VisualAge Pacbase 2.5

RELATIONAL DBD
REFERENCE MANUAL

DDDSQ000251A

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1. INTRODUCTION

1.1. VISUALAGE PACBASE

The VisualAge Pacbase Solution

VisualAge Pacbase is an Application Development tool operating on mainframe, OS/2, UNIX or Windows NT. It has been designed to ensure the complete management of various information systems.

Consistency is ensured by all the data being stored in one Specification database and managed in a unique way by the System.

VISUALAGE PACBASE PRODUCTS

VisualAge Pacbase is a modular AD solution which is composed of two main products - Pacdesign for application design, Pacbench for application development.

Pacdesign and Pacbench are used to populate the Specifications Database and to ensure the maintenance of existing applications. Each product includes several functions.

Basic Functions

Dictionary
Structured Code
Personalized Documentation Manager (PDM-PDM+)

Generators

On-Line Systems Development
Pacbench Client/Server
Batch Systems Development
COB / Generator

Database Description

DBD
DBD-SQL

Application Revamping

Pacbench Automatic Windowing (PAW) (releases older than VisualAge Pacbase 2.0)

Pacbase Web Connection

Quality Control

Pacbench Quality Control (PQC)
Quality Control Extensibility

Table Management

Pactables

Production Turnover and Follow-up

Production Environment (PEI)
Pac/Transfer
Development Support Management System (DSMS)
PC function: revamped DSMS (in releases older than VisualAge Pacbase 2.0)

Additionnal services
Pac/Impact
Dictionary Extensibility
Pacbase Access Facility (PAF-PAF+)
DSMS Access Facility (DAF)
Methodology (Merise, YSM, etc.)
Sub-networks comparison utilities
Rename/move entity utility (RMEN)
Journal Statistics utility (ACTI)
RACF / TOPSECRET Security Interface
ENDEVOR
VisualAge Smalltalk-VisualAge Pacbase bridge
Team Connection-VisualAge Pacbase bridge

1.2. INTRODUCTION TO THE DATABASE DESCRIPTION FUNCTION

INTRODUCTION TO THE D.B.D. 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,

. TurboImage databases,

. DMSII databases.

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

DBD/RELATIONAL SQL

This function can only be used in conjunction with the Dictionary: data defined in the Specifications Dictionary (whether or not the METHODOLOGY function is being used) 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 allows the user to generate different descriptions from the same source.

1.3. PRINCIPLES OF DESCRIPTION

DESCRIPTION PRINCIPLES

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

. An introductory comment explaining the purpose and the general characteristics of the entity or screen,

. A detailed description of each screen, including the input fields for both on-line (screens) and batch (forms) data entry into the Database.

Since input screens and batch forms usually contain the same fields, their descriptions are often identical.

All on-line fields described in this manual are assigned an order number. These numbers are printed in bold italics on the screen examples which appear before the input field descriptions and allow for easy identification of a given field. The numbers are circled on the batch forms.

For certain descriptions, there may be slight differences between the screen and the corresponding batch form. This can be explained by the fact that batch mode is less flexible than on-line mode and often needs additional input fields for some indicators which already exist on the screen.

In addition, the user may find that the field sequence on a screen is different from the field sequence on the corresponding batch form. If that occurs, the numbers referencing the fields may not appear in ascending sequence on either the screen example or the batch form.

>>>> If you use the VisualAge Pacbase WorkStation (as it is recommended), refer to the VisualAge Pacbase WorkStation Reference Manual which documents the corresponding windows, except the Folder and Folder View windows which are documented only in the Pacbench C/S User's Guide, Vol. II: Business Logic.

NOTES: Each type of Database Block has a specific description. However, several Database Block types may use the same Batch Form.

As a result, fields on the Batch Form may have different meanings or may not be used, depending on the type of Database Block.

2. USE OF THE FUNCTION WITH SQL

2.1. INTRODUCTION

INTRODUCTION

The Relational/SQL DBD function is used to manage relational/SQL databases with the SQL language and to generate (in on-line or batch mode) the Data Description Language (DDL) of the database block in order to create, alter or delete TABLESPACES, TABLES, VIEWS and INDEXES, using the information contained in the Database.

The Relational/SQL DBD Reference Manual is not a technical training manual for database management.

In particular, the reader should be familiar with the SQL Data Description Language (DDL) and the Specifications Dictionary.

The purpose of this manual is to guide the user through the description of a relational database in the Specifications Dictionary.

2.2. USE OF ENTITIES

USE OF ENTITIES

When related to the DBD Description function, the Specifications Dictionary manages logical descriptions of the various external views which will be processed by programs.

The following entities are used:

.Data Elements,

.Segments,

.Database Blocks,

.General Documentation of Segments and Database Blocks,

.Parameterized Input Aids.

TERMINOLOGICAL EQUIVALENTS BETWEEN RELATIONAL DBMS AND THE SYSTEM'S METAMODEL

A relational database is a set of physical environments (TABLESPACE, DBSPACE, SPACE, STORAGE-AREA, etc.; these environments will be referred as SPACES in this manual).

A Space is a set of Tables. A Table is a set of Columns.

A Database Block is a set of Segments; a Segment is a set of Data Elements.

This parallelism is illustrated in the following chart:

SQL OBJECT	EQUIVALENT
DATABASE	DATABASE BLOCK (TYPE OF BLOCK = 'Qx')
SPACE	BLOCK DESCRIPTION (-DR): 'P' TYPE LINE
TABLE	SEGMENT ON A 'T' TYPE LINE OR AN 'A' TYPE LINE FOR AN 'ALTER TABLE' (-DR)
VIEW	SEGMENT ON A 'V' TYPE LINE (-DR SCREEN)
COLUMN	DATA ELEMENT
INDEX	DATA ELEMENT OF A SEGMENT CALLED ON AN 'I' TYPE LINE (-DR SCREEN)
PRIMARY KEY	DATA ELEMENT OF A SEGMENT CALLED ON A 'K' TYPE LINE (-DR SCREEN)
FOREIGN KEY	DATA ELEMENT OF A SEGMENT CALLED ON A 'J' TYPE LINE (-DR SCREEN)

DBMS CONCEPT	EQUIVALENT
PACKAGE	DATA ELEMENT OF A SEGMENT CALLED ON A 'C' LINE (-DR SCREEN)
FUNCTION	DATA ELEMENT OF A SEGMENT CALLED ON A 'E' LINE (-DR SCREEN)
PROCEDURE	DATA ELEMENT OF A SEGMENT CALLED ON A 'Q' LINE (-DR SCREEN)
TRIGGER OR RULE	DATA ELEMENT OF A SEGMENT CALLED ON A 'R' LINE (-DR SCREEN)

GENERATION OF A DATABASE

Basic principle: A database is generated from a Database Block.

Taking into account all of the information in the Specifications Dictionary (logical level information) and in function of the type of block, the DBD function ensures the generation of the Data Description Language (DDL); and it also generates the DDL for the Tables, Views, and Indexes according to the information provided on the Segment Description and Data Element Definition screens.

The user may replace or complete the generated lines, using the General Documentation (-G) lines of the block.

IMPLEMENTATION

SQL commands are generated according to the input on the Database Block Description (-DR) screen, which includes the segment calls (which contain the descriptions of Tables and Views).

The Data Elements called in the Segments are used to generate the Index descriptions.

Tablespaces are also defined on this screen; they are described on General Documentation (-G) lines associated with the block description lines (-DRnnnG, where 'nnn' = the description line number).

NOTE: Tablespaces are not generated for DB2/400, INGRES/SQL, INTEREL RDBC, INTEREL RFM, NON STOP SQL, INFORMIX, VAX/SQL, DB2/2, DB2/6000, SYBASE and SQL SERVER.

The following screens depend on the input on the Database Block Description (-DR) screen:

. Input of Data Element of Key (-DRnnnK) screen, used to consult and update the Primary and Foreign keys and to select the columns to be added or modified in a table.

. SQL Commands Generation (-GENnnn) screen, used to enter the information necessary for the generation of SQL commands (for ex., selection of the Columns to be added to a Table); the '-GENnnn' screen can also be accessed by entering a 'Q' in the ACTION CODE field of an 'nnn' description line on the -DR screen.

. Display of generated SQL commands once the 'ENTER' key has been pressed on the '-GEN' screen.

On General Documentation (-G) screens, virtual lines and P.I.A.'s facilitate user input.

3. COLUMN: DATA ELEMENT

3.1. COLUMN DEFINITION (E.....)

COLUMN DEFINITION

Since a Column corresponds to a Data ELement, it must be defined on a Data Element Definition screen accessed via the following CHOICE:

CH: E.....

ASSOCIATED LINES

General Documentation (-G).

