                              : PAC7AR
   DSN=&INDUVX..&ROOTX.&FILEX.AR
 - LIBRARIES and SESSIONS file                   : PAC7TS
   DSN=&INDSV..&ROOT.&ROOT.TS
 - UU selected transactions file                 : PAC7UQ
   DSN=&INDESV.&ROOT.&FILE.UU
 - Administrator identification transaction     : PAC7MV
   DSN=&INPUT

. Output file:
 - Endevor transactions file                     : PAC7UR
   DSN=&&PAC7UR
```

```
GENERATION OF VA Pac UPDATE TRANSACTIONS: PNDM10

. Input files:
 - Endevor transactions file                  : PAC7UR
   DSN=&&PAC7UR
 - VA Pac index file                          : PAC7AN
   DSN=&INDUVX..&ROOTX.&FILEX.AN
 - VA Pac data file                           : PAC7AR
   DSN=&INDUVX..&ROOTX.&FILEX.AR
 - VA Pac error messages file                 : PAC7AE
   DSN=&INDSVX..&ROOTX.&ROOTX.AE
 - PAF intermediate file                      : SYSPAF
   DSN=&SYSPAF..&USER

. Output file:
 - VA Pac update transactions file            : PAC7MV
   DSN=&&PAC7MV
 - Anomaly report                             : PAC7ET
   DSN=&OUT


DELETION OF THE UU SELECTED TRANSACTIONS FILE: IDCAMS


. Input file:
 - Delete command of UU file                   : SYSIN
  DSN=&INDSN..&ROOT.&ROOT.SY(DL&ROOT.&FILE.UU)
```

```
//**********************************************************************
//* VA PAC-ENDEVOR 2.5   : RETRIEVAL OF THE ARCHIVED JOURNAL TRA NSAC *
//**********************************************************************
//$RADP.JRND PROC FILE=$FILE,         NUMBER OF PHYSICAL DATABASE
//         FILEX=$FILEX,              NUMBER OF VA PAC PHYSICAL DBASE
//         ROOT=$ROOT,                ROOT OF THE SYSTEM
//         ROOTX=$ROOTX,              ROOT OF 'VA PAC' SYSTEM
//         INDSV='$INDSV',            INDEX OF VSAM SYSTEM FILES
//         INDSVX='$INDSVX',          INDEX OF VA PAC VSAM SYSTEM FILE
//         INDSN='$INDSN',            INDEX OF NON VSAM SYSTEM FILE
//         INDUN='$INDUN',            INDEX OF NON VSAM USER   FILE
//         INDUVX='$INDUVX',          INDEX OF VA PAC VSAM USER FILE
//*:       VSAMCAT='$CATU',           USER VSAM CATALOG
//*:       SYSTCAT='$CATV',           SYSTEM VSAM CATALOG
//         STEPLIB='$MODB',           LIBRARY OF LOAD-MODULES
//         BCOB='$BCOB',              COBOL II ROUTINES LIBRARY
//         SORTLIB='$BIBT',           SORT LIBRARY
//         CYL=3,                     SORT WORKS SIZE
//         OUT=$OUT,                  OUTPUT CLASS
//         UWK=$UWK,                  WORK UNIT
//         USER=,                     USER CODE
//         SYSPAF='$INDUV..SYSPAF',   DSN PREFIX VSAM KSDS WORK FILE
//         SPAUR='(TRK,(02,01),RLSE)', SPACE TEMPORARY FILE
//         SPAMV='(TRK,(05,01),RLSE)'  SPACE TRANSACTIONS FOR UPDATING
//*--------------------------------------------------------------------*
//*
//INPUT   EXEC PGM=PTU001
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//PAC7MB   DD DSN=&&JRNDMB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(1,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//*
//PRMSYS  EXEC PGM=PRMSYS,PARM='&USER'
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PACRIN   DD DSN=&INDSN..&ROOT.&ROOT.SY(DFSYSPAF),DISP=SHR
//PACROU   DD DSN=&&DFSYSPAF,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(1,1),RLSE)
//SYSOUT   DD SYSOUT=&OUT
//*
//DEFINE  EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSIN    DD DSN=&&DFSYSPAF,DISP=(OLD,DELETE)
//SYSPRINT DD SYSOUT=&OUT
//*
//MAXKEY  EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPAF   DD DSN=&SYSPAF..&USER,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//MAXKEY   DD DSN=&INDSN..&ROOT.&ROOT.SY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOT.&ROOT.SY(REPRO999),DISP=SHR
//*
//DEFINE  EXEC PGM=IDCAMS
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&INDSN..&ROOT.&ROOT.SY(DF&ROOT.&FILE.UU),DISP=SHR
//*
//PNINUQ  EXEC PGM=PNINUQ
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&FILE.UU,DISP=SHR
//SYSOUT   DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//*
```

```
//PNDJ10  EXEC PGM=PNDJ10
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//PAC7IN   DD DSN=&INDSV..&ROOT.&ROOT.TS,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&FILE.UU,DISP=SHR
//PAC7US   DD DSN=&INDUN..&ROOT.&ROOT.QU(0),DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7MB   DD DSN=&&JRNDMB,DISP=(OLD,PASS)
//PAC7MV   DD DSN=&&JRNDMV,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(1,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PNDM05  EXEC PGM=PNDM05
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//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)
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//PAC7AR   DD DSN=&INDUVX..&ROOTX.&FILEX.AR,DISP=SHR
//PAC7TS   DD DSN=&INDSV..&ROOT.&ROOT.TS,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&FILE.UU,DISP=SHR
//PAC7MV   DD DSN=&&JRNDMV,DISP=(OLD,PASS)
//PAC7UR   DD DSN=&&PAC7UR,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=183,BLKSIZE=18300),
//            SPACE=&SPAUR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PNDM10  EXEC PGM=PNDM10,COND=(00,NE,PNDM05)
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=&BCOB,DISP=SHR
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//*:        DD DSN=&SYSTCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7AN   DD DSN=&INDUVX..&ROOTX.&FILEX.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUVX..&ROOTX.&FILEX.AR,DISP=SHR
//PAC7UR   DD DSN=&&PAC7UR,DISP=(OLD,PASS)
//SYSPAF   DD DSN=&SYSPAF..&USER,DISP=SHR
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//            SPACE=&SPAMV
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//DELETE  EXEC PGM=IDCAMS,COND=((00,NE,PNDM05),(00,NE,PNDM10))
//*:STEPCAT DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&INDSN..&ROOT.&ROOT.SY(DL&ROOT.&FILE.UU),DISP=SHR
//*
```

7.8. LSND: LIBRARY/SESSION UPDATE

LSND: LIBRARY/SESSION UPDATE

The LSND procedure updates the TARGET LIBRARIES and SESSIONS table used by the interface.

EXECUTION CONDITION

None.

USER INPUT

. One line per update request.

SESSION UPDATE PARAMETER LINE

Pos.	Length	Value	Meaning
1	1		Transaction code
		'C'	Creation
		'M'	Modification
		'D'	Deletion
		'X'	Creation or Modification
2	4	base	VA Pac Database code
6	2	'NS'	Line code
8	4	ssss	Target session number
12	1		Target session status
		'Z'	'9999' current session
		'T'	Frozen session
13	3	nnn	Line number
16	5	sssss	Starting session number
21	5	sssss	Ending session number
26	36		Comments

Starting and ending sessions may have a 'Z' or 'T' status.
'T' status is included in 'Z' for the same session.

LIBRARY UPDATE PARAMETER LINE

Pos.	Length	Value	Meaning
1	1		Transaction code
		'C'	Creation
		'M'	Modification
		'D'	Deletion
		'X'	Creation or Modification
2	4	base	VA Pac Database code
6	2	'NB'	Line code
8	3	bbb	Target library code
13	3	nnn	Line number
16	3	bbb	VA Pac generation library code
19	36		Comments

OUTPUT REPORTS

An execution report with the detected anomalies and a report which lists the TYPES, TARGET SESSIONS and LIBRARIES defined on the site.

SYMBOLICS IN USE

SYMBOLIC	MEANING
&ROOT	SYSTEM ROOT
&ROOTX	VA Pac SYSTEM ROOT
&INDSV	VSAM SYSTEM FILE INDEX
&INDSVX	VA Pac VSAM SYSTEM FILE INDEX
&STEPLIB	LOAD MODULE LIBRARY
&SORTLIB	SORT LIBRARY
&CYL	SORT WORKS SIZE
&OUT	OUTPUT CLASS
&UWK	WORK UNIT

DESCRIPTION OF STEPS

This procedure includes the following steps:

. Recognition of input : PTU001

. Update of LIBRARIES and SESSIONS file : PNDU10

. Printing of TYPES, and TARGET LIBRARIES/SESSIONS
files : PNDU30

RECOGNITION OF INPUT: PTU001

. Input data : CARTE
DSN=SYSIN

. Output file : PAC7MB
DSN=&&LSNDMB

UPDATE OF LIBRARIES AND SESSIONS: PNDU10

. Input-Output file:
- LIBRARIES and SESSIONS file : PAC7TS
DSN=&INDEX..&ROOT.&FILE.TS

. Input files:
- VA Pac error messages file : PAC7AE
DSN=&INDSVX..&ROOTX.&ROOTX.AE
- Update transactions : PAC7MV
DSN=INPUT

. Output status:
- Updating report : PAC7ET
DSN=&OUT

PRINTING OF TYPES AND TARGET LIBRARIES/SESSIONS FILE: PNDU30

. Input files:
- TYPES file : PAC7TY
DSN=&INDEX..&ROOT.&FILE.TY
- LIBRARY and SESSION file : PAC7TS
DSN=&INDEX..&ROOT.&FILE.TS
- VA Pac error messages file : PAC7AE
DSN=&INDSVX..&ROOTX.&ROOTX.AE

. Output file:
- Printing status of the Interface TYPES and of
TARGET LIBRARIES and SESSSIONS : PAC7ET
DSN=&OUT

```
//*****************************************************************
//* VA PAC-ENDEVOR 2.5   : UPDATING LIBRARIES/SESSIONS TABLE         *
//*****************************************************************
//$RADP.LSND PROC ROOT=$ROOT,         ROOT OF THE SYSTEM
//         ROOTX=$ROOTX,              ROOT OF 'VA PAC' SYSTEM
//         INDSV='$INDSV',            INDEX OF VSAM SYSTEM FILE
//         INDSVX='$INDSVX',          INDEX OF VA PAC VSAM SYSTEM FILE
//*:       VSAMCAT='$CATU',           USER VSAM CATALOG
//*:       SYSTCAT='$CATV',           SYSTEM VSAM CATALOG
//         STEPLIB='$MODB',           LIBRARY OF LOAD-MODULES
//         SORTLIB='$BIBT',           SORT LIBRARY
//         CYL=3,                     SORT WORKS SIZE
//         OUT=$OUT,                  OUTPUT CLASS
//         UWK=$UWK                   WORK UNIT
//*---------------------------------------------------------------*
//*
//INPUT   EXEC PGM=PTU001
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//PAC7MB   DD DSN=&&LSNDMB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(1,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//*
//PNDU10  EXEC PGM=PNDU10
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//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)
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7TS   DD DSN=&INDSV..&ROOT.&ROOT.TS,DISP=SHR
//PAC7MV   DD DSN=&&LSNDMB,DISP=(OLD,DELETE)
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PNDU30  EXEC PGM=PNDU30
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7TS   DD DSN=&INDSV..&ROOT.&ROOT.TS,DISP=SHR
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
```

7.9. MEND: GENERATION OF VA Pac UPDATE TRANSACTIONS

MEND: GENERATION OF VA PAC UPDATE TRANSACTIONS

The MEND procedure prepares VA Pac batch update transactions from the UQ interface journal and archives this journal. Only the transactions of the current VA Pac Database are selected.

EXECUTION CONDITION

The interface must be closed to use.

USER INPUT

. One administrator parameter line.

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

REPORT PRINTING

Printing of generation result.

RESULT

This procedure generates a VA Pac batch update transactions file for the UPDT procedure.

SYMBOLICS IN USE

SYMBOLIC	MEANING
&FILEX	VA Pac PHYSICAL DATABASE NUMBER
&ROOT	SYSTEM ROOT
&ROOTX	VA Pac SYSTEM ROOT
&INDSV	VSAM SYSTEM FILE INDEX
&INDSVX	VA Pac VSAM SYSTEM FILE INDEX
&INDSN	NON-VSAM SYSTEM FILE INDEX
&INDUN	NON-VSAM USER FILE INDEX
&INDUVX	VA Pac VSAM USER FILE INDEX
&STEPLIB	LOAD MODULE LIBRARY
&BCOB	COBOL II ROUTINES LIBRARY
&SORTLIB	SORT LIBRARY
&CYL	SORT WORKS SIZE
&OUT	OUTPUT CLASS
&UWK	WORK UNIT
&UNITS	BACKUP UNIT
&USER	USER CODE
&VOLS	BACKUP VOLUME
&SYSPAF	PAF WORKFILE
&SPAUR	TEMPORARY FILE SPACE
&SPAMV	UPDATE TRANSACTION FILE SPACE
&SPASU	JOURNAL BACKUP SPACE
&SPAQU	SPACE OF TRANS. FROM OTHER DATABASES
&SPACC	TRANS. FROM OTHER DBASES COUNTER SPACE

DESCRIPTION OF STEPS

This procedure includes the following steps:

. Recognition of input : PTU001

. Preparation for the generation of VA Pac
update transactions : PNDM05

. VA Pac update transaction generation : PNDM10

. Journal archiving of current database : PNDM50

. Reinitialization of journal file : PNINUQ

```
RECOGNITION OF INPUT:  PTU001

. Input data                                        : CARTE
  DSN=SYSIN

. Output file                                       : PAC7MB
  DSN=&&MENDMB


PREPARATION FOR THE GENERATION OF UPDATE TRANS.:  PNDM05

 . Input files:
  - VA Pac data file                                : PAC7AR
    DSN=&INDUVX..&ROOTX.&FILEX.AR
  - LIBRARY and SESSION file                        : PAC7TS
    DSN=&INDSV..&ROOT.&ROOT.TS
  - Interface journal file                          : PAC7UQ
    DSN=&INDSV..&ROOT.&ROOT.UQ
  - Administrator identification transaction        : PAC7MV
    DSN=&INPUT

 . Output file:
  - ENDEVOR transaction file                        : PAC7UR
    DSN=&&PAC7UR


GENERATION OF VA Pac UPDATE TRANSACTIONS:  PNDM10

 . Input files:
  - ENDEVOR transaction file                        : PAC7UR
    DSN=&&PAC7UR
  - VA Pac index file                               : PAC7AN
    DSN=&INDUVX..&ROOTX.&FILEX.AN
  - VA Pac data file                                : PAC7AR
    DSN=&INDUVX..&ROOTX.&FILEX.AR
  - VA Pac error message file                       : PAC7AE
    DSN=&INDSVX..&ROOTX.&ROOTX.AE
  - PAF temporary file                              : SYSPAF
    DSN=&SYSPAF..&USER

 . Output files:
  - VA Pac updating transaction file                : PAC7MV
    DSN=&&PAC7MV
  - Report of errors detected                       : PAC7ET
    DSN=&OUT
```

JOURNAL ARCHIVING OF CURRENT DATABASE : PNDM50

```
 . Input files:
  - VA Pac data file                               : PAC7AR
    DSN=&INDUVX..&ROOTX.&FILEX.AR
  - Interface journal file                         : PAC7UQ
    DSN=&INDSV..&ROOT.&ROOT.UQ
  - Former journal archive file                    : PAC7US
    DSN=&INDUN..&ROOT.&ROOT.QU(0)

 . Output file:
  - New journal archive file                       : PAC7SU
    DSN=&INDUN..&ROOT.&ROOT.QU(+1)
  - Transactions from other databases              : PAC7QU
    DSN=&&PAC7QU
  - Counter of transactions from other databases   : PAC7CC
    DSN=&&PAC7CC
```

JOURNAL FILE FORMATTING: IDCAMS

```
 . Input file:
  - Journal file definition                        : SYSIN
    DSN=&INDSN..&ROOT.&ROOT.SY(DF&ROOT.&ROOT.UQ)
```

JOURNAL FILE REINITIALIZATION: PNDM60

```
 . Input files:
  - Counter of transactions from other databases   : PAC7CC
    DSN=&&PAC7CC
  - Transactions from other databases              : PAC7QU
    DSN=&&PAC7QU

 . Output file:
  - Interface journal file                         : PAC7UQ
    DSN=&INDSV..&ROOT.&FILE.UQ
```

```
//*********************************************************************
//* VA PAC-ENDEVOR 2.5 : FORMATTING OF VA PAC UPDATE TRANSACTIONS     *
//*********************************************************************
//$RADP.MEND PROC FILEX=$FILEX, NUMBER OF VA PAC PHYSICAL DATABASE
//         ROOT=$ROOT,                ROOT OF THE SYSTEM
//         ROOTX=$ROOTX,              ROOT OF 'VA PAC' SYSTEM
//         INDSV='$INDSV',            INDEX OF VSAM SYSTEM FILE
//         INDSVX='$INDSVX',          INDEX OF VA PAC VSAM SYSTEM FILE
//         INDSN='$INDSN',            INDEX OF NON VSAM SYSTEM FILE
//         INDUN='$INDUN',            INDEX OF NON VSAM USER   FILE
//         INDUVX='$INDUVX',          INDEX OF VA PAC VSAM USER FILE
//*:       VSAMCAT='$CATU',           USER VSAM CATALOG
//*:       SYSTCAT='$CATV',           SYSTEM VSAM CATALOG
//         STEPLIB='$MODB',           LIBRARY OF LOAD-MODULES
//         BCOB='$BCOB',              COBOL II ROUTINES LIBRARY
//         SORTLIB='$BIBT',           SORT LIBRARY
//         CYL=3,                     SORT WORKS SIZE
//         OUT=$OUT,                  OUTPUT CLASS
//         UWK=$UWK,                  WORK UNIT
//         UNITS=$UNITO,              'UQ' BACKUP UNIT
//         VOLS='SER=$VOLO',          'UQ' BACKUP VOLUME
//         USER=,                     USER CODE
//         SYSPAF='$INDUV..SYSPAF',   DSN PREFIX VSAM KSDS WORK FILE
//         SPAUR='(TRK,(02,01),RLSE)', SPACE OF TEMPORARY FILE
//         SPAMV='(TRK,(05,01),RLSE)', SPACE OF UPDATE TRANS. FILE
//         SPASU='(TRK,(10,05),RLSE)', 'UQ' BACKUP SPACE
//         SPAQU='(TRK,(10,05),RLSE)', SPACE OF TRANS. FROM OTHER DBASE
//         SPACC='(TRK,(01,01),RLSE)'  TRANS. OTHER DBASE COUNTER SPACE
//*------------------------------------------------------------------*
//*
//INPUT   EXEC PGM=PTU001
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//PAC7MB   DD DSN=&&MENDMB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(1,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//*
//PRMSYS  EXEC PGM=PRMSYS,PARM='&USER'
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PACRIN   DD DSN=&INDSN..&ROOT.&ROOT.SY(DFSYSPAF),DISP=SHR
//PACROU   DD DSN=&&DFSYSPAF,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(1,1),RLSE)
//SYSOUT   DD SYSOUT=&OUT
//*
//DEFINE  EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSIN    DD DSN=&&DFSYSPAF,DISP=(OLD,DELETE)
//SYSPRINT DD SYSOUT=&OUT
//*
//MAXKEY  EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPAF   DD DSN=&SYSPAF..&USER,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//MAXKEY   DD DSN=&INDSN..&ROOT.&ROOT.SY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOT.&ROOT.SY(REPRO999),DISP=SHR
//*
//PNDM05  EXEC PGM=PNDM05
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//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)
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
```

