VisualAge Pacbase

TANDEM Database Description

Version 3.5

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Contents

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Chapter 1. Introduction

Introduction to the Database Description Function

The Database Description function automatically generates Database descriptions adapted to the Database Management System in use. This is done by using Segment and relationship Descriptions defined during the application analysis phase.

The DBD function can generate the description of the following DBMS's:

- Relational databases,
- Network databases (CODASYL),
- Hierarchical databases (DL/1),
- Physical File - AS/400 databases and TANDEM DDL,
- DMSII databases.

Each one of these DBMS's is documented in a specific Manual.

SQL RELATIONAL DBD

This Function can only be used in conjunction with the Dictionary: data defined in the Specifications Dictionary can be used to generate Database Descriptions.

This information is described through a Database Description Language which is independent of the DBMS in use. This enables you to generate different descriptions from the same source.

Principles of Description

In this manual, the entities and screens managed by VisualAge Pacbase are described in two parts:

- An introduction which explains the purpose and the general characteristics of the entity or screen,
- A detailed description of each screen, including the input fields of on-line screens.

For the description of batch input, refer to the 'Developer's Procedures' manual.

All the on-line fields described in this manual are assigned an order number in the screen map. These numbers are also used in the screen description that follows.

If you use Developer workbench, refer to the on-line Help.

If you use the VisualAge Pacbase WorkStation, refer to the 'WorkStation User Interface' guide which documents the corresponding windows.

Note: Each type of Database Block has a specific description. As a result, fields may have different meanings or may not be used, depending on the type of Database Block.

Chapter 2. Use of the Function

Introduction

The TANDEM Database Description Manual is a reference manual and not a technical training manual.

It is therefore necessary to have a prior knowledge of TANDEM and the VA Pac Dictionary, and particularly of the following concepts:

- Data Elements
- Segments
- Parameterized Input Aids.

This manual provides you with a series of examples designed to guide you through the description and generation of a TANDEM database.

Use of the Entities

THE DICTIONARY FUNCTION

The function of the Dictionary is to manage logical descriptions of all the external views that will be processed by the program.

The following entities are used:

- Data Elements,
- Segments,
- Database Blocks,
- Parameterized Input Aids.

TERMINOLOGICAL EQUIVALENTS BETWEEN VA Pac AND TANDEM

A TANDEM Schema is a set of Records, which themselves are sets of Fields (or Elements).

A VA Pac Database Block is a set of Segments; each Segment calls Data Elements.

This correpondence is illustrated in the following table:

TANDEM OBJECT	EQUIVALENT
Schema	Database block

TANDEM OBJECT	EQUIVALENT
Record	Segment
Field	Data Element

Thus a TANDEM Schema is comparable to a Database Block,

a Record is comparable to a Segment,

a Field is comparable to a Data Element.

All the elements required by a TANDEM Schema description are found in VA Pac. The 'Data Dictionary' Reference Manual contains the descriptions of the Data Element and Segment entities.

Notes on Data Elements
- Picture and Usage: for a Data Element with a numeric format in Display mode, the numeric sign is considered as a separate character. When the Data Element is generated, a 'T' replaces 'S9'.
- The Primary Key is generated for the Data Element marked by a 'U' in the Key column of the Segment, except in cases where it is modified in the virtual lines of the 'Generation elements' screen. See also chapter 'Generation of a Database Block', sub-chapter 'Virtual Lines'.
- The Secondary Keys are entered by the user, using the Parameterized Input Aids.

Chapter 3. Tandem Databases

Definition of a Database Block (B)

A TANDEM Schema is defined by a Database Block, which is accessed via the following input in the CHOICE field:

CH: B......

The TANDEM database is defined by a code, a name and a specific type whose value is 'TD'.

It is also possible to enter an external name associated with the database.

Since a Block Definition screen is common to all types of Blocks, the (SCHEMA) 'EXTERNAL NAME' field which is displayed initially in this screen is not displayed again after a transmit.