COLUMN NAME

A Column Name may be entered on the Segment Call of Elements (-CE) screen (see Chapter "TABLE OR VIEW: SEGMENT", Subchapter "TABLE OR VIEW DESCRIPTION"), or on an 'R'-type line on the Data Element Description (-D) screen (for further details please refer to Subchapter "COLUMN DESCRIPTION").

If a Column Name is entered on both screens, the one entered on the Segment Call of Elements (-CE) screen is the one taken into account.

If no Column Name is specified, the Data Element code will be used as the Column Name.

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

COLUMN FORMATS

The System generates the Column's format (type and length) from input in the INTERNAL FORMAT and USAGE fields on the Data Element Definition screen.

The following charts show the generated formats in relation to the formats entered on the Data Element's Definition screen for each type of database.

A CHAR(n) is generated for the System date formats (M, G, D, I, E, S, C, T, TS) which do not generate an SQL date format.

If you input a non-standard date format on the -D screen of the Data Element (on an E-type line), a DATE format is generated for ORACLE, SYBASE and SQL SERVER, and a DATETIME format is generated for INFORMIX.

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

DB2, SQL/DS

SQL FORMAT	FORMAT	USE	NOTES
CHAR(n)	X(n) with n<255	D	
VARCHAR(n)	X(n) with n<255	D	(see below)
LONG VARCHAR	X(n) with n>254	D	(see below)
SMALLINT	S9(n) with n<5	C	
INTEGER	S9(n) with n>4	C	
DECIMAL(n+m,m)	S9(n)V9(m)	3,1	use 1 for DB2 only
FLOAT	No format	W	
DATE	M, G	D	
TIME	T	D	
TIMESTAMP	TS	D	
REAL	No format	F	DB2 only

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

DB2/2, DB2/6000

SQL FORMAT	FORMAT	USE	NOTES
CHAR(n)	X(n)	D	
VARCHAR(n)	X(n) with n<4001	D	(see below)
LONG VARCHAR	X(n) with n>4000	D	(see below)
SMALLINT	S9(n) with n<5	C or G	
INTEGER	S9(n) with n>4	C or G	
DECIMAL(n+m,m)	S9(n)V9(m)	3,1	
FLOAT	No format	W	
DATE	M, G	D	
TIME	T	D	
TIMESTAMP	TS	D	

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

ORACLE < V7

SQL FORMAT	FORMAT	USE	NOTES
CHAR(n)	X(n)	D	V5: n<241 V6: n<2001
LONG VARCHAR	X(n)	D	n<65536 (see below)
INTEGER	S9(n)	C,J,P,5,6	n<=4
NUMBER(n+m,m)	S9(n)V9(m)	T,Q,3,8,9	
FLOAT	No format	W	
DATE	D, I, E, S, C, M, G, T	D	

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

RDMS 1100

SQL FORMAT	FORMAT	USE
CHAR(n)	X(n)	D
DECIMAL (n+m+1,m)	S9(n)V9(m)	D,C,3,H
FROM VERSION 5RA4 ONWARDS		
CHARACTER (n)	X(n)	D
DECIMAL (n+m+1,m)	S9(n)V9(m)	3, C
NUMERIC (n+m,m)	S9(n)V9(m)	H or D
	9(n)V9(m)	H or D
FLOAT	No format	F COMP-1
DOUBLE PRECISION	No format	W COMP-2

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

ORACLE V7

SQL FORMAT	FORMAT	USE	NOTES
CHAR(n)	X(n)	D	n<2000 and key indic= 'C'
VARCHAR2(n)	X(n)	D	n<2000
VARCHAR(n)	X(n)	D	n<2000 and key indic='V'or'W'
LONG VARCHAR	X(n)	D	n<65536 and key indic= 'L'
INTEGER	S9(n)	C,J,P,5,6	
NUMBER(n+m,m)	S9(n)V9(m)	T,Q,3,8,9	
FLOAT	No format	W	
DATE	D, I, E, S, C, M, G, T	D	

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

DATACOM/DB

SQL FORMAT	FORMAT	USE	NOTES
CHAR(n)	X(n)	D	with n<32768
NUMERIC(n+m,n)	S9(n)V9(m)	D	
DECIMAL(n+m,n)	S9(n)V9(m)	3	
INTEGER	S9(n) 4<n<9	C	
SMALLINT	S9(n) with n<5	C	
DOUBLE PRECISION	No format	W	
DATE	M	D	
TIME	T	D	
TIMESTAMP	TS	D	

COLUMN: DATA ELEMENT **3**
COLUMN DEFINITION (E.....) **1**

SQL/INGRES

SQL FORMAT	FORMAT	USAGE	NOTES
CHAR(n)	X(n)	D	n<2000
VARCHAR(n)	X(n)	D	n<2000 and key indic='V'
SMALLINT	S9(n)	C	n<5
INTEGER	S9(n)	C	n<9
	S9(n)	3	n<11
	S9(n)	D	n<11
FLOAT	no format	W	
	S9(n)	3	n>10
	S9(n,m)V9(m)	3	
	S9(n,m)V9(m)	C	
	S9(n,m)V9(m)	D	
FLOAT4	no format	F	

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

NON STOP SQL

SQL FORMAT	FORMAT	USE	NOTES
CHAR(n)	X(n)	D	n<4075
VARCHAR(n)	X(n)	D	V in -CE
VARCHAR(n)	X(n)	D	(see below)
DECIMAL(n+m,n)	S9(n)V9(m)	D, 1	
DECIMAL(n+m,n)	9(n)V9(m)		
Unsigned			
NUMERIC(n+m,n)	S9(n)V9(m)	C	
NUMERIC(n+m,n)	9(n)V9(m)		
Unsigned			
SMALLINT	S9(n)	C	n<5
SMALLINT	9(n)		
Unsigned			
INTEGER	S9(n)	C	n<10
INTEGER	9(n)		
Unsigned			
LARGEINT	S9(n)	C	n<19
DATE	M	D	Version C30
TIME	T	D	Version C30
TIMESTAMP	TS	D	Version C30

COLUMN: DATA ELEMENT **3**
COLUMN DEFINITION (E.....) **1**

INTEREL RDBC

SQL FORMAT	FORMAT	USE	NOTES
CHAR(n)	X(n)	D	
VARCHAR(n)	X(n) with n<32000	D	V on '-CE' (see below)
LONG VARCHAR	X(n) with n=32000	D	V on '-CE' (see below)
SMALLINT	no format	0 (zero)	
INTEGER	no format	J	
DECIMAL(n+m,m)	S9(n)V9(m)	D,1	
REAL	No format	F	
DATE	E, M	D	
FLOAT	No format	W	

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

INTEREL RFM

SQL FORMAT	FORMAT	USE	NOTES
CHAR(n)	X(n)	D	n<4096
SMALLINT	S9(n)	0 (zero)	n<5
INTEGER(n)	S9(n)	J	4<n<10
DECIMAL(n+m,m)	S9(n)V9(m)	D	
FLOAT	-	W	
REAL	-	F	
DATETIME YEAR TO DAY	G	D	8 charac. format
TIME	T	D	
TIMESTAMP	TS	D	

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

DB2/400

SQL FORMAT	FORMAT	USAGE	NOTES
CHAR(n)	X(n)	D	n<32766
SMALLINT	S9(n)V9(m) or S9(n) with n<5	C	
INTEGER	S9(n)V9(m) or S9(n) with 4<n<9	C	
DECIMAL	S9(n)V9(m) or S9(n)	3	
NUMERIC	S9(n)V9(m) or S9(n)	D	
REAL	No format entered	F	
DOUBLE PRECISION	No format entered	W	
FROM DB2/400 V2 ONWARDS			
DATE	M, G	D	
TIME	T	D	
TIMESTAMP	TS	D	

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

VAX/SQL

SQL FORMAT	FORMAT	USAGE	NOTES
CHAR(n)	X(n)	D	n<16384
VARCHAR(n)	X(n)	D	n<16384
SMALLINT	S9(n)	C	n<5
INTEGER	S9(n)	C	n<4<10
QUADWORD(n)	S9(n)	C	9<n
DECIMAL(n+m,m)	S9(n)V9(m)	3	
FLOAT	No format	W	
REAL	No format	F	

COLUMN: DATA ELEMENT **3**
COLUMN DEFINITION (E.....) **1**

ALLBASE/SQL

SQL FORMAT	FORMAT	USAGE	NOTES
CHAR(n)	X(n)	D	n<3997
VARCHAR(n)	X(n)	D	n<3997 see -CE
SMALLINT	S9(n)	C	n<5
INTEGER	S9(n)	C	n<9
DECIMAL(n+m,m)	S9(n)V9(m)	3	
DATE	M	D	
TIME	T	D	
DATETIME	TS	D	