```
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AR   DD DSN=&INDUVX..&ROOTX.&FILEX.AR,DISP=SHR
//PAC7TS   DD DSN=&INDSV..&ROOT.&ROOT.TS,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&ROOT.UQ,DISP=SHR
//PAC7MV   DD DSN=&&MENDMB,DISP=(OLD,DELETE)
//PAC7UR   DD DSN=&&PAC7UR,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=183,BLKSIZE=18300),
//            SPACE=&SPAUR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PNDM10  EXEC PGM=PNDM10,COND=(00,NE,PNDM05)
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=&BCOB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7AN   DD DSN=&INDUVX..&ROOTX.&FILEX.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUVX..&ROOTX.&FILEX.AR,DISP=SHR
//PAC7UR   DD DSN=&&PAC7UR,DISP=(OLD,PASS)
//SYSPAF   DD DSN=&SYSPAF..&USER,DISP=SHR
//PAC7MV   DD DSN=&&PAC7MV,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//            SPACE=&SPAMV
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PNDM50  EXEC PGM=PNDM50,COND=((00,NE,PNDM05),(00,NE,PNDM10))
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AR   DD DSN=&INDUVX..&ROOTX.&FILEX.AR,DISP=SHR
//PAC7US   DD DSN=&INDUN..&ROOT.&ROOT.QU(0),DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&ROOT.UQ,DISP=SHR
//PAC7SU   DD DSN=&INDUN..&ROOT.&ROOT.QU(+1),DISP=(,CATLG,DELETE),
//            VOL=&VOLS,
//            UNIT=&UNITS,SPACE=&SPASU,
//            DCB=&INDUN..DSCB.&ROOT.&ROOT.QU
//PAC7CC   DD DSN=&&PAC7CC,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=170),
//            SPACE=&SPACC
//PAC7QU   DD DSN=&&PAC7QU,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=1700),
//            SPACE=&SPAQU
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//DEFINE  EXEC PGM=IDCAMS,COND=((00,NE,PNDM05),(00,NE,PNDM10))
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&INDSN..&ROOT.&ROOT.SY(DF&ROOT.&ROOT.UQ),DISP=SHR
//*
//PNDM60  EXEC PGM=PNDM60,COND=((00,NE,PNDM05),(00,NE,PNDM10))
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7CC   DD DSN=&&PAC7CC,DISP=(OLD,DELETE)
//PAC7QU   DD DSN=&&PAC7QU,DISP=(OLD,DELETE)
//PAC7UQ   DD DSN=&INDSV..&ROOT.&ROOT.UQ,DISP=SHR
//SYSOUT   DD SYSOUT=*
```

```
//SYSUDUMP DD SYSOUT=*
//*
```

7.10. REND: RETRIEVAL OF VA Pac U.E. 1.6 -> 2.5

REND : RETRIEVAL OF VA PAC U.E. 1.6 --> 2.5

The REND procedure retrieves all the $7N occurrences of the .NDVLM User Entity in release 1.6 and applies the new formats to dates:

1. last action CCYY/MM/DD instead of YY/MM/DD

1. current action CCYY/MM/DD instead of YY/MM/DD

1. element generation DD/MM/CCYY instead of DD/MM/YY

EXECUTION CONDITIONS

The VA Pac VINS procedure must be executed first.

The VA Pac AR data file must be closed to on-line use.

SYMBOLICS IN USE

SYMBOLIC	MEANING
&FILEX	NUMBER OF VA Pac PHYSICAL DATABASE
&ROOTX	ROOT OF VA Pac SYSTEM FILE
&INDUVX	INDEX OF VA PAC VSAM SYSTEM FILE
&SYSTCAT	SYSTEM VSAM CATALOG
&VSAMCAT	USER VSAM CATALOG
&STEPLIB	LOAD-MODULES LIBRARY
&OUT	OUTPUT CLASS

DESCRIPTION OF STEPS

This procedure includes the following step:

. U.E update in VA Pac Database: PNRPEU

. Input-output file:
 - VA Pac data file : PAC7AR
   DSN=&INDUVX..&ROOTX.&FILEX.AR

. Output display:
 - Counter of updated occurrences

```
//*****************************************************************
//* VA PAC-ENDEVOR 2.5   : RETRIEVAL OF YEAR 2000 USER ENTITIES       *
//*****************************************************************
//NDVRREND PROC FILEX=$FILEX,    NUMBER OF VA PAC PHYSICAL DBASE '
//         ROOTX=$ROOTX,         ROOT OF THE 'VA PAC' SYSTEM
//         INDUVX='$INDUVX',     INDEX OF VA PAC VSAM USER FILE
//*:       VSAMCAT='<>',         USER VSAM CATALOG
//*:       SYSTCAT='<>',         SYSTEM VSAM CATALOG
//         STEPLIB='$MODB',      LIBRARY OF LOAD-MODULES
//         OUT=$OUT              OUTPUT CLASS
//*---------------------------------------------------------------*
//*
//PNRPEU  EXEC PGM=PNRPEU
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AR   DD DSN=&INDUVX..&ROOTX.&FILEX.AR,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
```

7.11. RIND: INFOPAC ELT. CREATION (RETRIEVAL)

RIND: INFOPAC ELEMENT CREATION

The RIND procedure allows the user to create, in ENDEVOR, the INFOPAC ELEMENTS which correspond to the VA Pac entities created in ENDEVOR before the installation of the VA Pac-ENDEVOR interface on the site.

EXECUTION CONDITION

This procedure is prepared by the 'RRND: Existing Data Retrieval' procedure.

SYMBOLICS IN USE

SYMBOLIC	MEANING
&FILE	PHYSICAL DATABASE NUMBER
&ROOT	SYSTEM ROOT
&INDSV	VSAM SYSTEM FILE INDEX
&INDSN	NON-VSAM SYSTEM FILE INDEX
&INDUN	NON-VSAM USER FILE INDEX
&VSAMCAT	USER VSAM CATALOG
&LOADLIB	ENDEVOR LOADLIB
&CONLIB	ENDEVOR CONLIB
&OUT	OUTPUT CLASS
&VOLS	NON-VSAM USER FILE VOLUME
&UNITS	NON-VSAM USER FILE UNIT
&SPABB	TEMPORARY PDS SPACE

DESCRIPTION OF STEPS

This procedure includes the following steps:

. Creation of temporary PDS for INFOPAC elements : IEFBR14

. Loading of INFOPAC elements into the PDS :IEBUPDTE

. Creation (ADD) of INFOPAC elements in ENDEVOR : NDVRC1

```
    CREATION OF TEMPORARY PDS FOR INFOPAC ELEMENTS: IEFBR14

    . Output file:
     - PDS of 'INFOPAC' elements                       : DD1
       DSN=&INDUN..&ROOT.&FILE.BB


    LOADING OF INFOPAC ELEMENTS IN THE PDS: IEBUPDTE

     . Input file:
      - 'INFOPAC' content of each element              : SYSIN
        ./ add name=Innnnnnn

     . Input/output file:
      - PDS of 'INFOPAC' elements                :SYSUT1/SYSUT2
        DSN=&INDUN..&ROOT.&FILE.BB


    CREATION OF INFOPAC ELEMENTS IN ENDEVOR: NDRC1

     . Input files:
      - TYPE file                                      : PAC7TY
        DSN=&INDSV..&ROOT.&ROOT.TY
      - PDS of 'INFOPAC' elements                      :INFOPAC
        DSN=*.STEP01.DD1
      - Endevor ADD request of INFOPAC ELEMENT        :BSTIPT01

     . Input/output files:
      - Interface work file                            : PAC7PU
        DSN=&INDSV..&ROOT.&ROOT.UP
      - Interface work file                            : PAC7UP
        DSN=&INDSV..&ROOT.&ROOT.UP

     . Output file:
      - Interface journal file                         : PAC7UQ
        DSN=&INDSV..&ROOT.&ROOT.UQ
```

```
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : CREATE 'INFOPAC'  (EXISTING DATA RETRIEVAL)*
//*********************************************************************
//$RADP.RIND PROC FILE=$FILE,         NUMBER OF PHYSICAL DATABASE
//         ROOT=$ROOT,                ROOT OF THE SYSTEM
//         INDSV='$INDSV',            INDEX OF SYSTEM VSAM FILE
//         INDUN='$INDUN',            USER NON VSAM FILES INDEX
//*:       VSAMCAT='$CATU',           USER VSAM CATALOG
//         LOADLIB='$LDLIB',          ENDEVOR LOADLIB
//         CONLIB='$CONLIB',          ENDEVOR CONLIB
//         OUT=$OUT,                  OUTPUT CLASS
//         VOLS='SER=$VOLO',          NON VSAM USER FILES VOLUME
//         UNITS=$UNITO,              NON VSAM USER FILES UNIT
//         SPABB='(TRK,(20,10,20),RLSE)' SPACE OF TEMPORARY PDS
//*-------------------------------------------------------------------*
//*
//**********************************************
//* CREATE TEMPORARY PDS FILE                  *
//**********************************************
//*
//STEP01  EXEC PGM=IEFBR14
//DD1      DD DSN=&INDUN..&ROOT.&FILE.BB,DISP=(,CATLG,DELETE),
//            UNIT=&UNITS,
//            VOL=&VOLS,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80,DSORG=PO),
//            SPACE=&SPABB
//*
//**********************************************
//* LOADING 'INFOPAC' ELEMENTS                 *
//**********************************************
//*
//STEP02  EXEC PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD SYSOUT=&OUT
//SYSUT1   DD DSN=*.STEP01.DD1,DISP=(SHR,KEEP,DELETE)
//SYSUT2   DD DSN=*.STEP01.DD1,DISP=(SHR,KEEP,DELETE)
//SYSIN    DD DUMMY
//*
//**********************************************
//* ENDEVOR 'ADD' ACTION FOR 'INFOPAC' ELEMENT *
//**********************************************
//*
//STEP03  EXEC PGM=NDVRC1,DYNAMNBR=1500,REGION=4096K,PARM='C1BM3000'
//STEPLIB  DD DSN=&LOADLIB,DISP=SHR
//CONLIB   DD DSN=&CONLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK04 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//C1TPDD01 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPDD02 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPLSIN DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//C1TPLSOU DD UNIT=SYSDA,SPACE=(CYL,5)
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7PU   DD DSN=&INDSV..&ROOT.&ROOT.UP,DISP=SHR
//PAC7UP   DD DSN=&INDSV..&ROOT.&ROOT.UP,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&ROOT.UQ,DISP=SHR
//INFOPAC  DD DSN=*.STEP01.DD1,DISP=(SHR,DELETE,DELETE)
//C1PLMSGS DD SYSOUT=&OUT
```

```
//C1MSGS1  DD SYSOUT=&OUT
//C1PRINT  DD SYSOUT=&OUT,DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171)
//PTRACE   DD SYSOUT=&OUT
//SYSABEND DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//BSTIPT01 DD DUMMY
//*
```

7.12. RPND: VA Pac ELT. CREATION (RETRIEVAL)

RPND: CREATION OF VA Pac ELEMENT

The RPND procedure prepares the VA Pac batch update transactions from the 'UQ' interface journal prepared by the RRND procedure.

EXECUTION CONDITION

The RRND procedure must be executed first.

USER INPUT

. One administrator identification line.

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

REPORT PRINTING

Printing of generation result.

RESULT

This procedure generates a VA Pac batch update transaction file for the UPDT procedure.

SYMBOLICS IN USE

SYMBOLIC	MEANING
&FILE	PHYSICAL DATABASE NUMBER
&FILEX	VA Pac PHYSICAL DATABASE NUMBER
&ROOT	SYSTEM ROOT
&ROOTX	VA Pac SYSTEM ROOT
&INDSV	VSAM SYSTEM FILE INDEX
&INDSVX	VA Pac VSAM SYSTEM FILE INDEX
&INDSN	NON-VSAM SYSTEM FILE INDEX
&INDUVX	VA Pac VSAM USER FILE INDEX
&VSAMCAT	USER VSAM CATALOG
&SYSTCAT	SYSTEM VSAM CATALOG
&STEPLIB	LOAD MODULE LIBRARY
&BCOB	COBOL II ROUTINES LIBRARY
&SORTLIB	SYSTEM VSAM CATALOG
&SORTLIB	SORT LIBRARY
&CYL	SORT WORK SIZE
&OUT	OUTPUT CLASS
&UWK	WORK UNIT
&USER	USER CODE
&SYSPAF	PAF WORKFILE
&SPAUR	TEMPORARY FILE SPACE
&SPAMV	UPDATE TRANSACTION FILE SPACE

DESCRIPTION OF STEPS

This procedure includes the following steps:

. Recognition of input	: PTU001
. SYSIN parameterization (IDCAMS)	: PRMSYS
. Definition of VSAM file	: DEFINE
. Initial loading of PAF file	: IDCAMS
. Preparation of update transaction generation	: PNDM05
. Generation of VA Pac update trans. (EU def.)	: PNDR40
. Generation of VA Pac update trans. (-D1 -D2 -D9)	: PNDM10
. Re-definition of 'UQ' journal file	: DEFINE
. Re-initialization of 'UQ' journal file	: PNINUQ

RECOGNITION OF INPUT: PTU001

```
. Input data                                        : CARTE
   DSN=SYSIN

. Output file                                       : PAC7MB
   DSN=&&RPNDMB
```

SYSIN PARAMETERIZATION: PRMSYS

```
. Input file
 - Parameters PDS                                   : PACRIN
   DSN=&INDSN..&ROOT.&ROOT.SY(DFSYSPAF)

. Output file
 - SYSIN for DEFINE                                 : PACROU
   DSN=&&DFSYSPAF
```

DEFINITION OF VSAM FILE: DEFINE

This step executes a DELETE/DEFINE on the user VSAM file used in the procedure.

```
. VSAM file defined:
   DSN=&INDUV..SYSPAF.&USER
```

INITIAL LOADING OF PAF file: IDCAMS

```
. Input files:
  - C1, maxi.                                       : MAXKEY
    DSN=&INDSN..&ROOT.&ROOT.SY(MAXKEY)
  - Sysin for repro                                 : SYSIN
    DSN=&INDSN..&ROOT.&ROOT.SY(REPRO999)

. Input/output files:
  - PAF file to be loaded                           : SYSPAF
    DSN=&SYSPAF..&USER
```

PREPARATION OF UPDATE TRANSACTION GENERATION: PNDM05

```
. Input files:
 - VA Pac data file                                : PAC7AR
   DSN=&INDUVX..&ROOTX.&FILEX.AR
 - LIBRARY and SESSION file                        : PAC7TS
   DSN=&INDSV..&ROOT.&ROOT.TS
 - Interface journal file                          : PAC7UQ
   DSN=&INDSV..&ROOT.&ROOT.UQ
 - Administrator identification transaction        : PAC7MV
   DSN=&&RPNDMB

. Output file:
 - ENDEVOR transaction file                        : PAC7UR
   DSN=&&PAC7UR
 - Sort files:                                     :SORTWK01
                                                   :SORTWK02
                                                   :SORTWK03
```

```
GENERATION OF VA Pac UPDATE TRANSACTIONS (UE DEF.):  PNDR40

. Input files:
 - ENDEVOR transaction file                       : PAC7LT
   DSN=&&PAC7UR

. Output file:
 - VA Pac batch update transaction file           : PAC7MU
   DSN=&&PAC7MU


GENERATION OF VA Pac UPDATE TRANSACTIONS (-D1 -D2 -D9):
PNDM10

. Input files:
 - ENDEVOR transaction file                       : PAC7UR
   DSN=&&PAC7UR
 - VA Pac index file                              : PAC7AN
   DSN=&INDUVX..&ROOTX.&FILEX.AN
 - VA Pac data file                               : PAC7AR
   DSN=&INDUVX..&ROOTX.&FILEX.AR
 - VA Pac error message file                      : PAC7AE
   DSN=&INDSVX..&ROOTX.&ROOTX.AE
 - PAF intermediate file                          : SYSPAF
   DSN=&SYSPAF..&USER

. Output file:
 - VA Pac batch update transaction file           : PAC7MV
   DSN=&&PAC7MU --> DISP=(MOD,PASS)
 - Error report                                   : PAC7ET
   DSN=&OUT


RE-DEFINITION OF 'UQ' JOURNAL:  IDCAMS

. Input file:
 - Definition of the journal file                 : SYSIN
   DSN=&INDSN..&ROOT.&ROOT.SY(DF&ROOT.&ROOT.UQ)


RE-INITIALIZATION OF 'UQ' JOURNAL:  PNINUQ

. Output file:
 - Interface journal file                         : PAC7UQ
   DSN=&INDSV..&ROOT.&ROOT.UQ
```

```
//*****************************************************************
//* VA PAC-ENDEVOR 2.5 : CREATE 'VA PAC' (EXISTING DATA RETRIEVAL)    *
//*****************************************************************
//$RADP.RPND PROC FILEX=$FILEX,       NUMBER OF VA PAC PHYSICAL DBASE
//          ROOT=$ROOT,               ROOT OF THE SYSTEM
//          ROOTX=$ROOTX,             ROOT OF 'VA PAC' SYSTEM
//          INDSV='$INDSV',           INDEX OF VSAM SYSTEM FILE
//          INDSVX='$INDSVX',         INDEX OF VA PAC VSAM SYSTEM FILE
//          INDSN='$INDSN',           INDEX OF NON VSAM SYSTEM FILE
//          INDUVX='$INDUVX',         INDEX OF VA PAC VSAM USER FILE
//*:        VSAMCAT='$CATU',          USER VSAM CATALOG
//*:        SYSTCAT='$CATV',          SYSTEM VSAM CATALOG
//          STEPLIB='$MODB',          LIBRARY OF LOAD-MODULES
//          BCOB='$BCOB',             COBOL II ROUTINES LIBRARY
//          SORTLIB='$BIBT',          SORT LIBRARY
//          CYL=1,                    SORT WORKS SIZE
//          OUT=$OUT,                 OUTPUT CLASS
//          UWK=$UWK,                 WORK UNIT
//          USER=,                    USER CODE
//          SYSPAF='$INDUV..SYSPAF',  DSN PREFIX VSAM KSDS WORK FILE
//          SPAUR='(TRK,(02,01),RLSE)', TEMPORARY FILE SPACE
//          SPAMV='(TRK,(05,01),RLSE)'  UPDATE TRANS. FILE SPACE
//*-----------------------------------------------------------------*
//*
//INPUT   EXEC PGM=PTU001
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//PAC7MB   DD DSN=&&RPNDMB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(1,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//*
//PRMSYS  EXEC PGM=PRMSYS,PARM='&USER'
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PACRIN   DD DSN=&INDSN..&ROOT.&ROOT.SY(DFSYSPAF),DISP=SHR
//PACROU   DD DSN=&&DFSYSPAF,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(1,1),RLSE)
//SYSOUT   DD SYSOUT=&OUT
//*
//DEFINE  EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSIN    DD DSN=&&DFSYSPAF,DISP=(OLD,DELETE)
//SYSPRINT DD SYSOUT=&OUT
//*
//MAXKEY  EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPAF   DD DSN=&SYSPAF..&USER,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//MAXKEY   DD DSN=&INDSN..&ROOT.&ROOT.SY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=&INDSN..&ROOT.&ROOT.SY(REPRO999),DISP=SHR
//*
//PNDM05  EXEC PGM=PNDM05
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//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)
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AR   DD DSN=&INDUVX..&ROOTX.&FILEX.AR,DISP=SHR
//PAC7TS   DD DSN=&INDSV..&ROOT.&ROOT.TS,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&ROOT.UQ,DISP=SHR
//PAC7MV   DD DSN=&&RPNDMB,DISP=(OLD,DELETE)
//PAC7UR   DD DSN=&&PAC7UR,DISP=(,PASS),UNIT=&UWK,
//             DCB=(RECFM=FB,LRECL=183,BLKSIZE=18300),
//             SPACE=&SPAUR
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PNDR40  EXEC PGM=PNDR40,COND=(00,NE,PNDM05)
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7LT   DD DSN=&&PAC7UR,DISP=(OLD,PASS)
//PAC7MU   DD DSN=&&PAC7MU,DISP=(,PASS),UNIT=&UWK,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=8800),
//             SPACE=&SPAMV
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PNDM10  EXEC PGM=PNDM10,COND=(00,NE,PNDM05)
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//         DD DSN=&BCOB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7AN   DD DSN=&INDUVX..&ROOTX.&FILEX.AN,DISP=SHR
//PAC7AR   DD DSN=&INDUVX..&ROOTX.&FILEX.AR,DISP=SHR
//PAC7UR   DD DSN=&&PAC7UR,DISP=(OLD,PASS)
//SYSPAF   DD DSN=&SYSPAF..&USER,DISP=SHR
//PAC7MV   DD DSN=&&PAC7MU,DISP=(MOD,PASS)
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//DEFINE  EXEC PGM=IDCAMS,COND=(00,NE,PNDM05)
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&INDSN..&ROOT.&ROOT.SY(DF&ROOT.&ROOT.UQ),DISP=SHR
//*
//PNINUQ  EXEC PGM=PNINUQ,COND=(00,NE,PNDM05)
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&ROOT.UQ,DISP=SHR
//SYSOUT   DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//*
```

7.13. RRND: EXISTING DATA RETRIEVAL

RRND: EXISTING DATA RETRIEVAL

The RRND procedure retrieves ENDEVOR ELEMENTS coming from VA Pac and generated before the acquisition of VA Pac-Endevor interface, and associates an INFOPAC ELEMENT type with each one.

EXECUTION CONDITION

None.

RESULT

Generated execution JCL for the RIND procedure (creation of INFOPAC-type elements).

'UQ' VSAM file which contains the update transactions for VA Pac. This file is retrieved as it is by the RPND procedure.

IMPORTANT NOTE

The execution of the RRND procedure MUST be followed by the execution of the RIND and RPND procedures.

USER INPUT

You can enter as many lines as there are environments which can possibly contain one or more ELEMENTS coming from the VA Pac system.

ENVIRONMENT PARAMETER LINE

Pos.	Length	Value	Meaning
1	10	'xxxxxxxxxx'	ENDEVOR Element (1)
11	8	'eeeeeeee'	ENDEVOR Environment
19	8	'ssssssss'	ENDEVOR System (1)
27	8	'subssubs'	ENDEVOR Sub-system (1)
35	8	'tttttttt'	ENDEVOR Type (1)
43	1	's'	ENDEVOR Stage (1)

(1) Each field can be entered in a generic manner using an asterisk immediately after the last significant character (ex: 'env*   '). The value '   ' is equivalent to the value '*   '.

SYMBOLICS IN USE

SYMBOLIC	MEANING
&FILE	PHYSICAL DATABASE NUMBER
&ROOT	SYSTEM ROOT
&INDSN	NON VSAM SYSTEM FILE INDEX
&INDSV	VSAM SYSTEM FILE INDEX
&VSAMCAT	VSAM USER CATALOG
&SYSTCAT	VSAM SYSTEM CATALOG
&STEPLIB	LOAD MODULE LIBRARY
&LOADLIB	ENDEVOR LOAD MODULE LIBRARY
&CONLIB	ENDEVOR CONLIB LIBRARY
&OUT	OUTPUT CLASS
&UWK	WORK UNIT
&RADP	PROCEDURE PREFIX
&SPAMB	'BSTIPT01' TRANSACTIONS SPACE
&SPAMS	NDVRC1 'C1MSGS1 AND C1PRINT' SPACE
&SPAUR	TEMPORARY FILE SPACE
&SPAJC	GENERATED JCL SPACE

DESCRIPTION OF STEPS

This procedure includes the following steps:

. Recognition of user input : PTU001

. Preparation of elements 'LIST' SYSIN : PNCI10

. List of ENDEVOR elements : NDVRC1A

. Preparation of elements 'PRINT' SYSIN : PNDR20

. Printing of ENDEVOR elements : NDVRC1B

. Printing of ENDEVOR elements (Master option) : NDVRC1C

. 'INFOPAC' creation from COBOL source : PNDR30

. Redefinition of UQ journal file : DEFINEUQ

. Reinitialization of UQ journal file : PNINUQ

. UQ loading for VA Pac update : PNDR35