From the Database Block, VA Pac generates a DDL file which is used by the DDL compiler to create an 'FUP' file (physical description of the application database) and a 'DICT' file (required for the update of the TANDEM dictionary if this is to be used).

The request for a Schema compilation, the opening of the dictionary and the creation of the 'FUP' file must be specified in the FRONT CARDS option as follows:

```
DDL/IN <schema name>/DICT <volume name>, FUP <f.name FUP>
```

ASSOCIATED LINES

Generation Elements (-GG).

```
The physical information necessary to generate the
database is entered on the Generation Elements lines
associated with the Block, in order to complement the logical information entered on th
Virtual lines and P.I.A.'s facilitate the input.
```

Comments (-GC)

```
In this screen, you enter comments on the Database Block or
on the objects it calls.
```

```
 ----------------------------------------------------------------- ----------
|                     SAMPLE DATABASE                         *PDLB.NDOC.FTA.134|
|                                                                              |
| BLOCK CODE.................: 1  BLOCTD                                        |
|                                                                              |
| NAME..................: ORDER FILE      2                                     |
| TYPE..................: TD TANDEM SCHEMA  3                                   |
| VERSION...............: 4                                                     |
|                                                                              |
| EXTERNAL NAME.........: 5                                                     |
|                                                                              |
|                                                                              |
| CONTROL CARDS....... FRONT: 6     BACK: 7                                     |
|                                                                              |
|                                                                              |
| EXPLICIT KEYWORDS..: 8                                                        |
|                                                                              |
| UPDATED BY.........:              ON :          AT:  : :      LIB :           |
| SESSION NUMBER.....: 0133         LIBRARY......: DCC    LOCK....:             |
|                                                                              |
|                                                                              |
|                                                                              |
| O: C1 CH: Bbloctd                          ACTION:                           |
 -----------------------------------------------------------------------------
```

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
1	6		BLOCK CODE (REQUIRED)
			One to six alphanumeric characters.
2	36		NAME OF THE BLOCK (REQUIRED IN CREAT)
			This clear name should be as explicit as possible. Words used here become implicit keywords (subject to limitations specified in Subchapter "HOW TO BUILD THE THESAURUS", Chapter "KEYWORDS" in the SPECIFICATIONS DICTIONARY Reference Manual).
3	2		TYPE OF BLOCK (REQUIRED IN CREAT)
			For hierarchical or network databases, it is not required, when creating a database block, to enter the definitive block type. The selection of a network or hierarchical structure is sufficient at this point.
			A specific "physical" type must be entered when generating the Data Description Language (DDL).
		'TR' 'SE'	Tree-like structure (hierarchical block). Group of sets (network block).
			HIERARCHICAL DATABASES - IMS/DL1
		'DP'	Physical Database Description.

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		'DR'	Physical Database Description (same as 'DP', but only the data elements referenced as access keys in the segment description are generated in the 'FIELD......' statements).
		'DL'	Logical Database Description.
		'PC'	PCB.
		'IP'	Primary Index.
		'IS'	Secondary Index.
		'PS'	PSB (Assigned at creation. Cannot be modified at a later stage).
			RELATIONAL DATABASES
		Q2	DB2 SQL
		Q3	SQL SERVER
		QB	DB2/2 and DB2/6000
		QC	DATACOM/DB
		QN	NONSTOP SQL
		QP	ORACLE
		QR	RDMS
		QS	SQL/DS
		QT	INTEREL RDBC
		QU	INTEREL RFM
		QY	SYBASE
		DB	DB2 (It is recommended to use the Q2 type)
			NETWORK DATABASES
			.CODASYL-DM4 (GCOS8):
		'M1'	DDL schema, only elementary fields are generated,
		'M4'	DDL schema, only group fields are generated,
		'M2'	DMCL schema,
		'M3'	Sub-schema.
			.CODASYL-IDS2 (GCOS7):
		'I1'	DDL schema,
		'I2'	DMCL schema,
		'I3'	SDDL sub-schema.
			.CODASYL-IDMS:

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		'D0'	DDL schema (Release 10.0),
		'D1'	DDL schema,
		'D2'	DMCL schema,
		'D3'	Sub-schema,
		'D4'	Sub-schema (Release 5.7).
			.CODASYL-DMS (UNISYS 1100):
		'S1'	DDL Schema,
		'S3'	Sub-schema.
			DDL TANDEM
		TD	TANDEM
			AS/400 PHYSICAL FILE
		PF	AS/400 Physical file (IBM SYS. 38)
		LF	AS/400 Logical file (IBM SYS. 38).
			DMSII DATABASE
		20	DMSII Database (DASDL)
4	4		VERSION
			This field is not used.
5	8		DATABASE BLOCK EXTERNAL NAME
			Necessary at generation time.
			This is the physical name of the System-generated DDL (Data Description Language) module.
			To obtain a list of blocks sorted by this external name, enter 'LEB' in the CHOICE field.
			For TurboImage, only the first six characters are processed.
6	1		CONTROL CARDS IN FRONT OF BLOCK
			Necessary at generation time.
			Enter the one-character code that identifies the job control card to be inserted before the generated block.
7	1		CONTROL CARDS IN BACK OF BLOCK
			Necessary at generation time.
			Enter the one-character code that identifies the job control card to be inserted after the generated block.
8	55		EXPLICIT KEYWORDS

NUMLEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		This field allows you to enter additional (explicit) keywords. By default, keywords are generated from the instance's name (implicit keywords).
		Keywords must be separated by at least one space. Keywords have a maximum length of 13 characters which must be alphanumeric. However, '=' and '*' are reserved for special usage and are therefore ignored in keywords.
		Keywords are not case-sensitive: uppercase and lower-case letters are equivalent.
		NOTE: Accented and special characters can be declared as equivalent to an internal value in order to optimize the search of instances by keywords (Administrator workbench, 'Window' menu, 'Parameters browser' choice, in 'Special Characters' tab).
		A maximum of ten explicit keywords can be assigned to one entity. For more details, refer to the 'Character Mode User Interface' guide, chapter 'Search for Instances', subchapter 'Searching by Keywords'.

Description of a Database Block (-DC)

Since a TANDEM database can be assimilated to a network database, its description is accessed by the following choice:

CH: B......DC

This description contains the list of the Records which make up the database.

Each Record is called on an 'R'-type line. For each Segment called, the name of the corresponding file must be specified.

ASSOCIATED LINES

Each line may be associated with 'Comment' lines (-DCnnnGC where 'nnn' is the line number) or 'Generation elements' line (-DCnnnGG choice, where 'nnn' is the line number).

The description screen of a TANDEM Block is used by VA Pac to find out the logical information necessary to the generation of the Block in source code. The line type implies that the following 'virtual' lines will be taken into account:

```
RECORD < ECORD NAME > .
FILE IS < FILE NAME> .
KEY-SEQUENCED .
    ---> ELEMENT INSERTION BEGINING <---
    ---> ELEMENT INSERTION END <---
KEY IS < FIELD NAME > .
```

If you request the generation of a Block, VA Pac uses these lines, replacing
RECORD NAME with the code of the Segment called on the line, FILE
NAME with the name of the physical file, and FIELD NAME with the code of
the Data Element marked by a 'U' in the Key column of the Segment
description.

```
------------------------------------------------------------------------
|                     SAMPLE DATABASE                      *PDLB.NDOC.FTA.134|
|  BLOCK DESC. CODASYL SCHEMA  BLOCTD ORDER FILE                          |
|                            1                                           |
|  A LIN : T    RECORD                        :       FILE               |
|  2  3    4         5                         6                         |
|    100 : R        CD05                  COMM.CD05                       |
|    110 : R        CD10                  COMM.CD10                       |
|    120 : R        CD20                  COMM.CD20                       |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|        :                                                               |
|  *** END ***                                                           |
|  O: C1 CH: -DC                                                         |
------------------------------------------------------------------------
```

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
1	6		BLOCK CODE (REQUIRED)
			One to six alphanumeric characters.
2	1		ACTION CODE
		'C'	Creation of the line
		M	Modification of the line
		D or 'A'	Deletion of the line
		T	Transfer of the line
		B	Beginning of multiple deletion
		G	Multiple transfer
		?	Request for HELP documentation
		E or '-'	Inhibit implicit update
		X	Implicit update without upper/lowercase transformation.
3	3		Line number
			Numeric. You are advised to begin with line number '100' and then number them in intervals of 20. This facilitates subsequent line insertions, as necessary.