COLUMN: DATA ELEMENT **3**
COLUMN DEFINITION (E.....) **1**

INFORMIX-ESQL

SQL FORMAT	FORMAT	USAGE	NOTES
CHAR(n)	X(n)	D	n<32512
SMALLINT	S9(n) or 9(n)	C	n<5
INTEGER	S9(n) or 9(n)	C	n<9
DECIMAL(m,n)	S9(m-n)V9(n)	3, C	
NUMERIC(m,n)	S9(m-n)V9(n)	D	
REAL	No format	F	
FLOAT	No format	W	
DATE	M	D	
DATETIME	T	D	

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

SYBASE

SQL FORMAT	FORMAT	USAGE	NOTES
CHAR(n)	X(n)	D	n<255
VARCHAR(n)	X(n)	D	n<255
SMALLINT	S9(n) or 9(n)	C, G	n<5
INTEGER	S9(n) or 9(n)	C, G	n<9
NUMERIC(m,n)	S9(m-n)V9(n) or 9(m-n)V9(n)	D,3,1,X	
DECIMAL(n,m)	S9(n)V9(m)	C	
REAL	No format	F	
FLOAT	No format	W	
DATETIME	T, M, S, E, I, G	D-dff	

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

SQL SERVER

SQL FORMAT	FORMAT	USAGE	NOTES
CHAR(n)	X(n)	D	n<255
VARCHAR(n)	X(n)	D	n<255
SMALLINT	S9(n) or 9(n)	C, G	n<5
INTEGER	S9(n) or 9(n)	C, G	n<9
NUMERIC(m,n)	S9(m-n)V9(n) or 9(m-n)V9(n)	D,3,1,X	
DECIMAL(n,m)	S9(n)V9(m)	C	
REAL	No format	F	
FLOAT	No format	W	
DATETIME	T, M, S, E, I, G	D-dff	

VARIABLE COLUMNS

In order to generate a variable Column, the user must define a data element with an alphanumeric format X(n). On the data element call line on the Table Segment Call of Elements (-CE) screen, the user indicates that it is a variable length field by entering a 'V' in the KEY INDICATOR FOR ACCESS OR SORT field.

The System generates:

.VARCHAR(n)

NOTE: This type of column is only generated for DB2, SQL/DS, INTEREL RDBC, NONSTOP SQL, ALLBASE/SQL, VAX SQL, DB2/2, DB2/6000, INGRES/SQL, SYBASE and SQL SERVER.

For DB2 and SQL/DS, if 'n' is greater than 254, the System generates:

.LONG VARCHAR.

For DB2/2 and DB2/6000, if 'n' is greater than 4000, the System generates:

.LONG VARCHAR.

Note that in the programs generated with the BATCH S.D. and ON-LINE S.D. functions, the corresponding 'Host Variables' are processed as variable alphanumeric strings.

RDMS 1100, DATACOM/DB and DB2/400:

Variable columns cannot be generated.

DB2, SQL/DS, DB2/2 and DB2/6000:

- value 'W' generates a VARCHAR,
- value 'L' generates a LONG VARCHAR.

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

ORACLE V5 and V6:

- value 'V' only generates a VARCHAR.
- value 'L' generates a LONG VARCHAR.
- value 'W' generates a VARCHAR.

ORACLE V7:

- value 'V' or 'W' generates a VARCHAR(n).
- field length<2000 and 'space' in key indicator generate a VARCHAR2(n).
- value 'L' generates a LONG VARCHAR.
- value 'C' generates a CHAR.

REQUIRED COLUMNS

On a Data Element call line on the Table Segment's '-CE' screen, the user can specify a required Column (NOT NULL), or a required Column with default values, as follows:

In the PRESENCE INDICATOR field, the user would enter:

```
'O' --> NOT NULL,

'P' --> NOT NULL WITH DEFAULT (for DB2, DB2/400,
        DATACOM/DB, DB2/2 and DB2/6000)
        DEFAULT               (for INTEREL RDBC)
        DEFAULT SYSTEM        (for NONSTOP SQL C30)
```

SQL/DS, ORACLE, NONSTOP SQL, VAX SQL (< V4), ALLBASE SQL, INFORMIX SQL, INGRES/SQL, SYBASE and SQL SERVER:

It is not possible to generate a (NOT NULL WITH) DEFAULT clause. Value 'P' is not recognized.

RDMS 1100:

It is not possible to generate required Columns (the value in the PRESENCE INDICATOR field is ignored).

VAX SQL V4:

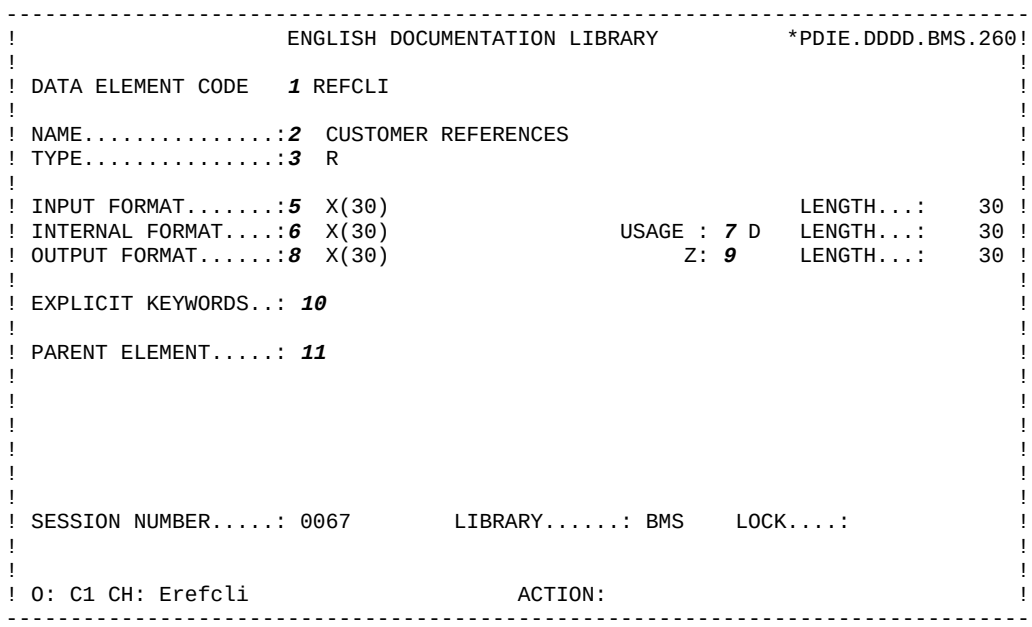
In the PRESENCE INDICATOR field, the user would enter:

```
'O' --> NOT NULL

'P' --> DEFAULT SPACE NOT NULL for a CHAR or VARCHAR
        Column.

    --> DEFAULT ZERO NOT NULL for a numeric type Column.
```

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1



COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
1	6		DATA ELEMENT CODE (REQUIRED) Enter the mnemonic code which references the data element independently from any data structure, report or screen to which the data element might belong. There is no need to include a report, screen or segment code in the Data Element code since the System does it automatically. This code consists of alphabetic or numeric characters only. Some Data Element codes are reserved by the System for use in data structures, reports or screens and cannot be defined in the Specifications Dictionary:
		SUITE	Prohibited. This code is reserved for the System for program generation.
		FILLER	Data Element that is used for the alignment of fields. Options of the BSD Function: Error Verification fields on transaction files:
		ENPR	Used for Data Element error verification.
		GRPR	Used for Segment error verification.
		ERUT	Used for user defined errors. For more information see DATA ELEMENT CODE on the Segment Call of Elements (-CE) screen. For Reports:
		LIGNE	Reserved for the placement and alignment of the layout line.
		LSKP	Reserved usage only in the '00' Report Structure. See STRUCTURE NUMBER on the Report Call of Elements (-CE) screen.
		SAUT	Reserved usage. This code is the counterpart of LSKP and used with the French version of the System. Options of the OLSD Function:
		ERMSG	Data Element for the placement of the error message.
		LIERR	Reserved usage. This code is the counterpart of ERMSG and used with the French version of the System.
		PFKEY	Used to represent the programmable function keys.