```
RECONGITION OF INPUT:  PTU001

. Input data                                      : CARTE
   DDNAME=SYSIN

. Output file                                     : PAC7MB
   DSN=&&RRNDMB


PREPARATION OF ELEMENTS 'LIST' SYSIN: PNCI10

This program prepares the extraction of COBOL-type
ENDEVOR elements generated by VA Pac and
identified by one of the working constants:
'CONSTANTES-PAC' or 'VA Pac-CONSTANT'.

. Input files:
 - User input: elements to be extracted           : PAC7IN
   DSN=&&RRNDMB
 - Interface type file                            : PAC7TY
   DSN=&INDSV..&ROOT.&ROOT.TY

. Output file:
 - 'LIST' SYSIN of the elements to be selected    : PAC7BS
   DSN=&&PAC7BS


LIST OF SELECTED ENDEVOR ELEMENTS: NDVRC1A

. Input file:
 - 'LIST' SYSIN of elements to be selected        : BSTIPT01
   DSN=&&PAC7BS

. Output file:
 - SYSOUT of ENDEVOR list                         : C1MSGS1
  DSN=&&C1MSGS1A


PREPARATION OF ELEMENTS 'PRINT' SYSIN: PNDR20

. Input file:
 - SYSOUT of ENDEVOR list                         : PAC7LT
   DSN=&&C1MSGS1A

. Output files:
 - 'PRINT' SYSIN of listed elements               : PAC7BS
   DSN=&&PAC7SB
 - 'PRINT' SYSIN of listed elements (M. option)   : PAC7BT
   DSN=&&PAC7TB
 - 'PRINT' SYSIN of the elements descriptions     : PAC7XT
   DSN=&&PAC7XT


PRINTING OF THE SELECTED ENDEVOR ELEMENTS: NDVRC1B

. Input file:
 - 'PRINT' SYSIN of listed elements               : BSTIPT01
   DSN=&&PAC7SB

. Output file:
 - SYSOUT of ENDEVOR list                         : C1MSGS1
   DSN=&&C1MSGS1B
 - SYSOUT of ENDEVOR print                        : C1PRINT
   DSN=&&C1PRINTB

PRINTING OF THE SELECTED ENDEVOR ELEMENTS: NDVRC1C

With the 'MASTER' option

. Input file:
 - 'PRINT' SYSIN of listed elements               : BSTIPT01
   DSN=&&PAC7TB

. Output file:
 - SYSOUT of ENDEVOR print (MASTER option)        : C1PRINT
   DSN=&&C1MSGS1C


'INFOPAC' CREATION FROM COBOL SOURCE: PNDR30

. Input files:
 - SYSOUT of ENDEVOR list                         : PAC7LT
   DSN=&&C1MSGS1B
 - SYSOUT of ENDEVOR print                        : PAC7PT
   DSN=&&C1PRINTB
 -Interface type file                             : PAC7TY
   DSN=&INDSV..&ROOT.&ROOT.TY
 -'PRINT' SYSIN of elements descriptions          : PAC7XT
   DSN=&&PAC7XT

. Temporary work file                             : PAC7JD

. Output files:
 - Execution JCL of 'RIND' procedure              : PAC7JC
   DSN=&&PAC7JC
 - Sequential image of UQ file                    : PAC7UQ
   DSN=&&PAC7UQ


REDEFINITION OF 'UQ' JOURNAL: IDCAMS

. Input file:
 - Definition of journal file                 : SYSIN
   DSN=&INDSN..&ROOT.&ROOT.SY(DF&ROOT.&FILE.UQ)


REINITIALIZATION OF 'UQ' JOURNAL: PNINUQ

. Output file:
 - Interface journal file                     : PAC7UQ
   DSN=&INDSV..&ROOT.&ROOT.UQ


'UQ' LOADING FOR VA PAC UPDATE: PNDR35

. Input files:
 - SYSOUT of ENDEVOR print (MASTER option)    : PAC7PT
   DSN=&&C1PRINTC
 - Sequential image of 'UQ' file             : PAC7QU
   DSN=&&PAC7UQ

. Output file:
 - 'UQ' VSAM file ready for RPND procedure   : PAC7UQ
   (creation of elements in VA Pac)
   DSN=&INDSV..&ROOT.&FILE.UQ
```

```
//*******************************************************************
//*  VA PAC-ENDEVOR 2.5   : RETRIEVAL OF ENDEVOR ELEMENTS             *
//*******************************************************************
//$RADP.RRND PROC ROOT=$ROOT,         ROOT OF THE SYSTEM
//         INDSN='$INDSN',            INDEX OF NON VSAM SYSTEM FILES
//         INDSV='$INDSV',            INDEX OF VSAM SYSTEM FILES
//*:       VSAMCAT='$CATU',           USER VSAM CATALOG
//*:       SYSTCAT='$CATV',           SYSTEM VSAM CATALOG
//         STEPLIB='$MODB',           LIBRARY OF LOAD-MODULES
//         LOADLIB='$LDLIB',          ENDEVOR LOADLIB
//         CONLIB='$CONLIB',          ENDEVOR CONLIB
//         OUT=$OUT,                  OUTPUT CLASS
//         UWK=$UWK,                  WORK UNIT
//         RADP=$RADP,                PREFIX OF PROCEDURE NAMES
//         SPAMB='(TRK,(02,01),RLSE)', SPACE TRANSACTIONS FOR 'BSTIPT01
//         SPAMS='(TRK,(05,05),RLSE)', SPACE 'C1MSGS1 & C1PRINT' NDVRC1
//         SPAUR='(TRK,(02,01),RLSE)', TEMPORARY FILE SPACE
//         SPAJC='(TRK,(05,01),RLSE)'  GENERATED JCL SPACE
//*-----------------------------------------------------------------*
//*
//INPUT   EXEC PGM=PTU001
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//PAC7MB   DD DSN=&&RRNDMB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(1,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//*
//PNCI10  EXEC PGM=PNCI10,
//             PARM='*(''CONSTANTES-PAC'' OR ''PACBASE-CONSTANT'')'
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7IN   DD DSN=&&RRNDMB,DISP=(OLD,PASS)
//PAC7BS   DD DSN=&&PAC7BS,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=&SPAMB
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//NDVRC1A EXEC PGM=NDVRC1,DYNAMNBR=1500,REGION=4096K,PARM='C1BM3000'
//STEPLIB  DD DSN=&LOADLIB,DISP=SHR
//CONLIB   DD DSN=&CONLIB,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK04 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//C1TPDD01 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPDD02 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPLSIN DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//C1TPLSOU DD UNIT=SYSDA,SPACE=(CYL,5)
//C1PLMSGS DD SYSOUT=&OUT
//*1MSGS1  DD SYSOUT=&OUT
//C1MSGS1  DD DSN=&&C1MSGS1A,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FBA,LRECL=133,BLKSIZE=26600),
//            SPACE=&SPAMS
//C1PRINT  DD SYSOUT=&OUT,DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171)
//SYSABEND DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//BSTIPT01 DD DSN=&&PAC7BS,DISP=(OLD,PASS)
```

```
//*
//PNDR20  EXEC PGM=PNDR20
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//PAC7LT   DD DSN=*.NDVRC1A.C1MSGS1,DISP=(OLD,PASS)
//PAC7BS   DD DSN=&&PAC7SB,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=&SPAMB
//PAC7BT   DD DSN=&&PAC7TB,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=&SPAMB
//PAC7XT   DD DSN=&&PAC7XT,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=43,BLKSIZE=4300),
//            SPACE=&SPAMB
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//NDVRC1B EXEC PGM=NDVRC1,DYNAMNBR=1500,REGION=4096K,PARM='C1BM3000'
//STEPLIB  DD DSN=&LOADLIB,DISP=SHR
//CONLIB   DD DSN=&CONLIB,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK04 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//C1TPDD01 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPDD02 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPLSIN DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//C1TPLSOU DD UNIT=SYSDA,SPACE=(CYL,5)
//C1PLMSGS DD SYSOUT=&OUT
//*1MSGS1  DD SYSOUT=&OUT
//C1MSGS1  DD DSN=&&C1MSGS1B,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FBA,LRECL=133,BLKSIZE=26600),
//            SPACE=&SPAMS
//*1PRINT  DD SYSOUT=&OUT,DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171)
//C1PRINT  DD DSN=&&C1PRINTB,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FBA,LRECL=133,BLKSIZE=26600),
//            SPACE=&SPAMS
//SYSABEND DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//BSTIPT01 DD DSN=&&PAC7SB,DISP=(OLD,PASS)
//*
//NDVRC1C EXEC PGM=NDVRC1,DYNAMNBR=1500,REGION=4096K,PARM='C1BM3000'
//STEPLIB  DD DSN=&LOADLIB,DISP=SHR
//CONLIB   DD DSN=&CONLIB,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK04 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//C1TPDD01 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPDD02 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPLSIN DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//C1TPLSOU DD UNIT=SYSDA,SPACE=(CYL,5)
//C1PLMSGS DD SYSOUT=&OUT
```

```
//C1MSGS1  DD SYSOUT=&OUT
//*1PRINT  DD SYSOUT=&OUT,DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171)
//C1PRINT  DD DSN=&&C1PRINTC,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FBA,LRECL=133,BLKSIZE=26600),
//            SPACE=&SPAMS
//SYSABEND DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//BSTIPT01 DD DSN=&&PAC7TB,DISP=(OLD,PASS)
//*
//PNDR30  EXEC PGM=PNDR30,PARM='&RADP'
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7LT   DD DSN=*.NDVRC1B.C1MSGS1,DISP=(OLD,PASS)
//PAC7PT   DD DSN=*.NDVRC1B.C1PRINT,DISP=(OLD,PASS)
//PAC7XT   DD DSN=&&PAC7XT,DISP=(OLD,PASS)
//PAC7JC   DD DSN=&&PAC7JC,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=24000),
//            SPACE=&SPAJC
//PAC7UQ   DD DSN=&&PAC7UQ,DISP=(,PASS),UNIT=&UWK,
//            DCB=(RECFM=FB,LRECL=170,BLKSIZE=17000),
//            SPACE=&SPAUR
//PAC7JD   DD UNIT=&UWK,SPACE=&SPAUR,DCB=BLKSIZE=24000
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//DEFINUQ EXEC PGM=IDCAMS,COND=(00,NE,PNDR30)
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&INDSN..&ROOT.&ROOT.SY(DF&ROOT.&ROOT.UQ),DISP=SHR
//*
//PNINUQ  EXEC PGM=PNINUQ,COND=(00,NE,PNDR30)
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&ROOT.UQ,DISP=SHR
//SYSOUT   DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//*
//PNDR35  EXEC PGM=PNDR35
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&ROOT.UQ,DISP=SHR
//PAC7PT   DD DSN=*.NDVRC1C.C1PRINT,DISP=(OLD,PASS)
//PAC7QU   DD DSN=&&PAC7UQ,DISP=(OLD,PASS)
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
```

7.14. RTND: RETRIEVAL 8.0.2 -> 2.5

RTND: RETRIEVAL 8.0.2 --> 2.5

The 'RRND' procedure retrieves the 'TS' TARGET LIBRARIES/ SESSIONS and 'TY' TYPEs tables of the VA Pac-ENDEVOR interface to switch from release 8.0.2 to release 2.5. It assigns the VA Pac database internal code to the 'TS' TARGET LIBRARIES/SESSIONS.

EXECUTION CONDITION

The Interface must not be in use.

USER INPUT

.One identification line of the VA Pac database internal code.

Pos.	Len.	Value	Meaning
1	4		VA Pac database internal code

PRINTED REPORT

The list of TYPES, TARGET LIBRARIES AND SESSIONS defined on the site.

RESULT

This procedure rebuilds the data of the TARGET LIBRARIES/SESSIONS and TYPEs tables for release 2.5.

SYMBOLICS IN USE

SYMBOLIC	MEANING
&ROOT	SYSTEM ROOT
&ROOTX	VA Pac SYSTEM ROOT
&INDSV	INDEX OF VSAM SYSTEM FILE
&INDSVX	INDEX OF VA Pac VSAM SYSTEM FILE
&INDSN	INDEX OF NON VSAM SYSTEM FILE
&STEPLIB	LOAD-MODULES LIBRARY
&OLDTS	8.0.2 TARGET LIBRARIES/SESSIONS TABLE
&OLDTY	8.0.2 TYPES TABLE
&OUT	OUTPUT CLASS
&UWK	WORK UNIT

DESCRIPTION OF STEPS

This procedure includes the following steps:

. Recognition of input : PTU001

. Definition of 2.5 TS and TY Tables : IDCAMS

. Retrieval of TS and TY Tables : PNRPTS

. Printing of TYPEs Table and of TARGET LIBRARIES/SESSIONS
Table after the retrieval : PNDU30

RECOGNITION OF INPUT: PTU001

. Input data : CARTE
DSN=SYSIN

. Output file : PAC7MB
DSN=&&RTNDMB

DEFINITION OF TS AND TY TABLES: DEFINE

```
. This step carries out a DELETE/DEFINE on TS and TY files.
 - Defined files:
   DSN=&INDSV..&ROOT.&ROOT.TS
   DSN=&INDSV..&ROOT.&ROOT.TY
```

RETRIEVAL OF TS AND TY TABLES: PNRPTS

```
. Input files:
 - 8.0.2 TARGET LIBRARIES/SESSIONS Table        : PAC7TT
   DSN=&&OLDTS
 - 8.0.2 TYPEs Table                            : PAC7TZ
   DSN=&&OLDTY
 - Identification OF VA Pac logical dbase code  : PAC7MV
   DSN=&&RTNDMB

. Output files:
 - 2.5 TARGET LIBRARIES/SESSIONS Table          : PAC7TS
   DSN=&INDSV..&ROOT.&ROOT.TS
 - 2.5 TYPEs Table                              : PAC7TY
   DSN=&INDSV..&ROOT.&ROOT.TY
```

PRINTING OF TYPEs TABLE AND TARGET LIBRARIES/SESSIONS TABLE AFTER THE RETRIEVAL: PNDU30

```
. Input files:
 - TYPEs file                                : PAC7TY
   DSN=&INDSV..&ROOT.&ROOT.TY
 - LIBRARIES and SESSION file                : PAC7TS
   DSN=&INDSV..&ROOT.&ROOT.TS
 - VA Pac error messages file                : PAC7AE
   DSN=&INDSVX..&ROOTX.&ROOTX.AE

. Output file:
 - Printing of file contents                 : PAC7ET
   DSN=&OUT
```

```
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : RETRIEVAL 8.0.2 -> 2.5                     *
//*********************************************************************
//$RADP.RTND PROC ROOT=$ROOT,         ROOT OF THE SYSTEM
//         ROOTX=$ROOTX,              ROOT OF 'VA PAC' SYSTEM
//         INDSN='$INDSN',            INDEX OF NON VSAM SYSTEM FILES
//         INDSV='$INDSV',            INDEX OF VSAM SYSTEM FILE
//         INDSVX='$INDSVX',          INDEX OF VA PAC VSAM SYSTEM FILE
//*:       VSAMCAT='$CATU',           USER VSAM CATALOG
//*:       SYSTCAT='$CATV',           SYSTEM VSAM CATALOG
//         OLDTS=,                    OLD LIBRARY/SESSION TABLE
//         OLDTY=,                    OLD ENDEVOR TYPE TABLE
//         STEPLIB='$MODB',           LIBRARY OF LOAD-MODULES
//         OUT=$OUT,                  OUTPUT CLASS
//         UWK=$UWK                   WORK UNIT
//*-------------------------------------------------------------------*
//*
//INPUT   EXEC PGM=PTU001
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//PAC7MB   DD DSN=&&RTNDMB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(1,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//*
//DEFINE  EXEC PGM=IDCAMS
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSIN    DD DSN=&INDSN..&ROOT.&ROOT.SY(DF&ROOT.&ROOT.TS),DISP=SHR
//         DD DSN=&INDSN..&ROOT.&ROOT.SY(DF&ROOT.&ROOT.TY),DISP=SHR
//*
//PNRPTS  EXEC PGM=PNRPTS
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7TT   DD DSN=&OLDTS,DISP=SHR
//PAC7TZ   DD DSN=&OLDTY,DISP=SHR
//PAC7TS   DD DSN=&INDSV..&ROOT.&ROOT.TS,DISP=SHR
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7MV   DD DSN=&&RTNDMB,DISP=(OLD,DELETE)
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PNDU30  EXEC PGM=PNDU30
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7TS   DD DSN=&INDSV..&ROOT.&ROOT.TS,DISP=SHR
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
```

7.15. TYND: TYPE UPDATE

TYND: TYPE UPDATING

The TYND procedure updates the TYPEs table of the elements managed by the Interface.

EXECUTION CONDITION

None.

USER INPUT

. One line per update request.

TYPEs UPDATE PARAMETER LINE

Pos.	Length	Value	Meaning
1	1		Transaction code
		'C'	Creation
		'M'	Modification
		'D'	Deletion
		'X'	Creation or Modification
2	8	pppppppp	VA Pac ELEMENT type
11	8	iiiiiiii	INFOPAC ELEMENT type
19	1		VA Pac ELEMENT nature
		'P'	Program
		'O'	Screen
		'B'	Database block
		'D'	Copy Data clause
20	36		Comments

PRINTED REPORT

An update report with the detected anomalies and a report with the TYPES, TARGET SESSIONS and LIBRARIES defined on the site.

SYMBOLICS IN USE

SYMBOLIC	MEANING
&ROOT	SYSTEM ROOT
&ROOTX	VA Pac SYSTEM ROOT
&INDSV	VSAM SYSTEM FILE INDEX
&INDSVX	VA Pac VSAM SYSTEM FILE INDEX
&STEPLIB	LOAD MODULE LIBRARY
&OUT	OUTPUT CLASS
&UWK	WORK UNIT

DESCRIPTION OF STEPS

This procedure includes the following steps:

. Recognition of input : PTU001

. Update of the TYPEs table : PNDU20

. Printing of the TYPEs Table and TARGET LIBRARY/SESSION
Table : PNDU30

RECOGNITION OF INPUT: PTU001

. Input data : CARTE
DDNAME=SYSIN

. Output file : PAC7MB
DSN=&&TYNDMB