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			This field is alphanumeric if you generate a customized SQL access. In this case, you can enter letters in the 'LIN' field. You can then create more than the '1000' lines initially available.
4	1		TYPE OF DESCRIPTION LINE (REQUIRED)
		R	Record call line.
5	4		TABLE OR VIEW (REQUIRED)
			This field contains the Segment code which corresponds to the called record.
			When the Database Block is generated, this code is displayed after the 'RECORD' clause.
6	36		FILE NAME (REQUIRED)
			This field contains the name of the physical file which supports the data.
			When the Database Block is generated, this name is displayed after the 'FILE IS' clause.

On-Line Access Commands

```
LISTS
CHOICE            SCREEN                              UPD
------            ------                              ---
LCBaaaaaa         List of Database Blocks by code      NO
                  (starting with block 'aaaaaa').

LNBaaaaaa         List of Database Blocks by name      NO
                  (starting with block 'aaaaaa')
                  (case sensitive).

LTBaabbbbbb       List of Database Blocks by type      NO
                  (starting with type 'aa' and Database
                  Block 'bbbbbb').

LEBaaaaaaaaa      List of Database Blocks by external   NO
                  name (starting with name 'aaaaaaaa').
DESCRIPTION OF BLOCK 'aaaaaa'
CHOICE            SCREEN                              UPD
------            ------                              ---
Baaaaaa           Definition of Database Block 'aaaaaa' YES

BaaaaaaCR         Instances linked to Database Block   YES
                  'aaaaaa' through User Relations.

BaaaaaaGCbbb      Comments for Database Block 'aaaaaa' YES
                  (starting with line 'bbb').
```

BaaaaaaGGbbb	Generation Elements for Database Block 'aaaaaa' (starting with line 'bbb').	YES
BaaaaaaGObbb	Generation Options for Database Block 'aaaaaa' (starting with line 'bbb').	YES
BaaaaaaATbbbbbb	Text Assigned to Database Block 'aaaaaa' (starting with text 'bbbbbb').	NO
BaaaaaaX	Cross-references of Database Block 'aaaaaa'.	NO
BaaaaaaXBbbbbb	Cross-references of Database Block 'aaaaaa' to PSB's (starting with PSB 'bbbbbb').	NO
BaaaaaaXObbbbbb	Cross-references of Database Block 'aaaaaa' to Screens (starting with Screen 'bbbbbb').	NO
BaaaaaaXObbbbbbCScdddd	Cross-references of Database Block 'aaaaaa' to the Call of Segments of Screen 'bbbbbb'(starting with category 'c' and with Segment 'dddd'). Note: 'c' is equal to & for the Screen-top category.	NO
BaaaaaaXObbbbbbWccddd	Cross-references of Database Block 'aaaaaa' to the Work Areas of Screen 'bbbbbb' (starting with Work Area 'cc', line number 'ddd').	NO
BaaaaaaXQbbbbbb	List of occurrences linked to Database Block 'aaaaaa' through User-Defined Relation (starting with Relation 'bbbbbb').	NO
BaaaaaaXVvvvvvv	Cross-references of Database Block 'aaaaaa' to Volumes (starting with Volume 'vvvvvv').	NO
BaaaaaaXPbbbbbb	Cross-references of Database Block 'aaaaaa' to Programs (starting with Program 'bbbbbb').	NO
BaaaaaaXPbbbbbbWccddd	Cross-references of Database Block 'aaaaaa' to Work Areas of Program 'bbbbbb' (starting with Work Area 'cc', line number 'ddd').	NO

TANDEM DATABASE BLOCK DESCRIPTION

CHOICE	SCREEN	UPD
------	------	---
BaaaaaaDCbbb	Description of TANDEM Database Block 'aaaaaa' (starting with line 'bbb').	YES

```
BaaaaaaDCbbbGCccc   Comments of TANDEM Database Block      YES
                    'aaaaaa' description line 'bbb'
                    (starting with line 'ccc').
BaaaaaaDCbbbGGccc   Generation Elements for TANDEM  Block YES
                    'aaaaaa' description line 'bbb'
                    (starting with line 'ccc').
```

NOTE: After the first choice of type 'Baaaaaa', 'Baaaaaa' can be replaced with '-'.