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		*PASWD	(IMS only): Used for passwords on a specific screen. The code of the Data Elements provided with the product begins with ".". For the Data Elements you define, you should not use codes beginning with a ".". For more information, see DATA ELEMENT CODE OR SCREEN CODE TO CALL on the On-Line Screen Call of Elements (-CE) screen.
2	36		NAME OF DATA ELEMENT (REQUIRED IN CREAT) This 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). This name appears in documentation and in user manuals and volumes each time the data element is used. It is also possible to list data elements sorted by name. In IMS: Use uppercase.
3	1		TYPE
		P	Property: Elementary piece of information defined at the conceptual level. Note: the FORMAT is optional.
		R	Real Data Element (Default value): elementary piece of information, defined at the Specifications Dictionary level. D.B.D. function: CODASYL elementary data, Relational column.
		A	ALIAS Data Element: This value is used in conjunction with the 'A*' value in the DATA STRUCTURE CODE IN GENER. DESCR. field with the 'DATA' PIA, causes the NAME OF DATA ELEMENT to be generated, rather than the standard element name.
4	1		FORMAT TYPE Batch mode only. This field is used to distinguish which format is being entered in the INPUT, INTERNAL or OUTPUT FORMAT field in batch mode data entry.
		E	Input format.
		I	Internal format (default value).
		S	Output format. For the input and output formats, only the first ten

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			characters are recognized.
5	10		INPUT FORMAT Not used with the DBD function.
6	10		INTERNAL FORMAT Format normally used in system files (permanent, data-base and temporary files) and in screen input fields. Like the INPUT FORMAT, the INTERNAL FORMAT will be automatically used in the data segment descriptions. For batch programs, the user may select the format type on the Program Call of Data Structures (-CD) screen. It is also used (with the necessary transformations) in screen descriptions (input fields). (Refer to screen description in the ON-LINE SYSTEMS DEVELOPMENT Reference Manual). The internal format must be coded like a COBOL pic-ture (without print characters). The 'INTERNAL USAGE' clause is associated with this format. For data elements that represent a date, it is pos-sible to assign a symbolic format: Display type formats (input):
		D	Without century (DDMMYY or MMDDYY).
		C	With century (DDMMCCYY or MMDDCCYY).
			Internal type formats:
		I	Without century (YYMMDD).
		S	With century (CCYYMMDD).
			Extended type formats (output) (with slashes):
		E	Without century (DD/MM/YY or MM/DD/YY).
		M	With century (DD/MM/CCYY or MM/DD/CCYY).
		G	Gregorian format (CCYY-MM-DD).
		T	TIME format (HH:MM:SS).
		TS	TIMESTAMP format
			METHODOLOGY function: This field may be left blank

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			for a property. For details on the use of the formats with the various types of database blocks, see the summary tables in chapter "COLUMNS: DATA ELEMENTS" of the "Relational SQL Database Description" Reference Manual.
7	1		INTERNAL USAGE Corresponds to the COBOL 'USAGE' clause.
		D	DISPLAY (default option), all hardware. Required for data elements indicating dates.
		C	COMPUTATIONAL (binary), IBM or equivalent; COMPUTATIONAL-4 (binary), IBM SYSTEM 38; COMPUTATIONAL-4 IBM 3-15D, COMPUTATIONAL-6 ICL 2900.
		R	COMPUTATIONAL SYNCHRONIZED RIGHT, IBM or equivalent; This value is preferable to 'C' when binary data are aligned on even addresses, since corresponding COBOL statements are more efficient.
		B	COMPUTATIONAL-1 ICL 1900. BINARY-1 UNISYS 1100 associated with format 1(n).
		S	COMPUTATIONAL SYNCHRONIZED RIGHT ICL 1900.
		N	COMPUTATIONAL-4 aligned on a half-byte. The user must add the complement if the length is uneven.
		P	COMPUTATIONAL-1 BULL 66, 6000 and DPS8.
		L	COMPUTATIONAL-1 SYNCHRONIZED RIGHT ICL 1900.
		Q	COMPUTATIONAL BULL 66, 6000 and DPS8.
		F	COMPUTATIONAL-1 IBM or equivalent. COMPUTATIONAL-9 BULL DPS7. COMPUTATIONAL-11 BULL 66 and DPS8. Relational DBD : floating point, simple precision.
		T	COMPUTATIONAL-3 PACKED SYNC. BULL 66 and DPS8.
		X	DISPLAY SIGN IS TRAILING SEPARATE CHARACTER.
		G	COMPUTATIONAL SYNCHRONIZED RIGHT ICL 2900 AND COMPUTATIONAL-5 MICROFOCUS.
		7	COMPUTATIONAL-5 ICL 2900.
		K	COMPUTATIONAL CDC. COMPUTATIONAL UNISYS 1100 (COBOL 85)

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

NUM LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
	M	COMPUTATIONAL-1 CDC.
	N	COMPUTATIONAL UNISYS-A
	O	COMPUTATIONAL-4 UNISYS 1100
	U	COMPUTATIONAL-1 UNISYS 1100.
	W	COMPUTATIONAL-2 UNISYS 1100. COMPUTATIONAL-12 BULL 66 and DPS8. RELATIONAL DBD : floating point, double precision.
	H	COMPUTATIONAL UNISYS 1100. BINARY UNISYS 1100 (COBOL 85)
	8	COMPUTATIONAL BULL 66 COBOL 74 and DPS8.
	9	COMPUTATIONAL-3 BULL 66 COBOL 74 DPS7 and DPS8.
	J	COMPUTATIONAL-6 BULL 66 COBOL 74 DPS7 and DPS8. REAL UNISYS-A.
	Y	DB-KEY BULL 66 DM4 and DPS8. POINTER IBM.
	I	DISPLAY-1 Unisys 1100
	5	COMPUTATIONAL-1 BULL 64 66 MINI-6 COBOL 74 DPS7 DPS8
	6	COMPUTATIONAL-2 BULL 64 66 MINI-6 COBOL 74 DPS7 DPS8
	3	COMPUTATIONAL-3 IBM or equivalent. COMPUTATIONAL BULL 64 MINI-6 DPS7. COMPUTATIONAL-3 (packed decimal) IBM SYSTEM 38. PACKED-DECIMAL UNISYS 1100 (COBOL 85)
	0	COMPUTATIONAL-7 BULL 66 and DPS8.
	1	DISPLAY-1 NCR (signed extended decimal). DISPLAY SIGN LEADING SEPARATE - UNISYS 1100, DPS8, IBM, TANDEM, DPS7.
	4	DISPLAY-2 NCR (unsigned packed decimal).
	2	DISPLAY-2 BULL = DISPLAY, fields are compared in accordance with the "commercial collating sequence" and not in accordance with the standard BULL sequence.
	Z	In batch mode only: this option, which is only used with an output format, allows for the generation of a 'BLANK WHEN ZERO' clause with the Batch S.D. function. METHODOLOGY function: This field may be left blank for

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			a property.
8	27		OUTPUT FORMAT Not used by the DBD function.
9	1		BLANK WHEN ZERO CLAUSE This field is not used when defining a data element used to generate a CODASYL elementary data element or a relational column.
10	55		EXPLICIT KEYWORDS This field allows the user to enter additional (explicit) keywords. By default, keywords are generated from an occurrence's clear name (implicit keywords). This field only exists on-line. In batch mode, keywords are entered on Batch Form 'G'. 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 not permitted in keywords. Keywords are not case-sensitive: upper-case and lower-case letters are equivalent. NOTE: Characters bearing an accent and special characters can be declared as equivalent to an internal value in order to make easy the search of occurrences by keywords. For more details, refer to the Operations Manual - Vol. II: 'Administrator's Guide', Chapter 'Database Management Utilities', Subchapter 'PARM : Update of User Parameters'. A maximum of ten explicit keywords can be assigned to one entity. For more details, refer to the SPECIFICATIONS DICTIONARY Reference Manual, Chapter 'Keywords', Subchapter 'Building the Thesaurus'.
11	6		PARENT ELEMENT CODE Allows data elements sharing the same characteristics to be defined under different codes. If a parent data element is indicated, the data element takes on the characteristics of the parent by default. These can be modified at the child level. The parent data element must have been defined previously.

COLUMN: DATA ELEMENT 3
COLUMN DEFINITION (E.....) 1

NUM LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		METHODOLOGY function: ---------- The notion of 'Parent Data Element' has no signi- ficance at the definition level of a property.

COLUMN: DATA ELEMENT 3
COLUMN DESCRIPTION (E.....D) 2

3.2. COLUMN DESCRIPTION (E.....D)

COLUMN DESCRIPTION

A Column is described on a Data Element Description (-D) screen which is accessed via the following CHOICE:

CH: E.....D

COLUMN NAME

By default, the Column Name is the 6-character code of the data element. This default may be overridden by entering an 18-character Column Name on the Data Element Description (-D) screen with a TYPE OF LINE = 'R'.

The Column Name may also be entered on the Segment Call of Elements screen; in this case, it overrides any name entered on the Data Element Description (-D).

PREREQUISITE

The data element must have been previously defined.