```
UPDATE OF THE TYPEs TABLE:  PNDU20

 . Input-Output file:
  - TYPEs file                                       : PAC7TY
    DSN=&INDSV..&ROOT.&ROOT.TY

 . Input files:
  - VA Pac error message file                        : PAC7AE
    DSN=&INDSVX..&ROOTX.&ROOTX.AE
  - Update transactions                              : PAC7MV
    DSN=&INPUT
 . Output report
  - Update report                                    : PAC7ET
    DSN=&OUT


PRINTING OF TYPES, TARGET LIBRARIES/SESSIONS TABLES: PNDU30

 . Input files:
  - TYPEs file                                       : PAC7TY
    DSN=&INDSV..&ROOT.&ROOT.TY
  - LIBRARIES and SESSIONS file                      : PAC7TS
    DSN=&INDSV..&ROOT.&ROOT.TS
  - VA Pac error message file                        : PAC7AE
    DSN=&INDSVX..&ROOTX.&ROOTX.AE

 . Output file:
  - File contents                                    : PAC7ET
    DSN=&OUT
```

```
//*****************************************************************
//* VA PAC-ENDEVOR 2.5   : UPDATING ENDEVOR TYPES TABLE              *
//*****************************************************************
//$RADP.TYND PROC ROOT=$ROOT,         ROOT OF THE SYSTEM
//         ROOTX=$ROOTX,              ROOT OF 'VA PAC' SYSTEM
//         INDSV='$INDSV',            INDEX OF VSAM SYSTEM FILES
//         INDSVX='$INDSVX',          INDEX OF VA PAC VSAM SYSTEM FILE
//*:       VSAMCAT='$CATU',           USER VSAM CATALOG
//*:       SYSTCAT='$CATV',           SYSTEM VSAM CATALOG
//         STEPLIB='$MODB',           LIBRARY OF LOAD-MODULES
//         OUT=$OUT,                  OUTPUT CLASS
//         UWK=$UWK                   WORK UNIT
//*---------------------------------------------------------------*
//*
//INPUT   EXEC PGM=PTU001
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//CARTE    DD DDNAME=SYSIN,DCB=BLKSIZE=80
//PAC7MB   DD DSN=&&TYNDMB,DISP=(,PASS),
//            UNIT=&UWK,SPACE=(TRK,(1,1),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//*
//PNDU20  EXEC PGM=PNDU20
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7MV   DD DSN=&&TYNDMB,DISP=(OLD,DELETE)
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
//PNDU30  EXEC PGM=PNDU30
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//*:STEPCAT  DD DSN=&VSAMCAT,DISP=SHR
//*:         DD DSN=&SYSTCAT,DISP=SHR
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//PAC7TS   DD DSN=&INDSV..&ROOT.&ROOT.TS,DISP=SHR
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7ET   DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//SYSOUX   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//*
```

7.16. UPND: VA Pac ELEMENTS IMPORT INTO ENDEVOR

UPND: IMPORT OF VA PAC ELEMENTS TO ENDEVOR

The UPND procedure imports generated VA Pac and INFOPAC ELEMENTs into ENDEVOR.

EXECUTION CONDITION

This procedure is prepared by VA Pac GPRT generation-print procedure and completed by the GPND procedure.

SYMBOLICS IN USE

SYMBOLIC	MEANING
&ROOT	SYSTEM ROOT
&ROOTX	VA Pac SYSTEM ROOT
&INDSV	VSAM SYSTEM FILE INDEX
&INDSVX	VA Pac VSAM SYSTEM FILE INDEX
&STEPLIB	LOAD MODULE LIBRARY
&LOADLIB	ENDEVOR LOADLIB
&CONLIB	ENDEVOR CONLIB
&OUT	OUTPUT CLASS

DESCRIPTION OF STEPS

This procedure includes the following steps:

```
  . Recognition of the INFOPAC ELEMENT contents and
    creation of a temporary file which will receive
    the SCL of the generated DELETE(s), if any : IEBGENER

  . Import of VA Pac ELEMENT into ENDEVOR      : NDVRC1

  . SCL building of DELETE VA Pac element      : PNDV20

  . VA Pac element import into ENDEVOR         : NDVRC1

  . SCL building of DELETE VA Pac and INFOPAC
    elements                                   : PNDV20
```

RECOGNITION OF INFOPAC CONTENTS: IEBGENER

```
. Input file:
 - INFOPAC ELEMENT contents                    : SYSUT1

. Output files:
   DSN=&&INFOPAC                               : SYSUT2
 - 'DELETE' SCL temporary file                 : SCLDEL
   (empty when created)
   DSN=&&SCLDEL
```

IMPORT OF VA Pac ELEMENT INTO ENDEVOR: NDVRC1

```
 . Input files:
  - TYPEs file                                    : PAC7TY
    DSN=&INDSV..&ROOT.&ROOT.TY
  - ENDEVOR ADD request of VA Pac ELEMENT         : BSTIPT01

 . Input-output files:
  - Interface work file                           : PAC7PU
    DSN=&INDSV..&ROOT.&ROOT.UP
  - Interface work file                           : PAC7UP
    DSN=&INDSV..&ROOT.&ROOT.UP

 . Output file:
  - Interface journal file                        : PAC7UQ
    DSN=&INDSV..&ROOT.&ROOT.UQ
```

```
SCL BUILDING OF DELETE VA Pac ELEMENT: PNDV20

  . This step is executed only if the return code of the
    preceding step is greater than 11.

  . Input files:
   - SCL generated by the UPND procedure           : SYSUT1
     DSN=user temporary file
   - VA Pac DELETE SCL                             : SYSUT2
     DSN=&&SCLDEL (DISP=MOD)
   - VA Pac error message file                     : PAC7AE
     DSN=&&INDSVX..&ROOTX.ROOTX.AE


IMPORT OF VA Pac ELEMENT INTO ENDEVOR: NDVRC1

  . Input files:
   - TYPEs file                                    : PAC7TY
     DSN=&INDSV..&ROOT.&ROOT.TY
   - ENDEVOR ADD request of INFOPAC ELEMENT        : BSTIPT01

  . Input-output files:
   - Interface work file                           : PAC7PU
     DSN=&INDSV..&ROOT.&ROOT.UP
   - Interface work file                           : PAC7UP
     DSN=&INDSV..&ROOT.&ROOT.UP

  . Output file:
   - Interface journal file                        : PAC7UQ
     DSN=&INDSV..&ROOT.&ROOT.UQ


IMPORT OF INFOPAC ELEMENT INTO ENDEVOR: NDVRC1

  . Input files:
   - TYPE file                                     : PAC7TY
     DSN=&INDSV..&ROOT.&ROOT.TY
   - ENDEVOR ADD request of INFOPAC ELEMENT        : BSTIPT01

  . Input-output files:
   - Interface work file                           : PAC7PU
     DSN=&INDSV..&ROOT.&ROOT.UP
   - Interface work file                           : PAC7UP
     DSN=&INDSV..&ROOT.&ROOT.UP

  . Output file:
   - Interface journal file                        : PAC7UQ
     DSN=&INDSV..&ROOTX.&ROOT.UQ
```

```
SCL BUILDING OF DELETE VA Pac/INFOPAC ELEMENTS: PNDV20

 . This step is executed only if the return codes of the two
   'NDVRC1' steps are greater than 11.

 . Input files:
  - SCL generated by the 'UPND' procedure         : SYSUT1
    DSN=user temporary file
  - VA Pac and INFOPAC DELETE SCL                 : SYSUT2
    DSN=&&SCLDEL (DISP=MOD)
  - VA Pac error messages file                    : PAC7AE
    DSN=&INDSVX..&ROOTX.&ROOTX.AE
```

NOTE:

Before the end of this job, you can perform an IEBGENER to retrieve, in a standard file, the contents of the DSN=&&SCLDEL temporary file which possibly contains the SCL of the generated 'DELETEs'.

This SCL can be executed with the ENDEVOR 'BATCH' option.

Anyway, if the SCL is generated, a problem has occurred in the execution of the 'ADD' of the UPND procedure and an incoherence has appeared in the VA Pac-ENDEVOR system. So it is highly recommended to execute this generated SCL.

```
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : ENDEVOR UPDATE                             *
//*********************************************************************
//$RADP.UPND PROC ROOT=$ROOT,         ROOT OF THE SYSTEM
//         ROOTX=$ROOTX,              ROOT OF 'VA PAC' SYSTEM
//         INDSV='$INDSV',            INDEX OF VSAM SYSTEM FILE
//         INDSVX='$INDSVX',          INDEX OF VA PAC VSAM SYSTEM FILE
//*:       VSAMCAT='$CATU',           USER VSAM CATALOG
//*:       SYSTCAT='$CATV',           SYSTEM VSAM CATALOG
//         STEPLIB='$MODB',           LIBRARY OF LOAD-MODULES
//         LOADLIB='$LDLIB',          ENDEVOR LOADLIB
//         CONLIB='$CONLIB',          ENDEVOR CONLIB
//         OUT=$OUT                   OUTPUT CLASS
//*-------------------------------------------------------------------*
//*
//**********************************************
//* CREATE 'INFOPAC' ELEMENT IN TEMPORARY FILE *
//**********************************************
//*
//STEP01  EXEC PGM=IEBGENER
//SYSUT1   DD DUMMY
//SYSUT2   DD DSN=&&INFOPAC,UNIT=SYSDA,DISP=(NEW,PASS),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80),
//            SPACE=(TRK,(1,1),RLSE)
//SCLDEL   DD DSN=&&SCLDEL,UNIT=SYSDA,DISP=(NEW,PASS),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=80),
//            SPACE=(TRK,(1,1),RLSE)
//SYSIN    DD DUMMY
//SYSPRINT DD SYSOUT=&OUT
//*
//**********************************************
//* ENDEVOR 'ADD' ACTION FOR 'VA PAC' ELEMENT *
//**********************************************
//*
//STEP02  EXEC PGM=NDVRC1,DYNAMNBR=1500,REGION=4096K,PARM='C1BM3000'
//STEPLIB  DD DSN=&LOADLIB,DISP=SHR
//CONLIB   DD DSN=&CONLIB,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK04 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//C1TPDD01 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPDD02 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPLSIN DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//C1TPLSOU DD UNIT=SYSDA,SPACE=(CYL,5)
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7PU   DD DSN=&INDSV..&ROOT.&ROOT.UP,DISP=SHR
//PAC7UP   DD DSN=&INDSV..&ROOT.&ROOT.UP,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&ROOT.UQ,DISP=SHR
//PTRACE   DD SYSOUT=&OUT
//C1PLMSGS DD SYSOUT=&OUT
//C1MSGS1  DD SYSOUT=&OUT
//C1PRINT  DD SYSOUT=&OUT,DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171)
//SYSABEND DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//BSTIPT01 DD DUMMY
//*
//**********************************************
//*     BUILD 'DELETE' SCL VA PAC ELEMENT     *
//*               IF 'ADD' ERROR                *
//**********************************************
//*
//STEP03  EXEC PGM=PNDV20,COND=(11,GE,STEP02)
//*:STEPCAT  DD DSN=&SYSTCAT,DISP=SHR
//*:         DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SYSIN    DD DUMMY
//SYSUT1   DD DUMMY
//SYSUT2   DD DSN=*.STEP01.SCLDEL,DISP=(MOD,PASS)
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
//*
//**********************************************
//* ENDEVOR 'ADD' ACTION FOR 'INFOPAC' ELEMENT *
//**********************************************
//*
//STEP04  EXEC PGM=NDVRC1,DYNAMNBR=1500,REGION=4096K,PARM='C1BM3000',
//        COND=(11,LT,STEP02)
//STEPLIB  DD DSN=&LOADLIB,DISP=SHR
//CONLIB   DD DSN=&CONLIB,DISP=SHR
//SYSPRINT DD SYSOUT=&OUT
//SYSUDUMP DD SYSOUT=&OUT
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//SORTWK04 DD UNIT=SYSDA,SPACE=(CYL,(2,1))
//C1TPDD01 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPDD02 DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=VB,LRECL=260,BLKSIZE=6160)
//C1TPLSIN DD UNIT=SYSDA,SPACE=(CYL,5),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160)
//C1TPLSOU DD UNIT=SYSDA,SPACE=(CYL,5)
//PAC7TY   DD DSN=&INDSV..&ROOT.&ROOT.TY,DISP=SHR
//PAC7PU   DD DSN=&INDSV..&ROOT.&ROOT.UP,DISP=SHR
//PAC7UP   DD DSN=&INDSV..&ROOT.&ROOT.UP,DISP=SHR
//PAC7UQ   DD DSN=&INDSV..&ROOT.&ROOT.UQ,DISP=SHR
//PTRACE   DD SYSOUT=&OUT
//C1PLMSGS DD SYSOUT=&OUT
//C1MSGS1  DD SYSOUT=&OUT
//C1PRINT  DD SYSOUT=&OUT,DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171)
//SYSABEND DD SYSOUT=&OUT
//SYSOUT   DD SYSOUT=&OUT
//INFOPAC  DD DSN=*.STEP01.SYSUT2,DISP=(OLD,DELETE)
//BSTIPT01 DD DUMMY
//*
//**********************************************
//*    BUILD 'DELETE' SCL FOR 'VA PAC' AND    *
//* 'INFOPAC' ELEMENTS IF ERROR(S) IN STEP03   *
//**********************************************
//*
//ISTEP05 IF (STEP02.RC < 12 AND STEP04.RC > 11) THEN
//STEP05  EXEC PGM=PNDV20
//*:STEPCAT  DD DSN=&SYSTCAT,DISP=SHR
//*:         DD DSN=&VSAMCAT,DISP=SHR
//STEPLIB  DD DSN=&STEPLIB,DISP=SHR
//SYSIN    DD DUMMY
//SYSUT1   DD DUMMY
//SYSUT2   DD DSN=*.STEP01.SCLDEL,DISP=(MOD,PASS)
//PAC7AE   DD DSN=&INDSVX..&ROOTX.&ROOTX.AE,DISP=SHR
//SYSOUT   DD SYSOUT=&OUT
//SYSPRINT DD SYSOUT=&OUT
```

```
//ESTEP05  ENDIF
//*
```

8. VA Pac-ENDEVOR COMPONENTS

8.1. OVERALL PRESENTATION

INTRODUCTION

The VA Pac-ENDEVOR interface manages permanent data in on-line (TSO FOREGROUND) or in batch mode.

Two types of resources are then necessary:

. Libraries to store the programs which make up the system and the parameters required for its operations:

A load module library
A parameter library

. Permanent files to materialize the data manipulated by the programs previously defined. These files are divided into two categories:

'System' files which are not modified by the use of VA Pac-ENDEVOR,

'Evolving' files which are manipulated by the user. Their size varies depending on the updates that are performed.

8.2. DSNAME ALLOCATION

DSNAME ALLOCATION

DSNAMEs are allocated according to the following rules:

. The first index level(s) are represented by &INDSV and &INDUV symbolic parameters in case of a VSAM file, or by &INDSN and &INDUN in case of a non-VSAM file. The same value can be allocated to these four parameters.

. The last index level is the file name. It is always six characters long and its composition depends on the specific file nature:

- &ROOT.&ROOT.xx for 'system' files,

- &ROOT.&FILE.xx for 'evolving' files,

&ROOT: two character symbolic parameter which identifies VA Pac-ENDEVOR system,
&FILE: two character numeric symbolic parameter which identifies the specific VA Pac-ENDEVOR database and
'xx': two character logical name specific to the file.

Catalogs are called by two parameters:

. &SYSTCAT which represents the catalog of the VSAM files belonging to the VA Pac-ENDEVOR system,

. &VSAMCAT which represents the catalog of the VSAM files belonging to a VA Pac-ENDEVOR database.

The same value can be allocated to these two parameters.

8.3. LOAD MODULE LIBRARY

LOAD MODULE LIBRARY

.Organization	:	PDS
.DSN	:	(defined during implementation)
.DCB	:	(RECFM=U,BLKSIZE=6144)
.Size	:	40 tracks (3390 disk)

The load module library contains the following programs:

CODE	PROC	COMMENTS
C1UEXT02	(1)	EXIT 2
C1UEXT03	(1)	EXIT 3
PBBTST	CIND	Inter-Environment integrity validation
-	GPND	Parameter valorization
-	MEND	Formatting of VA Pac update trans.
PBBT98	CIND	
-	GPND	
-	MEND	
PNCI10	CEND	Intra-ENDEVOR integrity validation
-	RRND	Existing data retrieval
PNCI20	CEND	
PNDC10	CIND	Inter-Environment integrity validation
PNDC50	-	
PNDC60	-	
PNDC70	-	
PNDC90	-	
PNDJ10	JRND	Retrieval of archived trans. journal
PNDM05	JRND	
-	MEND	Formatting of VA Pac update trans.
-	RPND	'VA Pac' creation (existing retrieval)
PNDM10	JRND	
-	MEND	
-	RPND	
-	CIND	
PNDM50	MEND	
PNDM60	-	
PNDR20	RRND	
PNDR30	-	
PNDR35	-	
PNDR40	RPND	
PNDU10	LSND	Library and session table update
PNDU20	TYND	ENDEVOR TYPE table update
PNDU30	LSND	Table printing
-	RNTD	
-	TYND	

CODE	PROC	COMMENTS
PNDV10	GPND	Parameter value assignment
PNDV20	UPND	Import of VA Pac elements into Endevor
PNINUQ	JRND	
PNINUQ	MEND	
PNPR10	(2)	CONWIN + BSTIPT01 for 'INFOPAC' types
PNPR11	(2)	Copy of seq. update trans. on VSAM file
PNRJ10	JJND	Retrieval of arch. journal 1.6 --> 2.5
PNRPEU	RPEU	Retrieval of User Entities 1.6 --> 2.5
PNRPTS	RTND	Retrieval of 'TS' & 'TY' 8.0.2 --> 2.5
PNTRAN	(2)	Processing of INFOS for TRANSFER action
PNXDAT	INND	List of program dates
PRMSYS	CIND	
-	GPND	
-	MEND	
-	RPND	
PTU001	all	Reception of user input

(1): These programs (EXITS) are not called by any procedure but are used by ENDEVOR.
(see 'ENDEVOR/MVS' in the Computer Associates docu_ mentation).

(2): These programs are called by processors:
'GENERATE - VA Pac and Infopac', 'MOVE - VA Pac',
'DELETE - VA Pac'.

8.4. PARAMETER LIBRARY

PARAMETER LIBRARY: SY