All notations between parentheses are optional.

Chapter 4. Generation of a Database Block

Virtual Lines

In on-line mode, you may 'dynamically' access the automatically generated lines. These lines are marked by a '*' action code and a '*VIRT' symbol in the LIB area. They make up the virtual lines.

COMPLEMENT TO THE GENERATED LINES

On the 'Generation Elements' screen, you specify the physical characteristics of the TANDEM database and its components, as well as all the information about insertion modes.

You can therefore create new lines, as well as modify or delete lines that have been automatically generated, in the following manner:

- Creation: by inserting a line in the adequate location, using an appropriate line number;
- Modification or deletion: by repeating the number of the line.

Example:

Consider the following virtual line:

```
A LIN : T DESCRIPTION
* 100 : G  RECORD < RECORD NAME > .
```

You may delete this line:

```
A LIN : T DESCRIPTION
  100 : G
```

or modify it:

```
A LIN : T DESCRIPTION
  100 : G  RECORD SS00 .
```

In both cases, you must use the number of the virtual line you want to override.

The lines that you want to have included in the generation must be marked by a 'G'-type line.

"OVERRIDE" OF A DATA ELEMENT

15

Insertion ranges:

You must create line numbers included inside the "Begining of insertion" and "End of insertion" boundaries.

To "override" a Data Element, you must specify '<DELCO >' on the first line, and the new description on the following lines.

If hyou do not want the new Data Element to appear, do not create any line after this first line.

You must enter at least six characters between the two delimiters.

Example:
```
A LIN : T DESCRIPTION

* 100 : G  RECORD < RECORD NAME > .
* 200 : G  FILE IS < FILE NAME > .
* 300 : G  KEY-SEQUENCED .
* 400 : G      ---> ELEMENT INSERTION BEGINING <---
  405 : G<NUCLIE>
  406 : G  10 NUCLIE PICTURE X(8).
* 600 : G      ---> ELEMENT INSERTIOM END <---
* 700 : G  KEY IS < FIELD NAME > .
```

```
----------------------------------------------------------------------
|                      SAMPLE DATABASE                  *PDLB.NDOC.FTA.134|
| GENERATION ELEMENTS FOR BLOCK   BLOCTD ORDER FILE                   100|
|                                                                        |
| A LIN : T DESCRIPTION                                               LIB|
| * 100 : G  RECORD < RECORD NAME > .                               *VIRT|
| * 200 : G  FILE IS < FILE NAME > .                                *VIRT|
| * 300 : G  KEY-SEQUENCED .                                        *VIRT|
| * 400 :        ---> ELEMENT INSERTION BEGINING <---               *VIRT|
| * 600 :        ---> ELEMENT INSERTION END <---                    *VIRT|
| * 700 : G  KEY IS < FIELD NAME > .                                *VIRT|
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|                                                                        |
| O: C1 CH: -DC100GG                                                     |
----------------------------------------------------------------------
```

Use of the Parameterized Input Aids

The input on the Comment or Generation Elements lines is made easier if you use Personalized Input Aids.

Its systematic use guarantees standardized description, generation elements and documentation patterns as well as cross-references management.

For further details on P.I.A.'s, please refer to the 'Character Mode User Interface' Guide, chapter 'Documentary Facilities', subchapter 'Parameterized Input Aids'.

You will find examples of complements to the generated lines entered on P.I.A. description lines in chapter 'Example of a Generated Description' in this manual.