COLUMN: DATA ELEMENT 3
COLUMN DESCRIPTION (E.....D) 2

```
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.260!
!  ELEMENT DESCRIPTION           REFCLI CUSTOMER REFERENCE1                     !
! 2 3     4 5 6          7                                                     !
! A LIN : T S VALUE      SIGNIFICANCE - DESCRIPTION                            !
!   100 : L              CUST. REF.          ***   SQL NAME   ***              !
!   150 : P              LP-KCP  ORDER NUMBER: 05179                           !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!                                                                              !
! O: C1 CH: E refcli D                                                         !
```

COLUMN: DATA ELEMENT 3
COLUMN DESCRIPTION (E.....D) 2

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
1	6		DATA ELEMENT CODE (REQUIRED)
2	1		ACTION CODE (REQUIRED)
3	3		LINE NUMBER PURE NUMERIC FIELD It is advisable to begin with line number '100' and then number in intervals of 20. This facilitates subsequent line insertions, as necessary.
4	1		TYPE OF LINE
		blank	Value and/or description line. With a blank line type, descriptive text is assigned to the Data Element. This text includes all possible values and what they mean.
		D	DATA ELEMENT DEFAULT VALUE One of the values entered can be referenced as the default value. When the value 'D' is entered on the Segment Call of Elements (-CE) screen in the TYPE : VALIDATION, UPDATE, VALUES field, this value is assigned as the initial value.
			PACBENCH C/S MODULE - for Smalltalk graphic client ----------
		G	This value allows you to define the graphic representation of the Entity when it is displayed in a Smalltalk graphic client. The sample value is entered in the SIGNIFICANCE - DESCRIPTION field. This is a default option; it can be modified by the developper of the graphic client.
			SPECIAL TYPES (OLSD & PACTABLE functions) ----------
		P	DATA ELEMENT PRESENTATION VALUE: The sample value is entered in the SIGNIFICANCE - DESCRIPTION field. This value is used when simulating a screen for documentary purposes.
		L	DATA ELEMENT SHORT LABEL: Maximum length: 18 characters. NOTE: This length may be shortened by explicitly entering a delimiter (see description of the DATA ELEMENT VALUE field). Default delimiter is '£'.
		C	COLUMN LABEL:

COLUMN: DATA ELEMENT 3
COLUMN DESCRIPTION (E.....D) 2

NUM LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		The Column Label is defined on a single line but may use up to three lines. A delimiter in the Column Label indicates a line skip. The Column Label length is that of its longest line. Maximum length = 18 characters, including delimiters. A Column Label must be delimited by at least one delimiter (default = '/'). NOTE: To change the default delimiter, enter its value left-justified in the DATA ELEMENT VALUE field (refer to the description of this field).
	F	CONVERSATIONAL FORMAT: Data Elements used in input and output on-line: For Date Data Elements, enter the one-character symbolic value that represents the desired format, in the DATA ELEMENT VALUE field. The system will display the format in the SIGNIFICANCE - DESCRIPTION field. For other Data Elements, enter the desired output format in the SIGNIFICANCE - DESCRIPTION field. For numeric Data Elements, a BLANK WHEN ZERO clause may be obtained by entering 'Z' following the format entered in the SIGNIFICANCE - DESCRIPTION field. EXAMPLE: T ... SIGNIFICANCE - DESCRIPTION F ... 9(4) Z
	O	Declaration of the OPERATION CODE values.
	I	Declaration of the ACTION CODE values. For values 'O' and 'I', see also the SKIP OR ACTION TYPE field, and refer to the "ON-LINE SYSTEMS DEVELOPMENT Reference Manual".
		RELATIONAL DATABASES: ----------
	R	This value generates the data element's relational name on 18 characters, which is entered in the SIGNIFICANCE - DESCRIPTION field. The relational name of a parent Data Element is not carried forward to the child Data Element. With TurboImage, this field generates an Item name different from the Data Element code. In this case only the first 16 characters are recognized.

COLUMN: DATA ELEMENT 3
COLUMN DESCRIPTION (E.....D) 2

NUM LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
	E	This value allows you to input non-standard date format in the SIGNIFICANCE - DESCRIPTION field. You can make up your own date format with one or several of the following elements: . YY : year (YYYY with the century) . MM : month . MON : month's 3 first characters . DD : day . HH : hour . MI : minute . SS : second . FF : fraction of second (millisecond) . AM and PM . delimiters / . : - blank The format indicated on the Data Element Definition screen must be X(n), with n < 28 (or n < 15 for an ORACLE Database for the automatic management of dates in ON-LINE SYSTEMS DEVELOPMENT and C/S FACILITY). This format is taken into account: . in the SQL generation to generate DATE for ORACLE, SYBASE and SQL SERVER, and DATETIME for INFORMIX, NONSTOP SQL. . in the OLSD and C/S generation for the SQL accesses (e.g. by generating the TOCHAR and TODATE functions for ORACLE). Non-standard dates are not not controlled in the generated programs; only standard dates (types C, D, E, G, I, M, S) are controlled. Furthermore, the date operator (AD) cannnot be applied to this non-standard format. The system controls only the elements of the format, and not the way you put them together (ex: MD will be rejected but MMMMMM and YY-DD/MM will be accepted). DATA ELEMENTS COMING FROM REVERSE ENGINEERING: ----------
	S	The COBOL data-name(s) of the associated REVERSE Elements are generated in the SIGNIFICANCE - DESCRIPTION field. COBOL COPYBOOKS: ----------
	A	For COPYBOOKS, when a variant Data Element is being used as an alias-type Element, the SIGNIFICANCE - DESCRIPTION field contains the SEGMENT CODE of the Segment in which the parent is called. LIST OF TURBOIMAGE CLASSES:

COLUMN: DATA ELEMENT 3
COLUMN DESCRIPTION (E.....D) 2

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE

		T	Values of the TurboImage class list.
5	1		SKIP OR ACTION TYPE This field is used to specify: Line skip or page skip (only taken into account when printing User Manuals and Volumes). Continuation of a value range when a value does not fit on a single line. Operation or Action Code (also see the TYPE OF LINE field). SKIP: -----
		blank or 1	New line.
		2	1 blank line + 1 new line.
		3 to 9	2 to 8 blank lines + 1 new line.
		*	Only in User Manuals ('U' entity) : Page skip. CONTINUATION OF A VALUE RANGE: ---
		+	This value indicates a continuation of a value range if it cannot fit on a single line. ACTION (OLSD function only) ---
			Two categories of value according to the selected TYPE OF LINE: WITH TYPE OF LINE 'I':
		C	Creation.
		M	Modification.
		D	Deletion.
		X	Mod-4 (implicit update).
			WITH TYPE OF LINE 'O':
		A	Display.

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		M	Update.
		S	Next screen.
		E	End of session.
		P	Same page.
		O	Call of another screen.
6	10		DATA ELEMENT VALUE This field is used to specify the authorized values of the data element. These values undergo automatic validation if they are entered as either numeric or alphanumeric literals (quotes for the latter), If the Data Element takes on a range of values, the range must be described as two values between parentheses and separated by at least a space. Inverted parentheses indicate that the given value is excluded from the range. EXAMPLES: ('E' 'Z') : from E inclusive to Z inclusive,)0 100(: from 0 exclusive to 100 exclusive. If the description of a value calls for several lines, the value must be entered on the first line. A parent Element's value(s) are automatically assigned to each one of its child Elements. OLSD FUNCTION: ----------
		*9	Numeric Data Element. This causes a COBOL NOT NUMERIC check to be generated.
		*B	Numeric Eata Element: LEADING blanks are replaced by zeros.
		*Z	Numeric Data Element: ALL blanks are replaced by zeros.
		*A	Alphabetic Data Element: checks that all characters are alphabetic.
		*L	Alphabetic Data Element: checks that all characters are lowercase alphabetic..

COLUMN: DATA ELEMENT 3
COLUMN DESCRIPTION (E.....D) 2

NUM LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
	*U	Alphabetic Data Element: checks that all characters are uppercase alphabetic. The system displays a decoded representation, in the SIGNIFICANCE - DESCRIPTION field. WITH TYPE OF LINE = 'F'
	I	Without century (picture x(6)): YYMMDD
	S	With century (picture x(8)): CCYYMMDD
	D	Without century (picture x(6)): MMDDYY or DDMMYY depending on the value entered in the DATE FORMAT IN GENERATED PROGRAMS field on the Library Def. screen.
	C	With century (picture x(8)): MMDDCCYY or DDMMCCYY depending on the value entered in the DATE FORMAT IN GENERATED PROGRAMS field on the Library Def. screen.
	G	With century (picture x(10)): CCYY-MM-DD in a Gregorian format. Date with slashes:
	E	Without century (picture x(8)): MM/DD/YY or DD/MM/YY.
	M	With century (picture x(10)): MM/DD/CCYY or DD/MM/CCYY WITH TYPE OF LINE = 'C': Enter the delimiter for the end of each Column label line (left-justified). Default value is '/'. WITH TYPE OF LINE = 'L': Enter the delimiter for the end of the short label, (left-justified). Default value is '£'. WITH TYPE OF LINE = 'O' OR 'I': When setting the value of the Operation and/or Action Codes via an element on the screen, enter the value that corresponds to the specific operation or action. NOTE: These values correspond to the internal operation and action codes as entered in the SKIP OR ACTION TYPE field.
	T	Time.
	TS	Timestamp.