```
.Organization  : PDS
.DSN           : &INDSN..&ROOT.&ROOT.SY
.DCB           : (RECFM=FB,LRECL=80,BLKSIZE=6080)
.Size          : 3 tracks (3390 disk)
```

The VA Pac-ENDEVOR parameter library contains the input of the various utilities used when the VA Pac-ENDEVOR system is operating.

It contains:

. The DEFINE of VSAM files:

The DFxxxxxx name (with xxxxxx: suffix of the specific file) identifies the DELETE / DEFINE of each VSAM file used in VA Pac-ENDEVOR.

Data concerning the catalog used, disks, space, etc. is initialized according to the initial parameterizing defined during installation and can be modified later - if necessary - by the VA Pac-ENDEVOR system administrator.

. Usual VSAM manipulations:

The VERIFYxx and REPROxx names identify the VERIFY and REPRO commands applied to VA Pac-ENDEVOR files.

. The BLDG of 'QU' generation file

The BLxxyyQU name identifies the building command of the 'QU' backup index of 'UQ' VA Pac update file.

. The files to be added to the TSO LOGON

The 'ISPLOGON' name identifies the VSAM files used by the VA Pac-ENDEVOR system. These files must be defined in the user LOGON of the TSO procedure.

. The allocation of the EXITS TRACE file to be added to the connection procedure to ISPF.

The 'ISPF' name identifies the allocation command of the EXITs TRACE file which must be defined in the user's ISPF connection procedure.

. TSO messages of the VA Pac-ENDEVOR system

The 'CIUU$msgsx' name (see the meaning of the '$MSGSX' parameter in the table of parameters) represents the TSO messages of the VA Pac-ENDEVOR system. These messages must be copied in ENDEVOR 'ISPMLIB' library.

. The processors used by the system

- 'PRCSGENI': JCL lines of the 'GENERATE' type processor for INFOPAC type elements.

- 'PRCSGEPP': JCL lines of the 'GENERATE' type processor for VA Pac ELEMENT types (only non-compilable entities).

- 'PRCSGENP': JCL lines of the 'GENERATE' type processor for VA Pac ELEMENT types (only compilable entities).

- 'PRCSDELP': JCL lines of the 'DELETE' type processor for VA Pac ELEMENT types.

- 'PRCSMOVP': JCl lines of the 'MOVE' type processor for VA Pac ELEMENT types.

NOTE: The implementation of these processors is explained in the 'INSTALLATION' chapter, PHASE 1.

NOTE: Any modification of the files must be performed in this parameter library.

9. INSTALLATION

9.1. INTRODUCTION

WARNING

The preparation, installation and operation of the system uses OS and VSAM standard functions. The user is entirely responsible for any adaptation other than those mentioned in PHASE 2 of the JCL generation process.

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

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

INTRODUCTION

The VA Pac ENDEVOR system must be installed using the tape (or cartridge) provided by IBM. You must carefully follow the explanations given in this chapter.

The installation process breaks down into three steps:

. Phase 1: the preparation of the environment on site,

. Phase 2: the generation of an installation and test JCL adapted to the site,

. Phase 3: the installation.

9.2. INSTALLATION TAPE

INSTALLATION TAPE

The installation tape (6250 BPI, standard labels) contains the following files:

RANK	LABEL	LRECL	BLKS	CONTENTS
01	INST.JCL	80	3440	Initial preparation JCL
02	INST.MOD		6144	MM1JCL load module Utility for JCL preparation
03	NDVR.JCL	80	3440	Skeleton JCL
04	NDVR.LOAD		6144	Load modules
05	NDVR.PACVINS	117	9360	VA Pac update transactions for User Entities

9.3. PHASE 1: ENVIRONMENT PREPARATION

PHASE 1: ENVIRONMENT PREPARATION

This phase prepares the environment for the installation of the VA Pac-ENDEVOR system. Referring to the system technical characteristics as described in the first chapters of this manual, in this phase:

. Choose the various prefixes, suffixes and roots to be allocated to the VA Pac-ENDEVOR codes and files,

. Choose the VSAM catalogs and reserve the necessary disk space.

Allocation of processors to the PROCESSOR GROUP

Reminder: The VA Pac-ENDEVOR system is constituted of two types of elements:

. 'VA Pac' type: All VA Pac entities (compilable or not) are stored in ENDEVOR TYPES called 'VA Pac' types. Several VA Pac types can be created.

. 'INFOPAC' type: Each VA Pac type element is associated with an INFOPAC type, which is in its turn associated with this VA Pac type. The INFOPAC type is transparent to the user. It cannot be modified, except on some specified processors.

Three PROCESSOR GROUPs must be defined for the VA Pac-ENDEVOR system. Two of these PROCESSOR GROUPs are allocated to each VA Pac type and one is allocated to each INFOPAC type.

These PROCESSOR GROUPs must be defined in the following way:

1. Non-compilable VA Pac entities (VA Pac type)

PROCESSOR GROUP:	(user-defined name)
GENERATE PROCESSOR:	(5)
DELETE PROCESSOR:	(2)
MOVE PROCESSOR:	(3)

2. Compilable VA Pac entities (VA Pac type)

PROCESSOR GROUP:	(user-defined name)
GENERATE PROCESSOR:	(1)
DELETE PROCESSOR:	(2)
MOVE PROCESSOR:	(3)

3. Compilable or non-compilable VA Pac entities (INFOPAC type)

PROCESSOR GROUP:	(user-defined name)
GENERATE PROCESSOR:	(4)
DELETE PROCESSOR:	*NOPROC*
MOVE PROCESSOR:	*NOPROC*

With:

(1) 'PRCSGENP' member of the 'SY' parameters PDS.

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

NOTE: This JCL must be adapted to the site standards before it is installed in the ENDEVOR system. The PDS name of SYSLIN and that of SYSLMOD (the same) in the 'IEWL' step must correspond to the user load-module library.

(2) 'PRCSDELP' member of the 'SY' parameters PDS.

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

(3) 'PRCSMOVP' member of the 'SY' parameters PDS.

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

(4) 'PRCSGENI' member of the 'SY' parameters PDS.

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

NOTE: The load module library name mentioned on line DD "//IN" of the 'GENOA' step must be adapted (compilable entities).

(5) 'PRCSGEPP' member of the 'SY' parameters PDS.

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

IMPORTANT : All these processors can be used without modification. They can also be customized to meet site's requirements. Proceed with caution and carefully follow the recommendations given in this manual (see Chapter DESCRIPTION OF THE INTERFACE ELEMENTS, Subchapter INTERFACE PROCESSORS).

9.4. PHASE 2: GENERATION OF THE INSTALLATION JCL

PHASE 2: GENERATION OF THE INSTALLATION JCL

This phase generates the JCLs for the system installation procedure. The first file on the installation tape (DSM=INST.JCL, RECFM=FB, LRECL=80) must be read and loaded onto the site editor. This file contains the JCLs of the JOBs to be executed:

1. PACBASE0: Duplication of the installation tape onto a tape provided by the user site (backup of the system).

2. PACBASE1: Copy of the MM1JCL utility into a library of executable modules.

3. PACBASE2: Execution of the MM1JCL utility which will transform the skeleton JCL from the installation tape into a JCL adapted to the site according to the given input values.

INSTALLATION OF THE COMPLETE JCL

The MM1JCL module reads the skeleton JCL file and outputs an adapted JCL. It uses commands which allow the user to:

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

. Parameterize the skeleton in order to obtain a JCL which may be operational with a minimum of modifications,

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

. Add before and/or after lines in order to separate the JCL modules.

This step can be executed as many times as necessary to produce the correct JCL.

MM1JCL provides a list for each JCL module created, with the parameters and the requested variants.

NOTE ON THE PRINTED OUTPUT:
The parameters of the skeleton JCL are formatted: $xxxx. So if, upon execution, MM1JCL encounters a $ character which does not correspond to a defined parameter, it indicates it with the error message: 'UNKNOWN SYMBOLIC PARAMETER'. This message does not stop the execution and should be ignored; it applies to '$' characters in the JCL stream processed by MM1JCL which are not parameters.

Once the JCL is created, it can be retrieved into a text editor. At this point, the actual installation procedure can begin.

It is recommended that as many members as there are JCL modules should be created in the text editor; each module constitutes a logical step in the installation procedure.

CODING OF MM1JCL COMMANDS

```
===SELM mmmm1 mmmm2 ...    .Selection of JCL modules
                            mmmm1=name of JCL module
                            mmmm2=name of JCL module
                            etc.

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

NOTE: On ===PRM lines, a comment can be entered and must
      be preceded by a period.

===BEGMOD    Insertion of lines at the beginning of module
DDDD1
.....        (Lines to be inserted before each module)
DDDDn
===ENDMOD    Insertion of lines at the end of module
FFFF1
.....        (Lines to be inserted after each module)
FFFFn
```

DEFAULT OPTIONS

. VARIANTS (===SELV):

All available variants are selected.
IMPORTANT: The user must delete the lines which correspond to the variants not installed on the site.

. PARAMETERS (===PRM):

The values indicated here are examples. So,the user must set them according to the site's specific needs.

. MODULES (===SELM):

No selection of modules is provided. All modules (corresponding to the variants) are selected.

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

A line: ./ ADD NAME=<JCL module>

This makes it possible to split the JCL into a PDS by IEBUPDTE utility.

Because of this default option, the './' characters found in the JCL modules have been replaced by ':/' so that they are not taken into account in this IEBUPDTE.

Once the JCL is split up, the ':/' characters must be changed back to './' before executing jobs which contain IEBUPDTE.

. VSAM catalogs are entered as comments in the installation JCL:

```
- in the DELETE/DEFINE, as   /*:CATALOG ($VCAT) */
                        or   /*:CATALOG ($SCAT) */

- in the JCL STEPCATs,  as   //*:STEPCAT DD
                     or/and  //*:        DD

- in the procedure parameters as //*:      VSAMCAT='$CATU'
                              or //*:      SYSTCAT='$CATV'
```

If these parameters are not required on the site, the JCL does not need to be changed.

If these parameters are required, the comment lines must be transformed into active lines by:

- Substituting all '//*:' by '//'
- Substituting all '/*:' and '*/' with blanks.

These transformations should be done before splitting the JCL into different members to avoid repetitions.

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

mmmm	Contents	Nature
NDVRLOAD	Loading of load modules	OS JCL
NDVRSY	Loading of parameters PDS	OS JCL
NDVRPROC	Loading of batch procedures	OS JCL
NDVRPREP	Initial allocations and loadings	OS JCL
NDVREXIT	EXIT2 and EXIT3 Link-Edit in an authorized library	OS JCL
NDVRMSGS	Loading of TSO / VA Pac-ENDEVOR user messages in ISPMLIB	OS JCL
NDVRVINS	VA Pac update of the User Entities belonging to VA Pac-ENDEVOR system (1)	OS JCL
NDVRINSL	Installed module compilation dates	OS JCL

(1) This JCL module includes the retrieval 1.6 --> 2.5 (Year 2000)

TABLE OF PARAMETERS

```
===PRM PPPP=pppp              .Comments

+-----------------------------------------------------------+
! Code  !  Meaning                             ! Default    !
! PPPP  !                                      ! pppp       !
!-------+--------------------------------------+------------!
!       ! ON JOB COMMAND LINES                 !            !
!       ! --------------------                 !            !
! PRFJ  ! Jobname prefix (4 characters max.)   ! NDVR       !
! CCPT  ! Job accounting code                  ! <>         !
! CLASJ ! Job execution class                  ! 1          !
! MSGCL ! JCL output class                     ! A          !
!       !                                      !            !
!       ! CODING OF FILE DSNs                  !            !
!       ! -------------------                  !            !
!       ! All permanent VA Pac-ENDEVOR files   !            !
!       ! (except the load module libraries)   !            !
!       ! are coded in the following way:      !            !
!       ! &INDUV.XXNNSS: User VSAM             !            !
!       ! &INDUN.XXNNSS: User non-VSAM         !            !
!       ! &INDSV.XXXXSS: System VSAM           !            !
!       ! &INDSN.XXXXSS: System non-VSAM       !            !
!       !                                      !            !
!       ! IND-- Index of file names:           !            !
! INDSV ! VSAM System                          ! SYS.NDV801!
! INDSN ! non-VSAM System (SAM, PDS)           ! SYS.NDV801!
! INDUV ! VSAM User                            ! USR.NDV801!
! INDUN ! non-VSAM User (SAM)                  ! USR.NDV801!
!       !                                      !            !
!       ! All permanent VA Pac files are       !            !
!       ! coded in the same way.               !            !
!       !                                      !            !
! INDUVX! VSAM User                            ! USR.NDV801!
! INDSVX! VSAM System                          ! SYS.NDV801!
!       !                                      !            !
!       ! XX=ROOT, NN=FILE, SS=file code       !            !
! ROOT  ! Root of the VA Pac-ENDEVOR system    ! D4         !
!       ! (2 characters other than 'XX')       !            !
! FILE  ! VA Pac-ENDEVOR Database number       ! 01         !
+-----------------------------------------------------------+
```

TABLE OF PARAMETERS (cont.)

Code PPPP	Meaning	Default pppp
ROOTX	Root of the VA Pac system (1) (2 characters other than 'XX')	D4
FILEX	VA Pac user Database number (1)	01
	ON DD LINES	
OUT	SYSOUT printing class	A
UTAPE	UNIT of the installation tape, copy of the tape supplied	TAPE
TAPEI	Name of the installation tape, copy of the tape supplied	<>
UWK	UNIT of work files used	SYSDA
UNITO	UNIT of non-VSAM User files	3390
UNITP	UNIT of non-VSAM System files	3390
UNITU	UNIT of VSAM User files	3390
UNITV	UNIT of VSAM System files	3390
VOLP	Volume name of non-VSAM System files	<>
VOLV	Volume name of VSAM System files	<>
VOLO	Volume name of non-VSAM User files	<>
VOLU	Volume name of VSAM User files	<>

TABLE OF PARAMETERS (end)

Code PPPP	Meaning	Default pppp
	OTHER PARAMETERS ----------------	
RADP	Prefix of names of procedures to be installed (4 characters max.)	N801
CATU	VSAM catalog of VA Pac-ENDEVOR User files	
CATV	VSAM catalog of VA Pac-ENDEVOR System files	
MODB	DSNAME of VA Pac-ENDEVOR load module library	LOAD.NDV801
BIBP	DSNAME of the procedure library in which the VA Pac-ENDEVOR procedures are to be catalogued.	SYS1.PROCLIB
BIBT	DSNAME of the sort library	SYS1.SORTLIB
BCOB	DSNAME of Cobol II routine library	SYS1.COB2LIB
CONLIB	DSNAME of the ENDEVOR CONLIB libr.	NDVR.CONLIB
LDLIB	DSNAME of the ENDEVOR LOADLIB libr. (authorized library)	NDVR.LOADLIB
MSGLIB	DSNAME of the ENDEVOR ISPMLIB libr.	NDVR.ISPMLIB
MSGSX	Suffix of the VA Pac-ENDEVOR messages contained in ENDEVOR ISPMLIB library	50
MSGSXH	(Same as MSGSX parameter, but in hexadecimal)	F5F0

(1): 'ROOTX' and 'FILEX' parameters are specific to the VA Pac system. Their values can be identical to or different from their VA Pac-ENDEVOR 'ROOT' and 'FILE' equivalents. It is however recommended to give them the same value - if it is possible. Their values must be identical to the ones defined during the specific installation of VA Pac system, which is independent of that of VA Pac-ENDEVOR.

NOTES:

The '<>' value indicates a required parameter.

The parameter values which contain special characters must be delimited by quotes.

On the ===PRM lines, comments must not be entered beyond column 72. They must be preceded by a period '.'.

```
LINES BEFORE AND AFTER JCL MODULES

===BEGMOD
DDDD1     )
.....     ) Lines to be inserted before each JCL module
DDDDn     )

===ENDMOD
FFFF1     )
.....     ) Lines to be inserted after each JCL module
FFFFn     )
```

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

These lines may be inserted as input in MM1JCL if the default option is not appropriate (see paragraph 'INSTALLATION DEFAULT OPTIONS' in this subchapter).

The utility adds DDDD1 to DDDDn lines before each JCL module and FFFF1 to FFFFn lines after each JCL module.

```
$CO*********** VA PAC-ENDEVOR 2.5   CICS $VV AT $DATE ********** ****
//VA PAC0 JOB (---),'TAPE',CLASS=D,MSGCLASS=A
//ALLOC   EXEC PGM=IEHINITT
//TCGI     DD DISP=SHR,UNIT=(TAPE,,DEFER),VOL=(,RETAIN,SER=$BDECGI)
//TINST    DD DISP=SHR,UNIT=(TAPE,,DEFER),VOL=(,RETAIN,SER=££££££),
//            DCB=DEN=3
//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
//*
//STEP01  EXEC PACCOP,LAB=01,NAME=JCL,INDEX=INST
//STEP02  EXEC PACCOP,LAB=02,NAME=MOD,INDEX=INST
//STEP03  EXEC PACCOP,LAB=03,NAME=JCL,INDEX=NDVR
//STEP04  EXEC PACCOP,LAB=04,NAME=LOAD,INDEX=NDVR
//STEP05  EXEC PACCOP,LAB=05,NAME=PACVINS,INDEX=NDVR
//*
//
```

```
//PACBASE1 JOB (---),'UTI',CLASS=D,MSGCLASS=A
//*
//COPIE   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=TAPE,VOL=(,RETAIN,SER=££££££),
//            DSN=INST.MOD,LABEL=02
//OM       DD DISP=SHR,DSN=£££.£££.£££
//SYSIN    DD *
 C  I=((IM,R)),O=OM
/*
//*
//
```

```
//PACBASE2 JOB (---),'JCL INSTALLATION',CLASS=D,MSGCLASS=A
//*
//            DISP=(,CATLG),
//            SPACE=(TRK,(10,10,10)),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080)
//*
//MM1JCL  EXEC PGM=MM1JCL
//STEPLIB  DD DISP=SHR,DSN=£££.£££.£££
//SYSOUT   DD SYSOUT=A
//SYSUT1   DD DSN=NDVR.JCL,DISP=OLD,
//            UNIT=TAPE,VOL=(,RETAIN,SER=££££££),LABEL=03
//SYSUT3   DD UNIT=SYSDA,SPACE=(CYL,(5,2)),DCB=BLKSIZE=4160
//SYSUT4   DD UNIT=SYSDA,SPACE=(CYL,(5,2)),DCB=BLKSIZE=4160
//SYSUT8   DD DUMMY,DCB=BLKSIZE=1370
//SYSUT9   DD DUMMY,DCB=BLKSIZE=1370
//***************************************************************
//*  --- CREATION OF INSTALLATION JCL THROUGH 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 THE APPROPRIATE VALUES TO THE INSTALLATION PARAMETERS
//* AND BY SPECIFYING (IF NECESSARY) THE LINES TO BE ADDED AT
//*   THE BEGINNING OR AT THE END OF EACH JCL MODULE.
//***************************************************************
//SYSPRM   DD *
 *                                                             A
//SYSUT2   DD DSN=&&PACBASE2,DISP=(,PASS,DELETE),UNIT=£££££,
//            SPACE=(TRK,(10,10),RLSE),
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080)
//SYSIN DD *
===PRM PRFJ=NDVR              .JOB NAMES PREFIXES (4 CHARACTERS)
===PRM CCPT=0>                .JOB ACCOUNTING CODES (JOB CARDS)
===PRM CLASSJ=1               .JOB EXECUTION CLASS (JOB CARDS)
===PRM MSGCL=A                .JCL OUTPUT CLASS (MSGCLASS)
===PRM UTAPE=TAPE             .TAPE UNIT
===PRM TAPEI=0>               .NAME OF THE INSTALLATION TAPE
===PRM OUT=A                  .JOB SYSOUT CLASS
===PRM INDSV='SYS.NDV801'     .VSAM FILES INDEXES
===PRM INDSVX='SYS.NDV801'    .VA PAC SYSTEM VSAM FILES INDEXES
===PRM INDUV='USR.NDV801'     .USER VSAM FILES INDEXES
===PRM INDUVX='USR.NDV801'    .VA PAC USER VSAM FILES INDEXES
===PRM INDSN='SYS.NDV801'     .SYSTEM NON VSAM FILES INDEXES
===PRM INDUN='USR.NDV801'     .USER NON VSAM FILES INDEXES
===PRM ROOT='D4'              .ROOT OF SYSTEM (2 CHARACTERS)
===PRM ROOTX='D4'             .ROOT OF VA PAC SYSTEM (2 CHARACTER
===PRM FILE='01'              .NUMBER OF USER'S DATABASE
===PRM FILEX='01'             .NUMBER OF USER'S VA PAC DATABASE
===PRM RADP='N801'            .PREFIX OF CATALOGUED PROCEDURE NAME
===PRM VOLV=0>                .VOLUME OF SYSTEM VSAM FILES
===PRM VOLU=0>                .VOLUME OF USER VSAM FILES
===PRM CATV=0>                .CATALOG OF SYSTEM VSAM FILES
===PRM CATU=0>                .CATALOG OF USER VSAM FILES
===PRM UWK=SYSDA              .WORK UNIT
===PRM UNITP=3390             .NON VSAM SYSTEM FILES UNIT
===PRM UNITO=3390             .NON USER VSAM FILES UNIT
===PRM UNITV=3390             .VSAM SYSTEM FILES UNIT
===PRM UNITU=3390             .VSAM USER FILES UNIT
===PRM VOLP=0>                .NON VSAM SYSTEM FILES VOLUME
===PRM VOLO=0>                .NON VSAM USER FILES VOLUME
===PRM MODB='LOAD.NDV801'     .LOAD-MODULES LIBRARY
===PRM CONLIB='NDVR.CONLIB'   .ENDEVOR CONLIB
===PRM LDLIB='NDVR.LOADLIB'   .ENDEVOR LOADLIB (AUTHORIZED LIB.)
```