Generation - Print

The generation and printing of Database Blocks are requested in on-line mode on the

The following commands are available:

LTB: Lists all the Database Blocks of the Libraries of the selected sub-network, sorted by type.

- C1 OPTION: Without keywords,
- C2 OPTION: With explicit keywords.

LCB: Identical to 'LTB' but sorted by code.

LEB: Identical to 'LTB' but sorted by external name.

You can request the list of the Database Blocks which include one or more keyword(s). The corresponding command must be entered with a continuation line, on which the keywords used as selection criteria are indicated (refer to the 'Character Mode User Interface' Guide). The list is sorted by code. The corresponding command is:

LKB: Same as 'LCB' but sorted by keyword. Option 'C2' cannot be used.

DTB: Description of the Database Block whose code is in- dicated in the ENTITY field, or description of all Da- tabase Blocks if the field is not entered.

In the latter case, you can request the descriptions of all the Blocks of a given type, by spe- cifying this type in the print request.

GCB: Generation of a Database Block whose code must be indicated. Same printing option as for DTB.

Chapter 5. Example of a Generated Description

Introduction to the Example

The purpose of this chapter is to present a comprehensive view of the various steps that will enable you to generate a TANDEM Block, and to supply further information about the way VA Pac uses the data.

The example presented for this purpose is not exhaustive since it does not show all the possibilities available with the function.

It includes the main screens used in a Block generation, as well as the generated program itself.