COLUMN: DATA ELEMENT 3
COLUMN DESCRIPTION (E.....D) 2

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			Concerning the use of the formats with the various types of database blocks, see the summary tables in chapter "Columns: Data Elements" of the "RELATIONAL/ SQL DATABASE DESCRIPTION" Reference Manual.
7	54		SIGNIFICANCE - DESCRIPTION The value entered here depends upon the value of the TYPE OF LINE field. With ' ', 'D', 'O', 'I': Enter a descriptive comment (optional). With 'L', 'C', or 'P': Enter the label (with delimiters as needed) or a presentation value. With 'A': Enter the SEGMENT CODE where the parent Data Element is called. With 'G': The graphic representation can be: . HORIZRADIOBUT: an horizontal radio button . VERTRADIOBUT: a vertical radio button . MULTILINE: a multi-line edit box . SPINEDIT: a spinedit . LIST: a list . MULTILIST: a multi-list box . DROPDOWN: a dropdown list . COMBOBOX: a combobox . SCALE: a scale . SLIDER: a slider With 'R': Enter the Relational Column name. With 'E': Enter the non-standard date format. For NONSTOP SQL: input of start field and end field. With 'F' (for Data Elements other than dates): Enter the output format (using standard COBOL syntax). Note: To generate a BLANK WHEN ZERO clause with numeric Data Elements, follow the format with a blank and a 'Z' (Example: 9(4) Z).
		BLANK	With the EO printing option, the $OFF command, left-justified, can be used to ignore lines when printing the Data Element description. Inserting a left-justified $ON command after the last line to be ignored cancels the application of the $OFF command for the following lines. For more information about the $OFF and $ON commands, refer to the "Personalized Documentation Manager"

COLUMN: DATA ELEMENT 3
COLUMN DESCRIPTION (E.....D) 2

NUM LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		Reference manual, Chapter "The Volume Entity", Subchapter "Contents: Occurrence and List Calls".

4. TABLE OR VIEW: SEGMENT

4.1. TABLE OR VIEW DEFINITION (S....)

TABLE OR VIEW DEFINITION

A Table or View being similar to a Segment, it is defined on a Segment Definition Screen, accessed via the CHOICE:

CH: S....

The user specifies that the Segment is a Table or View when calling it into the database block.

The external name of the Table or View may be entered in the CODE/VALUE OF RECORD TYPE ELEMENT field (between quotes) on the Segment Definition Screen.

The default for the external name is the SEGMENT CODE.

ASSOCIATED LINES

General documentation lines may be entered on the General Documentation (-G) screen.

PREREQUISITE

The Data Structure must have been previously defined.

TABLE OR VIEW NAME PREFIXING

The name of a Table or View may be generated from different user inputs. They are taken into account by the DBD Description function in the following order of priority:

1. 27-character name entered on the Table or View segment call line in the block. For more information, the reader should refer to subchapter "TABLE OR VIEW DESCRIPTION".

2. 8-character name entered on the Segment Definition screen, in the CODE / VALUE OF RECORD TYPE ELEMENT field.

3. When no external name is specified, the assigned name is the Segment code.

DB2, SQL/DS, ALLBASE/SQL, INFORMIX-ESQL, DB2/2 AND DB2/6000: PREFIXING MODE

The presence of a period within the name conditions the prefixing mode:

. If the name is formatted as follows:

PREFIX.NAME
it will processed as such by the System and the DBMS i.e. as explicitly prefixed by the user.

. If the name contains neither a period nor a prefix, the DBD function prefixes the name with the user's 8-character User Code. The DBMS will process it as such, i.e. as explicitly prefixed by the System.

. If the name is formatted as follows:

.NAME
the DBD function generates it without the period so that the DBMS ensures prefixing. In this case, the assigned prefix depends on the catalog update mode:

- Within a TSO environment, via the interactive SQL application (SPUFI), the TSO LOGON is used as the prefix. In case of batch updating, the prefix is a parameter in the JOB.

- Within a CICS or IMS environment, via the interactive application (-GEN), the prefix depends on the SIGNON procedure and also on whether or not a Security System is in operation.

EXAMPLES:

- Under CICS with CSSN SIGNON, the prefix is the OPID associated with the USERID in the DFHSNT.

- Under IMS with RACF and LOGON input, the prefix is the IMS LOGON.

ALLBASE/SQL and INFORMIX-ESQL follow the rules that apply to DB2.

NOTE: You can modify the prefixing mode by entering PREFIX = NO at the beginning of the Database Block -G screen (B.....G), on a line whose type must 'blank' or 'O'. Then a name which contains neither a period nor a prefix will be generated as such, and a .NAME name will be generated prefixed by the user code.