```
===PRM CONLIB='NDVR.CONLIB'   .ENDEVOR CONLIB
===PRM LDLIB='NDVR.LOADLIB'   .ENDEVOR LOADLIB (AUTHORIZED LIB.)
===PRM MSGLIB='NDVR.ISPMLIB'  .ENDEVOR ISPMLIB
===PRM MSGSX='50'             .SUFFIX MSGS ENDEVOR ISPMLIB
00 -> 99
===PRM MSGSXH='F5F0'          .SAME AS ===PRM MSGSX BUT IN HEXA
===PRM BIBP='SYS1.PROCLIB'    .PROCEDURE LIBRARY
===PRM BIBT='SYS1.SORTLIB'    .SORT LIBRARY
===PRM DCOB='SYS1.COB2LIB'    .COBOL II ROUTINES LIBRARY
===BEGMOD
./ ADD NAME=$MODULE
/*
//*
//ET020   EXEC PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD SYSOUT=$S
//SYSUT1   DD DSN=*.ET010.DD1,DISP=SHR
//SYSUT2   DD DSN=*.ET010.DD1,DISP=SHR
//SYSIN    DD DSN=&&VA PAC2,DISP=(OLD,DELETE)
//
```

9.5. PHASE 3: INSTALLATION PROCESS

PHASE 3: INSTALLATION PROCESS

The JCL obtained in PHASE 2 is broken down into 8 JOBs (each corresponding to a JCL module) which constitute the VA Pac-ENDEVOR system installation.

1. Loading of load modules

2. Loading of the system parameters' PDS

3. Loading of batch operation procedures

4. Initial preparation of files

5. Loading of EXITs in an authorized library

6. Loading of VA Pac-ENDEVOR / TSO messages into the site ENDEVOR library

7. Creation in VA Pac of the VA Pac-ENDEVOR system user entities

8. List of installed progams.

1. LOADING OF LOAD MODULES

This loading is constituted of a '$PRFJ.LOAD' JOB, which includes the following steps:

```
ET010  : IDCAMS
         DELETE of VA Pac-ENDEVOR system  load-module lib.

ET020  : IEFBR14
         Allocation of the VA Pac-ENDEVOR system load-module
         lib.

ET030  : IEBCOPY
         Loading of load modules

ET040  : IMASPZAP
         EXIT2 ZAP. It concerns the member name of the
         VA Pac-ENDEVOR messages 'ISPMLIB' library.
         It must be executed only if the value chosen for
         the $MSGSXH parameter is other than 50.
```

2. LOADING OF THE SYSTEM PARAMETERS' PDS

This loading is constituted of a '$PRFJ.SY' job, which includes the following steps:

```
ET010   : IEHPROGM
          DELETE of the SY parameters' PDS

ET020   : IEFBR14
          Allocation of the parameters' PDS

ET030   : IEBUPDTE
```

- Input dedicated to SORT utilities

- Definitions (DELETE/DEFINE), verifications (VERIFY) and REPRO of VSAM files

- BLxxyyQU member containing the building command of the 'QU' backup index of 'UQ' VA Pac update file.

- 'ISPLOGON' member containing the 3 VSAM files used by the VA Pac-ENDEVOR system. They must be defined in the user LOGON of the TSO procedure.

- 'ISPF' member containing the allocation of the Exits trace file. Since its contents are specific to each user, it must be copied in the ISPF connection procedure.

- 'CIUU$msgsx' member (see the meaning of '$MSGSX' parameter in the table of parameters). It contains the TSO messages of the VA Pac-ENDEVOR system and is copied in the ENDEVOR 'ISPMLIB' library.

- 'PRCSGENI' member: JCL of the 'GENERATE' type processor for INFOPAC-type ELEMENTS (see PHASE 1)

- 'PRCSGENP' member: JCL of the 'GENERATE' type processor for VA Pac-type ELEMENTS with compilation (see PHASE 1)

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

- 'PRCSDELP' member: JCL of the 'DELETE' type processor for VA Pac-type ELEMENTS (see PHASE 1)

- 'PRCSMOVP' member: JCL of the 'MOVE' type processor for VA Pac-type ELEMENTS (see PHASE 1)

3. LOADING OF OPERATIONS PROCEDURES

This loading is constituted of the '$PRFJ.PROC' JOB which executes, via an IEBUPDTE, the cataloging of all batch operation procedures in PROCLIB.

Each procedure is a member coded '$radp.NNNN', where '$radp' is the root chosen during the JCL generation and NNNN the standard name of the procedure. Procedures are described in other chapters of this manual.

4. INITIAL PREPARATION OF FILES

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

```
ET010  : IDCAMS

         Allocation of tables:

         - libraries / sessions ...............'TS'
         - ENDEVOR types of VA Pac
           and INFOPAC elements ...............'TY'

         Allocation of work files:

         - VA Pac context of elements
           in ENDEVOR (update preparation) ....'UP'

         - VA Pac + ENDEVOR context of elements
           in ENDEVOR (update preparation) ....'UQ'

ET020  : PNINUQ
         Loading of 'UQ' RRDS file

ET030  : IDCAMS
         Delete of model DSCB

ET040  : IDCAMS
         Data-group index BLDG and initialization of 'QU'
         file (backup of VA Pac update 'UQ' file)

ET050  : IEBGENER
         Loading of 'QU' file

ET060  : IDCAMS
         Initialization of 'UP' file

ET070  : IDCAMS
         Initialization of 'TS' file

ET080  : IDCAMS
```

5. LINK-EDIT OF EXITS IN AN AUTHORIZED LIBRARY

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

The '$PRFJ.EXT' JOB includes the following steps:

```
ET010 : IEWL  : EXIT2 link

ET020 : IEWL  : EXIT3 link
```

NOTE: After this job, the user must define EXITs in ENDEVOR by adding them via the àC1UEXIT macro structure lines of the 'BC1JXITS' ENDEVOR JCL.

6. LOADING OF VA Pac-ENDEVOR / TSO MESSAGES

The '$PRFJ.MSG' JOB loads the TSO user messages of the VA Pac-ENDEVOR system into ENDEVOR 'ISPMLIB' message library from the 'CIUU$MSGSX' member present in the PDS of 'SY' parameters. (See the meaning and the possible values of the '$MSGSX' parameter in the table of parameters).

This job includes the following step:

```
ET010  : IEBCOPY  : Loading of the 'CIUU$MSGSX' in
                    ENDEVOR 'ISPMLIB' library

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

7. VA Pac DATABASE UPDATE

This JOB creates, in VA Pac database, the user input used in the VA Pac entities called in an ENDEVOR context.

It also retrieves the archived journal and the User Entity Occurrences already present in VA Pac, only for users who switch from 1.6 to 2.5.

```
ET010  : ????VINS
         Update of VA Pac User Entities
```

The pre-defined User Entities of VA Pac-ENDEVOR Interface

'.NDENV' User Entity enables you to define the default import environments in Endevor of the VA Pac generated objects, upon the generation.

'.NDVLM' User Entity stores the data of the ENDEVOR contexts where VA Pac generated objects are managed.

'.NDVRL' relationship links the user entity occurrence and the VA Pac entity itself.

They are described as batch update transactions which may be used in VA Pac UPDT procedure.

They must be present in the libraries where these ENDEVOR contexts are managed. It is recommended that the '.NDVLM' user entity and the '.NDVRL' relationship should be created in the highest library of the VA Pac database hierarchy or in the central library by the administrator interface. These entity occurrences are then be locked and cannot be modified by other users.

If the administrator wants to manage these contexts in frozen sessions, the operation must be repeated as many times as there are frozen sessions used.

Steps to be executed only for users switching from release 1.6 to 2.5.

ET020 : $RADP.JJND (Retrieval of archived journal 1.6)

ET030 : ????SAVE (Backup of VA Pac Database)

ET040 : $RADP.REND (Retrieval of VA Pac/ENDEVOR UEOs)

8. LIST OF PROGRAMS INSTALLED

===MOD PACINSL

This list can be obtained by the '$PRFJ.INSL' JOB which executes the '$RADP.INND' procedure.

This step is not compulsory but is recommended. It contains the list of the VA Pac-ENDEVOR load modules and their compilation date.