VisualAge Pacbase Screens

```
----------------------------------------------------------------- ----------
|                   SAMPLE DATABASE                        *PDLB.NDOC.FTA.134|
|                                                                            |
| BLOCK CODE.................: 1  BLOCTD                                      |
|                                                                            |
| NAME.................: ORDER FILE      2                                    |
| TYPE.................: TD TANDEM SCHEMA  3                                  |
| VERSION..............:  4                                                   |
|                                                                            |
| EXTERNAL NAME........:  5                                                   |
|                                                                            |
|                                                                            |
| CONTROL CARDS....... FRONT: 6     BACK:  7                                  |
|                                                                            |
|                                                                            |
| EXPLICIT KEYWORDS..: 8                                                      |
|                                                                            |
| UPDATED BY.........:            ON :          AT:  : :      LIB :           |
| SESSION NUMBER.....: 0133       LIBRARY......: DCC    LOCK....:             |
|                                                                            |
|                                                                            |
|                                                                            |
| O: C1 CH: Bbloctd               ACTION:                                     |
----------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------
|               SAMPLE DATABASE                        *PDLB.NDOC.FTA.134|
| BLOCK DESC. CODASYL SCHEMA  BLOCTD ORDER FILE                           |
|                              1                                          |
| A LIN : T    RECORD                          :      FILE               |
| 2  3    4        5                           6                         |
|   100 : R        CD05                    COMM.CD05                      |
|   110 : R        CD10                    COMM.CD10                      |
|   120 : R        CD20                    COMM.CD20                      |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
|       :                                                                |
| *** END ***                                                            |
| O: C1 CH: -DC                                                          |
--------------------------------------------------------------------------
```

```
 ------------------------------------------------------------------------------
|                     SAMPLE DATABASE                         *PDLB.NDOC.FTA.134|
| GENERATION ELEMENTS FOR BLOCK   BLOCTD ORDER FILE                          100|
|                                                                              |
| A LIN : T DESCRIPTION                                                     LIB |
| * 100 : G  RECORD < RECORD NAME > .                                      *VIRT|
| * 200 : G  FILE IS < FILE NAME > .                                       *VIRT|
| * 300 : G  KEY-SEQUENCED .                                               *VIRT|
| * 400 :        ---> ELEMENT INSERTION BEGINING <---                      *VIRT|
| * 600 :        ---> ELEMENT INSERTION END <---                           *VIRT|
| * 700 : G  KEY IS < FIELD NAME > .                                       *VIRT|
|       :                                                                       |
|       :                                                                       |
|       :                                                                       |
|       :                                                                       |
|       :                                                                       |
|       :                                                                       |
|       :                                                                       |
|       :                                                                       |
|       :                                                                       |
|       :                                                                       |
|       :                                                                       |
|       :                                                                       |
|       :                                                                       |
|       :                                                                       |
|                                                                              |
| O: C1 CH: -DC100GG                                                            |
 ------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
|                      SAMPLE DATABASE                      *PDLB.NDOC.FTA.134|
| SEGMENT CALL OF ELEMENTS CD05 ORDERS INFORMATION                           |
|                                                                            |
| A LIN : ELEM.  INT.FORM. U OCC GR K CMD456 CONT VALUE/SFC UPD/TRGET DOC LIBR.|
|   100 : NUCLIE                   U                                    0002  |
|   110 : DATE                                                          0002  |
|   120 : RELEA                                                         0002  |
|   130 : REFCLI                                                        0002  |
|   140 : RUE                                                           0002  |
|   150 : COPOS                                                         0002  |
|   155 : VILLE                                                         0002  |
|   160 : CORRES                                                        0002  |
|   170 : REMIS                                                         0002  |
|   180 : MATE                                                          0002  |
|   185 : LANGU                                                         0002  |
|   190 : FILLER X(5)       D                                           0002  |
|       :                                                                    |
|       :                                                                    |
|       :                                                                    |
|       :                                                                    |
|       :                                                                    |
|       : NAME    :                                                          |
| *** END ***                                                                |
| O: C1 CH: Scd05CE                                                          |
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------
|                    SAMPLE DATABASE                     *PDLB.NDOC.FTA.134|
| SEGMENT CALL OF ELEMENTS CD10 ORDER LINE                                 |
|                                                                          |
| A LIN : ELEM.  INT.FORM. U OCC GR K CMD456 CONT VALUE/SFC UPD/TRGET DOC LIBR.|
|   100 : QTMAC                 U                                      0002 |
|   110 : QTMAL                                                        0002 |
|   120 : INFOR                                                        0002 |
|   130 : ADFOU                                                        0002 |
|       :                                                                   |
|       :                                                                   |
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|       :                                                                   |
|       : NAME    :                                                        |
| *** END ***                                                              |
| O: C1 CH: Scd10CE                                                        |
--------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------
|                   APPLICATION TANDEM                    *PDLB.NDOC.FTA.134|
| SEGMENT CALL OF ELEMENTS CD20 PRINT REQUEST                               |
|                                                                           |
| A LIN : ELEM.  INT.FORM.  U OCC GR K CMD456 CONT VALUE/SFC UPD/TRGET DOC LIB|
| . 100 : EDIT                  U                                       *DCC |
|       :                                                                   |
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|       :                                                                   |
|       : NAME    :                                                         |
| *** END ***                                                               |
| O: C1 CH: Scd20 CE                                                        |
--------------------------------------------------------------------------
```

Generated Block

```
              RECORD CD05.
              FILE IS COMM.CD05.
              KEY-SEQUENCED.
                 10 NUCLIE PICTURE 9(8).
                 10 DATE   PICTURE X(6).
                 10 RELEA  PICTURE X(3).
                 10 REFCLI PICTURE X(30).
                 10 RUE    PICTURE X(40).
                 10 COPOS  PICTURE X(5).
                 10 VILLE  PICTURE X(20).
                 10 CORRES PICTURE X(25).
                 10 REMIS  PICTURE T9(03)V9(02).
                 10 MATE   PICTURE X(8).
                 10 LANGU  PICTURE X.
                 10 FILLER PICTURE X(5).
              KEY IS NUCLIE.
              END
              RECORD CD10.
              FILE IS COMM.CD10.
              KEY-SEQUENCED.
                 10 QTMAC  PICTURE 99.
                 10 QTMAL  PICTURE 99.
                 10 INFOR  PICTURE X(35).
                 10 ADFOU  PICTURE X(100).
              KEY IS QTMAC.
```

```
END
RECORD CD20.
FILE IS COMM.CD20.
KEY-SEQUENCED.
   10 EDIT   PICTURE X.
KEY IS EDIT.
END
```

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