TABLE OR VIEW: SEGMENT 4
TABLE OR VIEW DEFINITION (S....) 1

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.260!
!                           1 2                                                !
! SEGMENT DEFINITION.........: DZ05                                            !
!                                                                              !
! NAME.......................:3 FOURNITURE                                     !
!                                                                              !
! OCCUR. OF SEGMENT IN TABLE:4                                                 !
! EST. NUMBER OF INSTANCES..:5                                                 !
!                                                                              !
!                                                                              !
!                                                                              !
! VALUE OF RECORD TYPE ELEM.:6                                                 !
! CODE OF ACTION CODE ELEM..:7                                                 !
! PRESENCE...................: CR:       MO:       DE:                         !
!                              M4:       M5:       M6:                         !
!                                                                              !
!                                                                              !
! EXPLICIT KEYWORDS..:8                                                        !
!                                                                              !
!                                                                              !
! SESSION NUMBER.....: 0067        LIBRARY......: BMS    LOCK....:             !
!                                                                              !
!                                                                              !
! O: C1 CH: S dz05                      ACTION:                                !
--------------------------------------------------------------------------------
```

TABLE OR VIEW: SEGMENT 4
TABLE OR VIEW DEFINITION (S....) 1

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			DATA STRUCTURE / SEGMENT CODE
1	2		DATA STRUCTURE CODE (REQUIRED) This code is made up of two alphanumeric characters. This is a logical code internal to the Database and therefore independent of the names used in Database Blocks and Programs.
2	2		SEGMENT NUMBER (REQUIRED) The first character must be numeric and the second either numeric or alphabetic. However the second character can be alphabetic only if the first character is other than zero.
		00	For standard files: Used to indicate the common part of records in a file, located at the beginning of each record (Default). The control break sort keys, the record type and the keys of indexed files are contained in this Segment. A file does not necessarily have a common part. Records on files with only one type of record should be coded as a '00' Segment. With the Pactables function, this value is not allowed.
		01-99	Designates a specific Segment. The common part Data Elements are automatically concatenated with each specific part Segment. Although a data element may not be used twice in the same Segment, it may be used in both the common part and in one or more specific Segments (except data structures used as Tables).
3	36		SEGMENT CLEAR NAME (REQUIRED IN CREAT) This name must be as explicit as possible because it is used in the automatic building of keywords, as detailed in chapter "Keywords" in the SPECIFICATIONS DICTIONARY.
4	4		OCCURRENCES OF SEGMENT IN TABLE PURE NUMERIC FIELD WITH THE BATCH SYSTEMS DEVELOPMENT function: This is the amount of space reserved for a Segment in memory (USAGE OF DATA STRUCTURE 'T' or 'X', or RECORD TYPE = 3, or 4.

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			For tables (USAGE OF DATA STRUCTURE 'T' or 'X'), the default value at generation time is 100. Pactables: This field is strictly for documentation purposes. PACBENCH CLIENT/SERVER: The value entered in this field indicates the repetitive read or update capacity of the server which calls the Logical View. This capacity is expressed by a maximum number of repetitions. The Logical View can then be used as a repeated structure. NOTE: The use of a Logical View in a card layout does not exclude its use in a row layout. It is therefore strongly recommended to systematically fill in this field. Moreover, the entered value must be high enough to limit the exchanges between the client and the server.
		999	Maximum authorized value.
5	9		ESTIMATED NUMBER OF INSTANCES PURE NUMERIC FIELD For the Batch Systems Development function, this field is used to specify the estimated number of occurrences for a segment in a database or in a standard file. For the METHODOLOGY function, this field is used for activity calculation on the record or set using the Segment (on-line only). For the DBD function, this field is used to specify the application number of an entity in a SOCRATE/CLIO Block.
6	10		CODE / VALUE OF RECORD TYPE ELEMENT For a Relational Table or View, this field is used to specify the external name between quotes. This field is not used to define a CODASYL record.
7	36		CODE OF ACTION CODE ELEMENT This field is not used to define a CODASYL record or a Relational Table or View.
8	55		EXPLICIT KEYWORDS This field allows the user to enter additional (ex-

TABLE OR VIEW: SEGMENT 4
TABLE OR VIEW DEFINITION (S....) 1

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			plicit) keywords. By default, keywords are generated from an occurrence's clear name (implicit keywords). This field only exists on-line. In batch mode, keywords are entered on Batch Form 'G'. 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 not permitted in keywords. Keywords are not case-sensitive: upper-case and lower-case letters are equivalent. NOTE: Characters bearing an accent and special characters can be declared as equivalent to an internal value in order to make easy the search of occurrences by keywords. For more details, refer to the Operations Manual - Vol. II: 'Administrator's Guide', Chapter 'Database Management Utilities', Subchapter 'PARM : Update of User Parameters'. A maximum of ten explicit keywords can be assigned to one entity. For more details, refer to the SPECIFICATIONS DICTIONARY Reference Manual, Chapter 'Keywords', Subchapter 'Building the Thesaurus'.

4.2. TABLE OR VIEW DESCRIPTION (S....CE)

TABLE OR VIEW DESCRIPTION

Since a Table or View is defined as a segment, it is described on the Segment Call of Elements Screen. This screen is accessed via the following input in the CHOICE field:

CH: S....CE

A Table or View description is composed of the list of its Columns. Since Columns are represented by Data Elements, the corresponding Data Elements are called into the segment.

Segments may also be called into Segments describing Relational Tables and Views.

PREREQUISITES

The Table or View and its Columns must have been previously defined.

ASSOCIATED LINES

Each call line on this screen may be documented with a General Documentation (-G) line via CHOICE '-CEnnnG', where 'nnn' is the call line to be documented.

NOTE ON VIEW SOURCE DESCRIPTIONS

The DB2 View Description (-DBE) screen allows the user to specify the source (tables) of the Elements (Columns) called into Segments used as Views. This screen is accessed by entering '-DBE' in the CHOICE field from the Segment screen network. Once entered, these lines will be displayed on the Call of Elements Screen with "(-DBE)" as the DATA ELEMENT CODE and an asterisk (*) in the ACTION CODE field.

For more information, see Subchapter "ADDITIONAL VIEW DESCRIPTION".

TABLE OR VIEW: SEGMENT 4
TABLE OR VIEW DESCRIPTION (S....CE) 2

NOTES

Data Elements which are used as group Elements or redefined, are not taken into account for the generation.

A Data Element may be called only once in each Table or View, even if it is given different Column Names.

VIEW DESCRIPTION

A View can be described as follows:

. By calling Tables or Views, that is calling segments into another segment;

. By calling Columns via the DB2 VIEW DESCRIPTION (-DBE) screen (see Subchapter "DB2 VIEW DESCRIPTION").

COLUMN NAME GENERATION PRIORITIES

There are four different ways of specifying a Column Name. If all four methods are used, the Column Name is generated according to the following order of priority:

1. Column Name entered as an insertion to the system-generated (virtual) lines on the General Documentation Screen of the Block. (See chapter "DATABASE : DATABASE BLOCK", subchapter "GENERAL DOCUMENTATION").

2. Column Name entered on the Call of Elements Screen for a Table or View, 'A*' followed by the Column Name (maximum 8 characters) in the UPDATE TARGET field.

EXAMPLE:

```
A LIN ELEM.                          UPD/TRGET
  100 COLNE1                         A*COLUMN1
```

3. Column Name entered on a Data Element Description screen with TYPE OF LINE = 'R'.

4. Data Element 6-character code.

TABLE OR VIEW: SEGMENT 4
TABLE OR VIEW DESCRIPTION (S....CE) 2