This list must be kept in case abnormal conditions are detected in VA Pac operations.

```
===MOD NDVRLOAD
//$PRFJ.LOAD JOB ($CCPT),'LOAD-MODULES',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//**************************************************************
//*      LOADING OF LOAD MODULES PDS                           *
//**************************************************************
//*------------------------------------------------------------*
//*             WARNING                                        *
//*              ------                                        *
//*IT IS NOT NECESSARY TO EXECUTE STEP ET040 IF THE NAME SUFFIX*
//*OF THE MEMBER WHICH CONTAINS VA PAC USER MESSAGES FROM      *
//*ENDEVOR ISPMLIB LIBRARY REMAINS '50'(CF. PARAMETER 'MSGSX').*
//*HOWEVER IT MUST BE EXECUTED IF THE SUFFIX IS MODIFIED. IN   *
//*THAT CASE, YOU MUST REPLACE PARAMETER MSGSXH WITH THE VALUE *
//*CORRESPONDING TO THIS NEW SUFFIX AND CODE IT IN HEXADECIMAL.*
//*EX: IF THE NEW SUFFIX IS: MSGSX='89', THE PARAMETER MUST BE *
//*CODED: MSGSXH='F8F9'.                                       *
//*------------------------------------------------------------*
//ET010   EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
  DELETE ($MODB)
//*
//ET020   EXEC PGM=IEFBR14
//DDA      DD DSN=$MODB,DISP=(,CATLG,DELETE),UNIT=$UNITP,
//            VOL=SER=$VOLP,
//            SPACE=(TRK,(40,10,10)),
//            DCB=(RECFM=U,BLKSIZE=6144)
//*
//ET030   EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=$OUT
//SYSUT3   DD UNIT=$UWK,SPACE=(TRK,20)
//SYSUT4   DD UNIT=$UWK,SPACE=(TRK,20)
//INB      DD DSN=NDVR.LOAD,DISP=OLD,UNIT=$UTAPE,LABEL=(04,SL),
//            VOL=(,RETAIN,SER=$TAPEI)
//OUTB     DD DSN=$MODB,DISP=SHR
//SYSIN    DD *
  COPY INDD=((INB,R)),OUTDD=OUTB
  S M=C1UEXT02
  S M=C1UEXT03
  S M=PACMODGE
  S M=PBBTST
  S M=PBBT98
  S M=PNCI10
  S M=PNCI20
  S M=PNDC10
  S M=PNDC50
  S M=PNDC60
  S M=PNDC70
  S M=PNDC90
  S M=PNDJ10
  S M=PNDM05
  S M=PNDM10
  S M=PNDM50
  S M=PNDM60
  S M=PNDR20
  S M=PNDR30
  S M=PNDR35
  S M=PNDR40
  S M=PNDU10
  S M=PNDU20
  S M=PNDU30
  S M=PNDV10
  S M=PNDV20
  S M=PNINUQ
  S M=PNPR10
  S M=PNPR11
  S M=PNRJ10
  S M=PNRPEU
  S M=PNRPTS
  S M=PNTRAN
  S M=PNXDAT
  S M=PRMSYS
  S M=PTU001
/*
//ET040   EXEC PGM=IMASPZAP
//SYSPRINT DD SYSOUT=$OUT
//SYSLIB   DD DSN=$MODB,DISP=SHR
 NAME C1UEXT02 C1UEXT02
 VER 0303 F5F0
 REP 0303 $MSGSXH
//*
//
```

```
===MOD NDVRSY
//$PRFJ.SY JOB ($CCPT),'LOAD PARAM.',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*
//*************************************************************
//* LOADING OF VA PAC-ENDEVOR PARAMETER IN 'SY' PDS            *
//*************************************************************
//*
//*    *---------------------------------------------------*
//*    *              I M P O R T A N T                     *
//*    *                 -----------                        *
//*    *                                                    *
//*    *  BEFORE EXECUTING THIS JOB, REPLACE ALL            *
//*    *  ':/' WITH './' VIA THE EDITOR.                    *
//*    *---------------------------------------------------*
//*
//*
//ET010   EXEC PGM=IDCAMS
//*    *          ':/' BY './' VIA THE EDITOR.              *
//*    *---------------------------------------------------*
//*
//*
//ET020   EXEC PGM=IEFBR14
//DDA      DD DSN=$INDSN..$ROOT.$ROOT.SY,DISP=(,CATLG,DELETE),
//            UNIT=$UNITP,
//            VOL=SER=$VOLP,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(03,02,04))
//*
//ET030   EXEC PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD SYSOUT=$OUT
//SYSUT1   DD DSN=$INDSN..$ROOT.$ROOT.SY,DISP=SHR
//SYSUT2   DD DSN=$INDSN..$ROOT.$ROOT.SY,DISP=SHR
//SYSIN    DD DATA,DLM='$%'
:/        ADD NAME=DF$ROOT.$ROOT.TS
 DELETE ($INDSV..$ROOT.$ROOT.TS) CLUSTER
 DEFINE CLUSTER ( NAME ($INDSV..$ROOT.$ROOT.TS)     -
                  SHR (2 3)       KEYS (14 1)       -
                  REC  (100)        -
                  VOL ($VOLU)       -
                  RECSZ (080,080) RUS )             -
        INDEX   ( NAME ($INDSV..$ROOT.$ROOT.TS.I)   -
                  CISZ (0512) )                     -
        DATA    ( NAME ($INDSV..$ROOT.$ROOT.TS.D)   -
                  FSPC (10,5) SPEED                 -
                  CISZ (4096) )  /*: CATALOG ($CATU) */
:/        ADD NAME=DF$ROOT.$ROOT.TY
 DELETE ($INDSV..$ROOT.$ROOT.TY) CLUSTER
 DEFINE CLUSTER ( NAME ($INDSV..$ROOT.$ROOT.TY)     -
                  SHR (2,3)       KEYS (8,1)        -
                  REC  (150)        -
                  VOL ($VOLU)       -
                  RECSZ (080,080) RUS )             -
        INDEX   ( NAME ($INDSV..$ROOT.$ROOT.TY.I)   -
                  CISZ (4096) )                     -
        DATA    ( NAME ($INDSV..$ROOT.$ROOT.TY.D)   -
                  FSPC (10,5)                       -
                  CISZ (4096) )  /*: CATALOG ($CATU) */
:/        ADD NAME=DF$ROOT.$ROOT.UP
 DELETE ($INDSV..$ROOT.$ROOT.UP) CLUSTER
 DEFINE CLUSTER ( NAME ($INDSV..$ROOT.$ROOT.UP)     -
                  SHR (2,3)       KEYS (43,0)       -
                  REC  (10000)      -
                  VOL ($VOLU)       -
                  RECSZ (112,112) RUS )             -
        INDEX   ( NAME ($INDSV..$ROOT.$ROOT.UP.I)   -
                  CISZ (4096) )                     -
        DATA    ( NAME ($INDSV..$ROOT.$ROOT.UP.D)   -
                  FSPC (10,5)                       -
                  CISZ (4096) )  /*: CATALOG ($CATU) */
:/        ADD NAME=DF$ROOT.$ROOT.UQ
 DELETE ($INDSV..$ROOT.$ROOT.UQ) CLUSTER
 DEFINE CLUSTER ( NAME ($INDSV..$ROOT.$ROOT.UQ)     -
                  SHR (2,3)       NUMBERED          -
                  REC  (10000)      -
                  VOL ($VOLU)       -
                  RECSZ (170,170) RUS )             -
        DATA    ( NAME ($INDSV..$ROOT.$ROOT.UQ.D)   -
                  CISZ (4096) )  /*: CATALOG ($CATU) */
:/        ADD NAME=DF$ROOT.$FILE.UU
 DELETE ($INDSV..$ROOT.$FILE.UU) CLUSTER
 DEFINE CLUSTER ( NAME ($INDSV..$ROOT.$FILE.UU)     -
                  SHR (2,3)       NUMBERED          -
                  REC  (10000)      -
                  VOL ($VOLU)       -
                  RECSZ (170,170) RUS )             -
        DATA    ( NAME ($INDSV..$ROOT.$FILE.UU.D)   -
                  CISZ (4096) )  /*: CATALOG ($CATU) */
:/ ADD NAME=DFSYSPAF
 DELETE ($INDUV..SYSPAF.&USER) CLUSTER
 DEFINE CLUSTER ( NAME ($INDUV..SYSPAF.&USER)       -
                  SHR (2 3)  RUS  KEYS(12 0)        -
                  CYL (5 1)            -
                  VOL ($VOLU)          -
                  RECSZ (170 468) )                 -
        INDEX   ( NAME ($INDUV..SYSPAF.&USER.I)     -
                  CISZ (512) )                      -
        DATA    ( NAME ($INDUV..SYSPAF.&USER.D)     -
                  FSPC (10 5) SPEED                 -
                  CISZ (4096) )  /*: CATALOG ($CATU) */
:/ ADD NAME=DLSYSPAF
 DELETE ($INDUV..SYSPAF.&USER) CLUSTER
:/ ADD NAME=DL$ROOT.$FILE.UU
 DELETE ($INDSV..$ROOT.$FILE.UU) CLUSTER
:/ ADD NAME=PROCLSR
 NOBLPOOL
:/ ADD NAME=VERIFUP
 VERIFY FILE (DDUP)
:/ ADD NAME=VERIFUQ
 VERIFY FILE (DDUQ)
:/ ADD NAME=VERIFAE
 VERIFY FILE (DDAE)
:/ ADD NAME=REPROTS
 REPRO INFILE (INTS) OUTFILE (OUTTS)
:/ ADD NAME=BL$ROOT.$ROOT.QU
   DEFINE GENERATIONDATAGROUP -
          (NAME ($INDUN..$ROOT.$ROOT.QU) LIMIT (3) SCR)
:/ ADD NAME=ISPLOGON
//*
//*
//* THE FOLLOWING THREE FILES MUST BE DECLARED
//* INTO THE USER TSO LOGON PROCEDURE.
//*
  .
  .
//PAC7TY   DD DSN=$INDSV..$ROOT.$ROOT.TY,DISP=SHR
//PAC7UP   DD DSN=$INDSV..$ROOT.$ROOT.UP,DISP=SHR
//PAC7UQ   DD DSN=$INDSV..$ROOT.$ROOT.UQ,DISP=SHR
```

```
  .
  .
//
:/ ADD NAME=ISPF
//*
//* THE ALLOCATION OF THE EXITS TRACE FILE MUST BE
//* DECLARED IN THE USER ISPF CONNECTION PROCEDURE.
//*
//*
CONTROL MAIN NOMSG
SET &PTRACE = &STR('$INDSN..&SYSUID..PTRACE')
FREE  FI(PTRACE)
ALLOC FI(PTRACE) SHR REU DA(&PTRACE)
IF &LASTCC > 0 THEN DO
   FREE ATTRLIST(DCBTRACE)
   ATTR DCBTRACE  RECFM(F B) LRECL(120) BLKSIZE(12000) DSORG(PS)
   ALLOC FI(PTRACE) DA(&PTRACE) SPACE(20,10) TRACKS USING(DCBTRACE)
   FREE  FI(PTRACE)
   ALLOC FI(PTRACE) SHR REU DA(&PTRACE)
END
:/ ADD NAME=CIUU$MSGSX
CIUU$MSGSX.1E     'INVALID TYPE (INFOPAC)  ' .ALARM = YES .HELP = *
'''INFOPAC'' TYPE ELEMENTS ARE NOT ALLOWED FOR UPDATING
CIUU$MSGSX.2E     'INVALID ACTION (PACBASE)' .ALARM = YES .HELP = *
'ACTIONS ''ADD & UPDATE'' ARE NOT ALLOWED FOR PACBASE OUT OF PROCESSOR
CIUU$MSGSX.3E     'INVALID ACTION (PACBASE)' .ALARM = YES .HELP = *
'ONLY ACTIONS ''ADD & UPDATE'' ARE ALLOWED FOR PACBASE THROUGH PROCESSO
:/ ADD NAME=PRCSGENI
//*
//*-------------------------------------------------------------------*
//*  G E N E R A T E   P R O C E S S O R              (INFOPAC TYPE)
//*-------------------------------------------------------------------*
//*
//GEN00   EXEC PGM=BC1PDSIN,MAXRC=0,
//        EXECIF=(&C1COMMENT(36,5),NE,'*RND*')
//GEN02A   DD DSN=&&SYSOUT1,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//GEN02B   DD DSN=&&SYSDMP1,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//GEN03A   DD DSN=&&SYSOUT2,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//GEN04A   DD DSN=&&SYSOUT3,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//GEN04B   DD DSN=&&SYSDMP3,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//*
//GEN01   EXEC PGM=PNTRAN,
//        EXECIF=(&C1COMMENT(36,5),NE,'*RND*'),
//             PARM=(&C1ACTION(1,8,_),&C1ENVMNT(1,8,_),
//             &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//             &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_)I)
//STEPLIB  DD DSN=$MODB,DISP=SHR
//PAC7PU   DD DSN=$INDSV..$ROOT.$ROOT.UP,DISP=SHR
//PAC7TR   DD DSN=&&PAC7TR,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=58,BLKSIZE=58),
//            SPACE=(TRK,(01,01),RLSE)
//*
//GEN02   EXEC PGM=PNPR10,MAXRC=0,
//        EXECIF=(&C1COMMENT(36,5),NE,'*RND*'),
//             PARM=(&C1ACTION(1,8,_),&C1ENVMNT(1,8,_),
//             &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//             &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_))
//STEPLIB  DD DSN=$MODB,DISP=SHR
//SYSIN    DD DSN=&&PAC7TR,DISP=(OLD,DELETE)
//PAC7TZ   DD DSN=$INDSV..ROOT.$ROOT.TY,DISP=SHR
//PAC7BS   DD DUMMY,DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080)
//PAC7CW   DD DSN=&&CONWIN,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(01,01),RLSE)
//PAC7EV   DD DSN=&&PAC7EV,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=126,BLKSIZE=12600),
//            SPACE=(TRK,(01,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT1,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP1,DISP=(MOD,PASS)
//*
//*---------------------------------------------------*
//*  PRINTING OF THE CONTENTS OF 'INFOPAC' FROM ORIGIN*
//*  STAGE INTO 'PAC7IP' SEQUENTIAL FILE              *
//*---------------------------------------------------*
//*
//GEN03   EXEC PGM=CONWRITE,MAXRC=0,
//        EXECIF=(&C1COMMENT(36,5),NE,'*RND*')
//CONWIN   DD DSN=&&CONWIN,DISP=(OLD,DELETE)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(02,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT2,DISP=(MOD,PASS)
//*
//*---------------------------------------------------*
//*  COPY OF 'PAC7IP' SEQUENTIAL  IN A 'PAC7UP' VSAM  *
//*  DEFINED UNDER TSO WITH ANOTHER DDNAME FOR EXIT3  *
//*---------------------------------------------------*
//*
//GEN04   EXEC PGM=PNPR11,COND=(00,NE,GEN02),
//        EXECIF=(&C1COMMENT(36,5),NE,'*RND*')
//STEPLIB  DD DSN=$MODB,DISP=SHR
//PAC7EV   DD DSN=&&PAC7EV,DISP=(OLD,PASS)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(OLD,PASS)
//PAC7PU   DD DSN=$INDSV..$ROOT.$ROOT.UP,DISP=SHR
//SYSOUT   DD DSN=&&SYSOUT3,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP3,DISP=(MOD,PASS)
//*
//*---------------------------------------------------*
//*           PRINT SYSOUTS, SYSUDUMP, ...            *
//*---------------------------------------------------*
//*
//GEN05   EXEC PGM=CONLIST,PARM=PRINT,COND=EVEN,MAXRC=0,
//        EXECIF=((&C1COMMENT(36,5),NE,'*IBM*'),
//               (&C1COMMENT(36,5),NE,'*RND*'))
//C1BANNER DD DSN=&&BANNER,DISP=(,PASS,DELETE),UNIT=$UWK,
//            SPACE=(TRK,(1,1),RLSE)
//C1PRINT  DD SYSOUT=*,DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171,DSORG=PS)
//LIST01   DD DSN=&&SYSOUT1,DISP=(OLD,DELETE)
//LIST02   DD DSN=&&SYSDMP1,DISP=(OLD,DELETE)
//LIST03   DD DSN=&&SYSOUT2,DISP=(OLD,DELETE)
//LIST04   DD DSN=&&SYSOUT3,DISP=(OLD,DELETE)
//LIST05   DD DSN=&&SYSDMP3,DISP=(OLD,DELETE)
//*
:/ ADD NAME=PRCSGEPP
//*
//*-------------------------------------------------------------------*
//*   G E N E R A T E   P R O C E S S O R             (VA PAC TYPE)
//*-------------------------------------------------------------------*
```

```
//*
//*
//TRS01   EXEC PGM=BC1PDSIN,MAXRC=0,
//        EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//               (&C1ACTION(1,4),NE,'MOVE'),
//               (&C1ACTION(1,6),NE,'UPDATE'))
//TRS03A   DD DSN=&&SYSOUT1,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//TRS03B   DD DSN=&&SYSDMP1,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//TRS04A   DD DSN=&&SYSOUT2,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//TRS05A   DD DSN=&&SYSOUT3,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//TRS05B   DD DSN=&&SYSDMP3,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//*
//TRS02   EXEC PGM=PNTRAN,
//        EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//               (&C1ACTION(1,4),NE,'MOVE'),
//               (&C1ACTION(1,6),NE,'UPDATE')),
//             PARM=(&C1ACTION(1,8,_),&C1ENVMNT(1,8,_),
//             &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//             &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_)G)
//STEPLIB  DD DSN=$MODB,DISP=SHR
//PAC7PU   DD DSN=$INDSV..$ROOT.$ROOT.UP,DISP=SHR
//PAC7TR   DD DSN=&&PAC7TR,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=58,BLKSIZE=58),
//            SPACE=(TRK,(01,01),RLSE)
//*
//TRS03   EXEC PGM=PNPR10,
//        EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//               (&C1ACTION(1,4),NE,'MOVE'),
//               (&C1ACTION(1,6),NE,'UPDATE')),
//             PARM=(&C1ACTION(1,8,_),&C1ENVMNT(1,8,_),
//             &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//             &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_))
//STEPLIB  DD DSN=$MODB,DISP=SHR
//SYSIN    DD DSN=&&PAC7TR,DISP=(OLD,DELETE)
//PAC7TZ   DD DSN=$INDSV..$ROOT.$ROOT.TY,DISP=SHR
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(01,01),RLSE)
//PAC7CW   DD DSN=&&CONWIN,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(01,01),RLSE)
//PAC7EV   DD DSN=&&PAC7EV,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=126,BLKSIZE=12600),
//            SPACE=(TRK,(01,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT1,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP1,DISP=(MOD,PASS)
//*
//*---------------------------------------------------*
//*  PRINTING OF 'INFOPAC' CONTENTS FROM ORIGIN STAGE *
//*  INTO 'PAC7IP' SEQUENTIAL FILE                    *
//*---------------------------------------------------*
//*
//TRS04   EXEC PGM=CONWRITE,MAXRC=0,
//        EXECIF=(&C1ACTION(1,8),EQ,'GENERATE')
```

```
//CONWIN   DD DSN=&&CONWIN,DISP=(OLD,DELETE)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(02,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT2,DISP=(MOD,PASS)
//*
//*---------------------------------------------------*
//*  COPY OF 'PAC7IP' SEQUENTIAL IN PAC7UP SEQUENTIAL *
//*  DEFINED UNDER TSO WITH ANOTHER DDNAME FOR EXIT3  *
//*---------------------------------------------------*
//*
//TRS05   EXEC PGM=PNPR11,COND=(00,NE,TRS03),
//        EXECIF=(&C1ACTION(1,8),EQ,'GENERATE')
//STEPLIB  DD DSN=$MODB,DISP=SHR
//PAC7EV   DD DSN=&&PAC7EV,DISP=(OLD,PASS)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(OLD,PASS)
//PAC7PU   DD DSN=$INDSV..$ROOT.$ROOT.UP,DISP=SHR
//SYSOUT   DD DSN=&&SYSOUT3,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP3,DISP=(MOD,PASS)
//*
//*---------------------------------------------------*
//*         TRANSFER OF 'INFOPAC' ELEMENT             *
//*---------------------------------------------------*
//*
//TRS06   EXEC PGM=C1BM3000,PARM=(PAC7BS,CXMSGSX),
//        EXECIF=(&C1ACTION(1,8),EQ,'TRANSFER')
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(OLD,PASS)
//CXMSGSX  DD SYSOUT=*
//*
//*---------------------------------------------------*
//*           PRINT SYSOUTS, SYSUDUMP, ...            *
//*---------------------------------------------------*
//*
//TRS07   EXEC PGM=CONLIST,PARM=PRINT,COND=EVEN,MAXRC=0,
//        EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//               (&C1ACTION(1,4),NE,'MOVE'),
//               (&C1ACTION(1,6),NE,'UPDATE'))
//C1BANNER DD DSN=&&BANNER,DISP=(,PASS,DELETE),UNIT=$UWK,
//            SPACE=(TRK,(1,1),RLSE)
//C1PRINT  DD SYSOUT=*,DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171,DSORG=PS)
//LIST01   DD DSN=&&SYSOUT1,DISP=(OLD,DELETE)
//LIST02   DD DSN=&&SYSDMP1,DISP=(OLD,DELETE)
//LIST03   DD DSN=&&SYSOUT2,DISP=(OLD,DELETE)
//LIST04   DD DSN=&&SYSOUT3,DISP=(OLD,DELETE)
//LIST05   DD DSN=&&SYSDMP3,DISP=(OLD,DELETE)
//*
//
:/ ADD NAME=PRCSGENP
//*
//*-------------------------------------------------------------------*
//*  G E N E R A T E    P R O C E S S O R    (LOAD)   (VA PAC TYPE).
//*-------------------------------------------------------------------*
//*
//*
//CNWRITE EXEC PGM=CONWRITE
//ELMSRC   DD  DSN=&&ELMSRC,UNIT=SYSDA,DISP=(,PASS),
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=400),
//             SPACE=(TRK,(15,15),RLSE)
//CONWIN   DD *
  WRITE ELEMENT          &C1ELEMENT
        FROM ENVIRONMENT &C1ENVMNT
             SYSTEM      &C1SYSTEM
             SUBSYSTEM   &C1SUBSYS
             TYPE        &C1ELTYPE
             STAGE       &C1STGID
        TO   DDN         ELMSRC.
//*
//COB     EXEC PGM=IKFCBL00,MAXRC=04,
//             PARM='SIZE=500K,BUF=90K,LANGLVL(1),CLI,NONAME,LIB,OPT'
//SYSUT1   DD  UNIT=$UWK,SPACE=(460,(950,200)),DISP=(,DELETE)
//SYSUT2   DD  UNIT=$UWK,SPACE=(460,(950,200)),DISP=(,DELETE)
//SYSUT3   DD  UNIT=$UWK,SPACE=(460,(950,200)),DISP=(,DELETE)
//SYSUT4   DD  UNIT=$UWK,SPACE=(460,(950,200)),DISP=(,DELETE)
//SYSIN    DD  DSN=&&ELMSRC,DISP=(OLD,DELETE)
//SYSLIN   DD  DSN=&&LOADSET,UNIT=$UWK,DISP=(MOD,PASS),
//             SPACE=(400,(500,200)),
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=400)
//SYSPRINT DD  SYSOUT=$OUT
//*
//LKED    EXEC PGM=IEWL,PARM=(LIST,LET,XREF),MAXRC=04
//**      COND=(4,LT,COB)
//DDSET    DD UNIT=$UWK,SPACE=(CYL,1)
//SYSLIB   DD DSN=SYS1.VSCLLIB,DISP=SHR
//         DD DSN=???,DISP=SHR                   <-- LOAD-MODULES
//SYSLIN   DD DSN=&&LOADSET,DISP=(OLD,DELETE)
//         DD *,DCB=BLKSIZE=80
 NAME &C1ELEMENT(R)
//SYSLMOD  DD DSN=???,DISP=SHR,FOOTPRNT=CREATE   <-- LOAD-MODULES
//SYSUT1   DD UNIT=$UWK,SPACE=(1024,(50,20))
//SYSPRINT DD SYSOUT=$OUT
//*
//TRS00   EXEC PGM=BC1PDSIN,MAXRC=0,
//        EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//               (&C1ACTION(1,4),NE,'MOVE'),
//               (&C1ACTION(1,6),NE,'UPDATE'))
//TRS02A   DD DSN=&&SYSOUT1,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(05,05),RLSE)
//TRS02B   DD DSN=&&SYSDMP1,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(05,05),RLSE)
//TRS03A   DD DSN=&&SYSOUT2,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//TRS04A   DD DSN=&&SYSOUT3,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//TRS04B   DD DSN=&&SYSDMP3,DISP=(,PASS,DELETE),UNIT=$UWK,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//*
//TRS01   EXEC PGM=PNTRAN,
//        EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//               (&C1ACTION(1,4),NE,'MOVE'),
//               (&C1ACTION(1,6),NE,'UPDATE')),
//             PARM=(&C1ACTION(1,8,_),&C1ENVMNT(1,8,_),
//             &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//             &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_)G)
//STEPLIB  DD DSN=$MODB,DISP=SHR
//PAC7PU   DD DSN=$INDSV..$ROOT.$ROOT.UP,DISP=SHR
//PAC7TR   DD DSN=&&PAC7TR,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=58,BLKSIZE=58),
//            SPACE=(TRK,(01,01),RLSE)
//*
//TRS02   EXEC PGM=PNPR10,
//        EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//               (&C1ACTION(1,4),NE,'MOVE'),
//               (&C1ACTION(1,6),NE,'UPDATE')),
//             PARM=(&C1ACTION(1,8,_),&C1ENVMNT(1,8,_),
//             &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//             &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_))
//STEPLIB  DD DSN=$MODB,DISP=SHR
//SYSIN    DD DSN=&&PAC7TR,DISP=(OLD,DELETE)
//PAC7TZ   DD DSN=$INDSV..$ROOT.$ROOT.TY,DISP=SHR
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(01,01),RLSE)
//PAC7CW   DD DUMMY,DCB=(RECFM=FB,LRECL=80,BLKSIZE=80)
//PAC7EV   DD DSN=&&PAC7EV,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=126,BLKSIZE=12600),
//            SPACE=(TRK,(01,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT1,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP1,DISP=(MOD,PASS)
//*
//*----------------------------------------------------*
//*  PRINTING OF 'INFOPAC' CONTENTS FROM ORIGIN STAGE *
//*  IN 'PAC7IP'SEQUENTIAL FILE                        *
//*----------------------------------------------------*
//*
//TRS03   EXEC PGM=CONWRITE,MAXRC=0,
//        EXECIF=(&C1ACTION(1,8),EQ,'GENERATE')
//CONWIN   DD  DSN=&&CONWIN,DISP=(OLD,DELETE)
//PAC7IP   DD  DSN=&&PAC7IP,DISP=(,PASS),UNIT=$UWK,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//             SPACE=(TRK,(02,01),RLSE)
//SYSOUT   DD  DSN=&&SYSOUT2,DISP=(MOD,PASS)
//*
//*----------------------------------------------------*
//*  COPY OF 'PAC7IP' SEQUENTIAL IN 'PAC7UP' VSAM     *
//*  DEFINED UNDER TSO WITH ANOTHER DDNAME FOR EXIT3  *
//*----------------------------------------------------*
//*
//TRS04   EXEC PGM=PNPR11,COND=(00,NE,TRS02),
//        EXECIF=(&C1ACTION(1,8),EQ,'GENERATE')
//STEPLIB  DD DSN=PT$PDV.PB150.MBR8,DISP=SHR
//PAC7EV   DD  DSN=&&PAC7EV,DISP=(OLD,PASS)
//PAC7IP   DD  DSN=&&PAC7IP,DISP=(OLD,PASS)
//PAC7PU   DD  DSN=$INDSV..$ROOT.$ROOT.UP,DISP=SHR
//SYSOUT   DD  DSN=&&SYSOUT3,DISP=(MOD,PASS)
//SYSUDUMP DD  DSN=&&SYSDMP3,DISP=(MOD,PASS)
//*
//*----------------------------------------------------*
//*         TRANSFER OF 'INFOPAC' ELEMENT              *
//*----------------------------------------------------*
//*
//TRS05   EXEC PGM=C1BM3000,PARM=(PAC7BS,CXMSGSX),
//        EXECIF=(&C1ACTION(1,8),EQ,'TRANSFER')
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(OLD,PASS)
//CXMSGSX  DD SYSOUT=$OUT
//*
//*----------------------------------------------------*
//*           PRINT SYSOUTS, SYSUDUMP, ...             *
//*----------------------------------------------------*
//*
//TRS06   EXEC PGM=CONLIST,PARM=PRINT,COND=EVEN,MAXRC=0,
//        EXECIF=((&C1ACTION(1,3),NE,'ADD'),
//               (&C1ACTION(1,4),NE,'MOVE'),
//               (&C1ACTION(1,6),NE,'UPDATE'))
//C1BANNER DD DSN=&&BANNER,DISP=(,PASS,DELETE),UNIT=$UWK,
//            SPACE=(TRK,(01,01),RLSE)
//C1PRINT  DD SYSOUT=$OUT,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171,DSORG=PS)
```

```
//LIST01   DD DSN=&&SYSOUT1,DISP=(OLD,DELETE)
//LIST02   DD DSN=&&SYSDMP1,DISP=(OLD,DELETE)
//LIST03   DD DSN=&&SYSOUT2,DISP=(OLD,DELETE)
//LIST04   DD DSN=&&SYSOUT3,DISP=(OLD,DELETE)
//LIST05   DD DSN=&&SYSDMP3,DISP=(OLD,DELETE)
//*
//
:/ ADD NAME=PRCSDELP
//*
//*--------------------------------------------------------------------*
//*  D E L E T E    P R O C E S S O R                 (VA PAC TYPE)
//*--------------------------------------------------------------------*
//*
//DEL00   EXEC PGM=BC1PDSIN,MAXRC=0
//DEL01A   DD DSN=&&SYSOUT1,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//DEL01B   DD DSN=&&SYSDMP1,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//DEL03A   DD DSN=&&SYSOUT2,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//DEL03B   DD DSN=&&SYSDMP2,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//*
//DEL01   EXEC PGM=PNPR10,
//        EXECIF=(&C1COMMENT(36,5),NE,'*IBM*'),
//             PARM=(DELETE__,&C1ENVMNT(1,8,_),
//             &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//             &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_))
//STEPLIB  DD DSN=$MODB,DISP=SHR
//SYSIN    DD DUMMY
//PAC7TZ   DD DSN=$INDSV..$ROOT.$ROOT.TY,DISP=SHR
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(01,01),RLSE)
//PAC7CW   DD DSN=&&CONWIN,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(01,01),RLSE)
//PAC7EV   DD DSN=&&PAC7EV,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=126,BLKSIZE=12600),
//            SPACE=(TRK,(01,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT1,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP1,DISP=(MOD,PASS)
//*
//*---------------------------------------------------*
//*  PRINT 'INFOPAC' CONTENTS IN 'PAC7IP' SEQUENTIAL  *
//*---------------------------------------------------*
//*
//DEL02   EXEC PGM=CONWRITE,MAXRC=12,
//        EXECIF=(&C1COMMENT(36,5),NE,'*IBM*')
//CONWIN   DD DSN=&&CONWIN,DISP=(OLD,DELETE)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(02,01),RLSE)
//*
//*---------------------------------------------------*
//*  COPY OF 'PAC7IP' SEQUENTIAL IN 'PAC7UP' VSAM     *
//*  DEFINED UNDER TSO WITH ANOTHER DDNAME FOR EXIT3  *
//*---------------------------------------------------*
//*
//DEL03   EXEC PGM=PNPR11,COND=(00,NE,DEL02),
//        EXECIF=(&C1COMMENT(36,5),NE,'*IBM*')
//STEPLIB  DD DSN=$MODB,DISP=SHR
//PAC7EV   DD DSN=&&PAC7EV,DISP=(OLD,PASS)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(OLD,PASS)
//PAC7PU   DD DSN=$INDSV..$ROOT.$ROOT.UP,DISP=SHR
//SYSOUT   DD DSN=&&SYSOUT2,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP2,DISP=(MOD,PASS)
//*
//*---------------------------------------------------*
//*         DELETE OF 'INFOPAC' ELEMENT               *
//*---------------------------------------------------*
//*
//DEL04   EXEC PGM=C1BM3000,PARM=(PAC7BS,CXMSGSX),COND=(00,NE,DEL02),
//        EXECIF=((&C1ACTION,NE,GENERATE),
//                (&C1COMMENT(36,5),NE,'*IBM*'))
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(OLD,PASS)
//CXMSGSX  DD SYSOUT=$OUT
//*
//*---------------------------------------------------*
//*           PRINT SYSOUTS, SYSUDUMP, ...            *
//*---------------------------------------------------*
//*
//DEL05   EXEC PGM=CONLIST,PARM=PRINT,COND=EVEN,MAXRC=0,
//        EXECIF=(&C1COMMENT(36,5),NE,'*IBM*')
//C1BANNER DD DSN=&&BANNER,DISP=(,PASS,DELETE),UNIT=$UWK,
//            SPACE=(TRK,(01,01),RLSE)
//C1PRINT  DD SYSOUT=$OUT,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171,DSORG=PS)
//LIST01   DD DSN=&&SYSOUT1,DISP=(OLD,DELETE)
//LIST02   DD DSN=&&SYSDMP1,DISP=(OLD,DELETE)
//LIST03   DD DSN=&&SYSOUT2,DISP=(OLD,DELETE)
//LIST04   DD DSN=&&SYSDMP2,DISP=(OLD,DELETE)
//*
//
:/ ADD NAME=PRCSMOVP
//*
//*-------------------------------------------------------------------*
//*  M O V E   P R O C E S S O  R                     (VA PAC TYPE)
//*-------------------------------------------------------------------*
//*
//MOV00   EXEC PGM=BC1PDSIN,MAXRC=0
//MOV02A   DD DSN=&&SYSOUT1,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//MOV03A   DD DSN=&&SYSOUT2,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//MOV03B   DD DSN=&&SYSDMP2,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//MOV05A   DD DSN=&&SYSOUT3,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//MOV05B   DD DSN=&&SYSDMP3,DISP=(,PASS,DELETE),UNIT=SYSDA,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171),
//            SPACE=(TRK,(5,5),RLSE)
//*
//MOV01   EXEC PGM=PNTRAN,
//        EXECIF=(&C1ACTION,EQ,TRANSFER),
//             PARM=(&C1ACTION(1,8,_),&C1ENVMNT(1,8,_),
//             &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//             &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_)M)
//STEPLIB  DD DSN=$MODB,DISP=SHR
//PAC7PU   DD DSN=$INDSV..$ROOT.$ROOT.UP,DISP=SHR
```

```
//PAC7TR   DD DSN=&&&&C1ACTION,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=58,BLKSIZE=58),
//            SPACE=(TRK,(01,01),RLSE)
//*
//MOV02   EXEC PGM=IEBGENER,EXECIF=(&C1ACTION,EQ,MOVE)
//SYSIN    DD *
  GENERATE MAXFLDS=1
  RECORD FIELD=(058,1,,1)
//SYSUT1   DD *
,&C1SENVMNT(1,8,_),&C1SSYSTEM(1,8,_)&C1SSUBSYS(1,8,_)
&C1SELTYPE(1,8,_),&C1SELEMENT(1,10,_)&C1SSTGNUM)
/*
//SYSUT2   DD DSN=&&&&C1ACTION,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=58,BLKSIZE=58),
//            SPACE=(TRK,(01,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT1,DISP=(MOD,PASS)
//SYSPRINT DD SYSOUT=*
//*
//MOV03   EXEC PGM=PNPR10,MAXRC=0,
//             PARM=(&C1ACTION(1,8,_),&C1ENVMNT(1,8,_),
//             &C1SYSTEM(1,8,_)&C1SUBSYS(1,8,_)&C1ELTYPE(1,8,_),
//             &C1ELEMENT(1,10,_)&C1STGNUM(1,1,_)&C1CCID(1,12,_))
//STEPLIB  DD DSN=$MODB,DISP=SHR
//SYSIN    DD DSN=&&&&C1ACTION,DISP=(OLD,DELETE)
//PAC7TZ   DD DSN=$INDSV..$ROOT.$ROOT.TY,DISP=SHR
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(01,01),RLSE)
//PAC7CW   DD DSN=&&CONWIN,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(01,01),RLSE)
//PAC7EV   DD DSN=&&PAC7EV,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=126,BLKSIZE=12600),
//            SPACE=(TRK,(01,01),RLSE)
//SYSOUT   DD DSN=&&SYSOUT2,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP2,DISP=(MOD,PASS)
//*
//*-------------------------------------------------*
//*  PRINT OF 'INFOPAC' CONTENTS FROM ORIGIN STAGE    *
//*  IN 'PAC7IP' SEQUENTIAL FILE                      *
//*-------------------------------------------------*
//*
//MOV04   EXEC PGM=CONWRITE,MAXRC=0
//CONWIN   DD DSN=&&CONWIN,DISP=(OLD,DELETE)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(,PASS),UNIT=$UWK,
//            DCB=(RECFM=FB,LRECL=80,BLKSIZE=6080),
//            SPACE=(TRK,(02,01),RLSE)
//*
//*-------------------------------------------------*
//*  COPY OF 'PAC7IP' SEQUENTIAL IN 'PAC7UP' VSAM     *
//*  DEFINED UNDER TSO WITH ANOTHER DDNAME FOR EXIT3  *
//*-------------------------------------------------*
//*
//MOV05   EXEC PGM=PNPR11,MAXRC=0,COND=(00,NE,MOV04)
//STEPLIB  DD DSN=$MODB,DISP=SHR
//PAC7EV   DD DSN=&&PAC7EV,DISP=(OLD,PASS)
//PAC7IP   DD DSN=&&PAC7IP,DISP=(OLD,PASS)
//PAC7PU   DD DSN=$INDSV..$ROOT.$ROOT.UP,DISP=SHR
//SYSOUT   DD DSN=&&SYSOUT3,DISP=(MOD,PASS)
//SYSUDUMP DD DSN=&&SYSDMP3,DISP=(MOD,PASS)
//*
//*-------------------------------------------------*
//*           MOVE OF 'INFOPAC' ELEMENT               *
//*-------------------------------------------------*
```

```
//*
//MOV06   EXEC PGM=C1BM3000,PARM=(PAC7BS,CXMSGSX),MAXRC=8,
//              COND=(00,NE,MOV04)
//PAC7BS   DD DSN=&&BSTIPT01,DISP=(OLD,PASS)
//CXMSGSX  DD SYSOUT=$OUT
//*
//*---------------------------------------------------*
//*           PRINT SYSOUTS, SYSUDUMP, ...            *
//*---------------------------------------------------*
//*
//MOV07   EXEC PGM=CONLIST,PARM=PRINT,COND=EVEN
//C1BANNER DD DSN=&&BANNER,DISP=(,PASS,DELETE),UNIT=$UWK,
//            SPACE=(TRK,(01,01),RLSE)
//C1PRINT  DD SYSOUT=$OUT,
//            DCB=(RECFM=FBA,LRECL=121,BLKSIZE=6171,DSORG=PS)
//LIST01   DD DSN=&&SYSOUT1,DISP=(OLD,DELETE)
//LIST02   DD DSN=&&SYSOUT2,DISP=(OLD,DELETE)
//LIST03   DD DSN=&&SYSDMP2,DISP=(OLD,DELETE)
//LIST04   DD DSN=&&SYSOUT3,DISP=(OLD,DELETE)
//LIST05   DD DSN=&&SYSDMP3,DISP=(OLD,DELETE)
//*
//
$%
//*
//
```

```
===MOD NDVRPROC
//$PRFJ.PROC JOB ($CCPT),'LOADING PROCEDURES',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//ET010 EXEC PGM=IEBUPDTE,PARM=NEW
//*************************************************************
//*        CATALOGING THE VA PAC-ENDEVOR PROCEDURES           *
//*************************************************************
//*
//*    *--------------------------------------------------*
//*    *              I M P O R T A N T                   *
//*    *                 -----------                      *
//*    *      BEFORE EXECUTING THIS JOB, REPLACE ALL      *
//*    *         ':/' WITH './' UNDER THE EDITOR.         *
//*    *--------------------------------------------------*
//*
//SYSPRINT DD SYSOUT=$OUT
//SYSUT2   DD DSN=$BIBP,DISP=SHR
//SYSIN    DD DATA,DLM='%%'
:/ ADD NAME=$RADP.CEND
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : INTRA-ENDEVOR INTEGRITY CONTROL            *
//*********************************************************************
:/ ADD NAME=$RADP.CIND
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : INTER-ENVIRONMENT INTEGRITY CONTROL        *
//*********************************************************************
:/ ADD NAME=$RADP.GPND
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : PARAMETERS VALORIZATION                    *
//*********************************************************************
:/ ADD NAME=$RADP.INND
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : DATES OF LOAD MODULES                      *
//*********************************************************************
:/ ADD NAME=$RADP.JJND
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : CONVERTING THE ARCHIVAL JOURNAL            *
//*********************************************************************
:/ ADD NAME=$RADP.JRND
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : RETRIEVAL OF THE ARCHIVED JOURNAL  TRANSAC.*
//*********************************************************************
:/ ADD NAME=$RADP.LSND
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : UPDATING LIBRARIES/SESSIONS TABLE          *
//*********************************************************************
:/ ADD NAME=$RADP.MEND
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : FORMATTING OF VA PAC UPDATE TRANSACTIONS   *
//*********************************************************************
:/ ADD NAME=$RADP.REND
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : RETRIEVAL OF YEAR2000 USER ENTITIES        *
//*********************************************************************
:/ ADD NAME=$RADP.RIND
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : CREATE 'INFOPAC'   (EXISTING DATA RETRIEVAL*
//*********************************************************************
:/ ADD NAME=$RADP.RPND
//*********************************************************************
//* VA PAC-ENDEVOR 2.5   : CREATE 'VA PAC' (EXISTING DATA RETRIEVAL)  *
//*********************************************************************
:/ ADD NAME=$RADP.RRND
//*********************************************************************
```

```
//* VA PAC-ENDEVOR 2.5   : RETRIEVAL OF ENDEVOR ELEMENTS              *
//*******************************************************************
:/ ADD NAME=$RADP.TYND
//*******************************************************************
//* VA PAC-ENDEVOR 2.5   : UPDATING ENDEVOR TYPES                     *
//*******************************************************************
:/ ADD NAME=$RADP.UPND
//*******************************************************************
//* VA PAC-ENDEVOR 2.5   : ENDEVOR UPDATE                             *
//*******************************************************************
%%
```

```
===MOD NDVRPREP
//$PRFJ.PRE JOB ($CCPT),'PREPARATION',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*
//*------------------------------------------------------------------*
//*         JOB TO RUN ONLY FIRST TIME VA PAC  IS INSTALLED         *
//*------------------------------------------------------------------*
//*
//*****************************************************
//*       ALLOCATION OF TABLES AND WORK VSAM FILES    *
//*****************************************************
//*
//ET010   EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=$CATU,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD DSN=$INDSN..$ROOT.$ROOT.SY(DF$ROOT.$ROOT.TS),DISP=SHR
//         DD DSN=$INDSN..$ROOT.$ROOT.SY(DF$ROOT.$ROOT.TY),DISP=SHR
//         DD DSN=$INDSN..$ROOT.$ROOT.SY(DF$ROOT.$ROOT.UP),DISP=SHR
//         DD DSN=$INDSN..$ROOT.$ROOT.SY(DF$ROOT.$ROOT.UQ),DISP=SHR
//*
//****************************************************
//*               LOADING 'UQ'                       *
//****************************************************
//*
//ET020   EXEC PGM=PNINUQ
//STEPLIB  DD DSN=$MODB,DISP=SHR
//PAC7UQ   DD DSN=$INDSV..$ROOT.$ROOT.UQ,DISP=SHR
//SYSOUT   DD SYSOUT=$OUT
//SYSUDUMP DD SYSOUT=$OUT
//*
//****************************************************
//*       DELETE DSCB                                *
//****************************************************
//ET030   EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=$OUT
//SYSIN    DD *
  DELETE ($INDUN..DSCB.$ROOT.$ROOT.QU)
//*
//****************************************************
//*         BUILDING GENERATION FILE INDEX           *
//****************************************************
//*
//ET040   EXEC PGM=IDCAMS
//*:STEPCAT   DD DSN=$CATU,DISP=SHR
//GDGMOD   DD DSN=$INDUN..DSCB.$ROOT.$ROOT.QU,DISP=(,CATLG,DELETE),
//            SPACE=(TRK,0),UNIT=$UNITP,
//            VOL=SER=$VOLP,
//            DCB=(RECFM=FB,LRECL=187,BLKSIZE=18700)
//SYSIN    DD DSN=$INDSN..$ROOT.$ROOT.SY(BL$ROOT.$ROOT.QU),DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//*
//****************************************************
//*               LOADING 'QU'                       *
//****************************************************
//*
//ET050   EXEC PGM=IEBGENER
//SYSIN    DD DUMMY
//SYSPRINT DD SYSOUT=$OUT
//SYSUT1   DD DUMMY,DCB=(RECFM=FB,LRECL=187,BLKSIZE=187)
//SYSUT2   DD DSN=$INDUN..$ROOT.$ROOT.QU(+1),DISP=(,CATLG,DELETE),
//            VOL=SER=$VOLO,
//            SPACE=(TRK,(1,1),RLSE),UNIT=$UNITO,
//            DCB=$INDUN..DSCB.$ROOT.$ROOT.QU
//*
```

```
//* *************************************************
//* *          INITIALIZATION OF 'UP'               *
//* *************************************************
//*
//ET060   EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=$CATU,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//SYSPAF   DD DSN=$INDSV..$ROOT.$ROOT.UP,DISP=SHR
//MAXKEY   DD DSN=$INDSN..$ROOT.$ROOT.SY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=$INDSN..$ROOT.$ROOT.SY(REPRO999),DISP=SHR
//*
//* *************************************************
//* *          INITIALIZATION OF 'TS'               *
//* *************************************************
//*
//ET070   EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=$CATU,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//SYSPAF   DD DSN=$INDSV..$ROOT.$ROOT.TS,DISP=SHR
//MAXKEY   DD DSN=$INDSN..$ROOT.$ROOT.SY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=$INDSN..$ROOT.$ROOT.SY(REPRO999),DISP=SHR
//*
//* *************************************************
//* *          INITIALIZATION OF 'TY'               *
//* *************************************************
//*
//ET080   EXEC PGM=IDCAMS
//*:STEPCAT  DD DSN=$CATU,DISP=SHR
//SYSPRINT DD SYSOUT=$OUT
//SYSPAF   DD DSN=$INDSV..$ROOT.$ROOT.TY,DISP=SHR
//MAXKEY   DD DSN=$INDSN..$ROOT.$ROOT.SY(MAXKEY),DISP=SHR
//SYSIN    DD DSN=$INDSN..$ROOT.$ROOT.SY(REPRO999),DISP=SHR
//*
//
```

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

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

```
===MOD NDVRVINS
//$PRFJ.VINS JOB ($CCPT),'UPDATING PAC. U.E.',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*
//*
//ET010   EXEC ????VINS       <-- VA PAC  "VINS" PROCEDURE
//INPUT.CARTE DD *
 *USER    PASSWORD        F
//PACINS.PAC7MV DD DSN=NDVR.PACVINS,DISP=OLD,UNIT=$UTAPE,
//       LABEL=(05,SL),VOL=(,RETAIN,SER=$TAPEI)
//*
//*********************************************************************
//*                      !!!! WARNING   !!!!                          *
//*         THE FOLLOWING STEPS MUST BE EXECUTED  ONLY FOR A          *
//*                     RETRIEVAL 1.6 -> 2.5                          *
//*********************************************************************
//*
//*T020   EXEC $RADP.JJND,
//*       JNARCH='????'       <-- ARCHIVED JOURNAL 1.6
//*
//*T030   EXEC ????SAVE       <-- VA PAC  "SAVE" PROCEDURE RECOMMENDED
//*
//*T040   EXEC $RADP.REND
//*
//
```

```
===MOD NDVRINSL
//$PRFJ.INND JOB ($CCPT),'INSTALLATION LIST',CLASS=$CLASSJ,
// MSGCLASS=$MSGCL
//*
//******************************************************************
//*    THE FOLLOWING JOB PROVIDES THE LIST OF INSTALLED PROGRAMS   *
//******************************************************************
//*
//STEP01  EXEC $RADP.INND
//*
//
```

10. RE-INSTALLATION

10.1. RE-INSTALLATION PROCEDURE

RE-INSTALLATION OF THE SYSTEM

The VA Pac-ENDEVOR system must be re-installed whenever a new sub-version of the system comes out.

This sub-version, identified by a number (for example 2.5 V02), is generally delivered in the form of:

. A complete installation tape of the product,

. A list of corrected bugs,

. Possibly, an operations document which completes the instructions described in the present sub-chapter.

Generally, only the program library is affected by this new sub-version.

In most of the cases, the re-installation consists in executing the following JOBS:

1. PACBASE0, which ensures the copy of the installation tape (JOB contained in the initial JCL file).

2. PACBASE2, which ensures the creation of the re-installation JCL.

PACBASE2 executes the MM1JCL utility with the parameters given on installation, plus the following selection line of the JCL module:

```
        ===SELM NDVRLOAD
```

Follow the installation procedure described in Chapter INSTALLATION, Subchapter PHASE 3: INSTALLATION PROCESS, paragraph "Loading of Load Modules".

If the operations document contains corrections in one of the EXITs, add the following selection line of the JCL module:

```
        ===SELM NDVREXIT
```

Follow the installation procedure described in Chapter INSTALLATION, Subchapter PHASE 3: INSTALLATION PROCESS, paragraph "Link-Edit of Exits in an Authorized Library".

If the operations document contains corrections in the parameter PDS, add the following selection line of the JCL module:

```
        ===SELM NDVRSY
```

Follow the installation procedure described in Chapter INSTALLATION, Subchapter PHASE 3: INSTALLATION PROCESS, paragraph "Loading of the System Parameters PDS".

NOTE: If at least one PROCESS has been modified, it must be re-installed taking into account the information specified in Chapter INSTALLATION, Subchapter PHASE 1: ENVIRONMENT PREPARATION, paragraph "Allocation of Processors to the PROCESSOR GROUP".

If the operations document contains corrections in at least one batch procedure, add the following selection line of the JCL module:

```
        ===SELM NDVRPROC
```

Follow the installation procedure described in Chapter INSTALLATION, Subchapter PHASE 3: INSTALLATION PROCESS, paragraph "Loading of Operations Procedures".

If the operations document contains corrections in the VA Pac update transaction file of the user entities, add the following selection line of the JCL module:

```
        ===SELM NDVRVINS
```

Follow the installation procedure described in Chapter INSTALLATION, Subchapter PHASE 3: INSTALLATION PROCESS, paragraph ".NDVLM User Entity and .NDVRL Relation".