```
--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.260!
!                         1 2                                                  !
! SEGMENT CALL OF ELEMENTS DZ05 FOURNITURE                                     !
! 3 4     5      7          8 9   10 11  12   13   14        15        16      !
! A LIN : ELEM.  INT.FORM.  U OCC GR K CMD456 CONT VALUE/SFC UPD/TRGET DOC LIBR!
!   100 : COCARA                       O                                 0067!
!   110 : NUCOD                        P         S     O                 0067!
!   120 : FOURNI                                                         0067!
! * 125 : (-DBE)                                                        0234!
!   200 : NUCLIE                             S   O                       0067!
! * 205 : (-DBE)                                                        0234!
!   210 : DATE                                                           0067!
!   220 : RELEA                                                          0067!
!   230 : REFCLI                   V         S   O                       0067!
! * 235 : (-DBE)                                                        0234!
!   240 : RUE                      V         S   O                       0067!
! * 245 : (-DBE)                                                        0234!
!   250 : COPOS                              S   O                       0067!
! * 251 : (-DBE)                                                        0234!
!   255 : VILLE                    V         S   O                       0067!
! * 256 : (-DBE)                                                        0234!
!   260 : CORESP                   V         S      O                    0067!
!       : NAME    : 6                                                        !
!                                                                            !
! O: C1 CH: -CE                                                              !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.260!
! SEGMENT CALL OF ELEMENTS DZ05 FOURNITURE                                     !
!                                                                            !
! A LIN : ELEM.  INT.FORM.  U OCC GR K CMD456 CONT VALUE/SFC UPD/TRGET DOC LIBR!
!   270 : REMISE                                                         0067!
!   280 : MATE                     V                    A*MATERIEL    0067!
!   310 : PRIX1                                                          0067!
!   330 : HEURE                                                          0067!
!   340 : PRECIS                             S     O                     0067!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       : NAME    :                                                          !
! *** END ***                                                                !
! O: C1 CH:                                                                  !
--------------------------------------------------------------------------------
```

TABLE OR VIEW: SEGMENT 4
TABLE OR VIEW DESCRIPTION (S....CE) 2

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			DATA STRUCTURE / SEGMENT CODE
1	2		DATA STRUCTURE CODE (REQUIRED) This code is made up of two alphanumeric characters. This is a logical code internal to the Database and therefore independent of the names used in Database Blocks and Programs.
2	2		SEGMENT NUMBER (REQUIRED) The first character must be numeric and the second either numeric or alphabetic. However the second character can be alphabetic only if the first character is other than zero.
		00	For standard files: Used to indicate the common part of records in a file, located at the beginning of each record (Default). The control break sort keys, the record type and the keys of indexed files are contained in this Segment. A file does not necessarily have a common part. Records on files with only one type of record should be coded as a '00' Segment. With the Pactables function, this value is not allowed.
		01-99	Designates a specific Segment. The common part Data Elements are automatically concatenated with each specific part Segment. Although a data element may not be used twice in the same Segment, it may be used in both the common part and in one or more specific Segments (except data structures used as Tables).
3	1		ACTION CODE (REQUIRED)
4	3		LINE NUMBER PURE NUMERIC FIELD It is advisable to begin with line number '100' and then number in intervals of 20. This facilitates subsequent line insertions, as necessary.
5	6		DATA ELEMENT CODE ELEMENTARY DATA ELEMENT DEFINED IN THE DICTIONARY --- The Data Element automatically assumes the characteristics defined at the Specifications Dictionary level.

TABLE OR VIEW: SEGMENT 4
TABLE OR VIEW DESCRIPTION (S....CE) 2

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			If the Data Element is used as a group, its format depends on the characteristics of the elementary Elements that make up the group. If the group is used as a key (sort or access key), the composite format of the elementary Elements must be compatible with the format specified for the group. DATA ELEMENT NOT DEFINED IN THE DICTIONARY --- The name and/or format of undefined Data Elements must be indicated at the segment level. RESERVED DATA ELEMENT CODES --- Prohibited. This code is reserved for the System for program generation.
		SUITE	
		FILLER	Data Element that is used for the alignment of fields. OPTIONS OF THE BATCH SYSTEMS DEVELOPMENT FUNCTION --- These codes (when used) precede other entries made in this field, in the sequence described below.
		ENPR	Used to store Element error verifications in a transaction file. The length is n + 1 where n = either the total number of elementary Elements in the file, or the number of elementary Elements in the '00' Segment added to the largest non-00 Segment. ("Largest" here means the most elementary Elements.) This depends upon the value entered in the RESERVED ERROR CODES IN TRANS FILE field on the Call of Data Structures (-CD) screen.
		GRPR	Used to store Segment error verifications. Its length is n + 1 where n = the number of records.
		ERUT	Used to store error verifications for users. Normally, these last three Data Elements are used in transaction files for error verification fields. When used in other types of files as "optional" Data Elements, they may be used as group fields whose generation may be invoked or suppressed according to the option selected in the RESERVED ERROR CODES IN TRANS. FILE field. (Note: this will affect the elementary Elements within the group as well.)

TABLE OR VIEW: SEGMENT 4
TABLE OR VIEW DESCRIPTION (S....CE) 2

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			CALLING DATA AGGREGATES ---------- A SEGMENT CODE or a Model Entity code (Relationship or Object in the METHODOLOGY function) can be entered in this field. The called data aggregate will be interpreted as if the individual Elements that make it up had been entered. The NO. OF ELEMENTARY ELEMENTS IN GROUP field is used to identify data aggregate calls. Enter the code at the location the elements are to be included in the Segment description. In O:C2, the level of 'nesting' is displayed in the Action Code (up to four levels). The number of authorized nesting levels varies according to the type of generator. Up to 4 nesting levels are authorized for data generation and PAF use. CONTINUATION LINES ---------- It is possible to create continuation lines. This may be necessary if there are many validations on a Data Element. In this case, leave the DATA ELEMENT CODE field blank, and use a LINE NUMBER value that sequentially follows that of the line where the Data Element code was entered.
6	18		NAME OF DATA ELEMENT It is required for a Data Element which is not defined in the Specifications Dictionary. However, it is optional for a data aggregate or a FILLER. Note: For on-line entry of Data Elements that are not declared in the Dictionary, this field cannot be used to input more than one Data Element at a time. There is actually only one available field on this screen, whether for input or for display. To define an Element at the Segment level : - Enter the Element code (and possibly the format) on the -CE, line nnn, - On the 'name' line, repeat the line number (nnn), and indicate the name (18 characters maximum), - Use the C2 option to view the name and format.

TABLE OR VIEW: SEGMENT 4
TABLE OR VIEW DESCRIPTION (S....CE) 2

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			Note: If several undefined Elements have been named in this fashion, the name displayed will be the one that refers to the Element with the lowest line number on the display. To view a specific Element's name use the CHOICE field, selecting the appropriate Element by line number. Example: O: C2 CH: -ce130 will display all Data Elements starting with the one on line 130. If it is an undefined Element, its name will appear in the NAME OF DATA ELEMENT field.
7	10		DATA ELEMENT INTERNAL FORMAT It is required only in the following cases : - For an elementary Data Element not defined in the Dictionary (COBOL format), - For a group Data Element that is or belongs to a key; its length must be the sum of the lengths of its elementary Data Elements, - For a FILLER-type field. It is the internal format; input and output formats will be the same (but with usage Display). It is defined as on a Data Element Definition screen.
8	1		INTERNAL USE For Data Elements not defined in the Specifications Dictionary when the INTERNAL FORMAT OF DATA ELEMENT field has been given a value, enter the appropriate USAGE (default : 'D' for DISPLAY). For valid values, see the USAGE field on the Data Element Definition Screen.
9	3		OCCURRENCES (COBOL "OCCURS" CLAUSE) PURE NUMERIC FIELD This field represents the 'OCCURS' clause at an elementary Data Element level, or at a group level (Maximum of 3 levels). It can be changed into an 'OCCURS DEPENDING ON' clause by entering '**' in the UPDATE TARGET field, followed by the counter's Segment and Data Element codes. The COBOL restrictions on the OCCURS clause apply.
10	2		NO. OF ELEMENTARY ELEMENTS IN GROUP

TABLE OR VIEW: SEGMENT 4
TABLE OR VIEW DESCRIPTION (S....CE) 2

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			PSEUDO NUMERIC FIELD
		1 to 99	For group Data Elements, enter the number of elementary Elements that belong to the group (A Segment call is considered as an elementary Data Element). Groups may contain up to 99 elementary Elements. Group Elements may contain embedded groups however the total number of elementary Elements cannot exceed 99. (The group Data Element codes are not counted). The maximum number of levels of 'nesting' is 9. This field is also used to identify the entity called in the DATA ELEMENT CODE field as Methodology entities or previously defined Segments.
		*M	Call of an Object or a Relationship.
		**	Call of a Segment. SQL DBD function:
		**	Call of a Segment into a view.
11	1		KEY INDICATOR FOR ACCESS OR SORT For Relational Tables or Views:
		blank	Fixed length Column (default value).
		V	Variable length Column,
		W	For DB2 SQL, SQL/DS, ORACLE, DB2/2 and DB2/6000, generation of a variable length column (VARCHAR).
		L	For DB2 SQL, SQL/DS, ORACLE, DB2/2 and DB2/6000, generation of a LONG VARCHAR.
		C	For ORACLE V7, generation of a CHAR.
12	6		PRESENCE INDICATOR Only the first position of the field is used to specify the nature of a Column presence in a Table.
		blank	Optional Column: The Column is not required in update and as such will not always be filled in in READ-ACCESS mode. Programming a variable indicator for presence validation is therefore necessary. It is possible to add an optional Column in a Table via the ALTER command.
		O	NOT NULL Column:

TABLE OR VIEW: SEGMENT 4
TABLE OR VIEW DESCRIPTION (S....CE) 2

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			The Column is required in update and is always filled in in READ-ACCESS mode. Programming a variable indicator for presence validation is therefore not necessary. It is not possible to add a NOT NULL Column in a Table via the ALTER command. RDMS 1100: This value is not taken into account.
		P	NOT NULL WITH DEFAULT Column (DB2, DB2/400, DB2/2, DB2/6000 and DATACOM/DB), DEFAULT (INTEREL RDBC and RFM), DEFAULT SYSTEM (NONSTOP SQL C30). The Column is not required in update but will be initialized to zero or space by the DBMS. As such, it is always filled in in READ-ACCESS mode. It is not possible to add a (NOT NULL WITH) DEFAULT Column via the ALTER command. This value is not recognized by RDMS 1100 nor by NONSTOP SQL (Version C10).
13	4		SCHEMA SELECTION
		S	Indicates that the schema has been selected. The group and elementary Data Elements must belong to the same sub-schema. This shema must be entered on all the lines.
14	10		SELECTION INDICATOR
		O	Indicates the presence top in a schema.
15	10		UPDATE TARGET
		A*.....	The user may specify a Column Name by entering 'A*' left-justified and followed by the desired name. This name cannot exceed 8 characters in length. EXAMPLE: ELEM. UPD/TRGET COLMN1 A*COLMNAME This value will override the default of the DATA ELEMENT CODE or the value assigned on the Data Element Description Screen (if any).
16	1		DOCUMENTATION INDICATOR
			This field is used in on-line mode only. It is a read-only field.
		*	General documentation exists for the element on this line.

TABLE OR VIEW: SEGMENT 4
TABLE OR VIEW DESCRIPTION (S....CE) 2

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			Access to line nnn: -CEnnn Access to the documentation of line nnn: -CEnnnG For more details, see the "GENERAL DOCUMENTATION" chapter in the SPECIFICATIONS DICTIONARY Reference Manual.

TABLE OR VIEW: SEGMENT 4
ADDITIONAL VIEW DESCRIPTION (S...DBE) 3

4.3. ADDITIONAL VIEW DESCRIPTION (S....DBE)

ADDITIONAL VIEW DESCRIPTION

When Segments are used as Views, an additional screen is available in order to specify where the Columns making up the View come from.

This screen is accessed via the following input in the CHOICE field:

CH: -DBE

The lines entered on the Segment's Call of Elements (-CE) screen are displayed on the Additional View Description (-DBE) screen and cannot be modified there. These lines are identified by an asterisk (*) in the ACTION CODE field.

By inserting lines between the displayed lines, the source of the Column can be specified.

EXAMPLE:

```
A LIN : ELEM.
  080 : COLUM1
  100 : COLUM2
  120 : COLUM3
  140 : COLUM4

O: C1 CH: -CE
```

In order to specify the source of 'COLUM2', the user must access the '-DBE' screen, and insert a line via an appropriate LINE NUMBER value, between the Element to describe (100 in this case) and the next element (120).
In the example below, we have selected a LINE NUMBER of 110. Enter the source of the Column in the format of 'ddsseeeeee' where ddss' = the SEGMENT CODE of the Table Segment and 'eeeeee' = the Column's DATA ELEMENT CODE.

```
A LIN : ELEM.                          TAB/ELEM.
* 080 : COLUM1
* 100 : COLUM2
  110 :                                 XX10DATELA
* 120 : COLUM3
* 140 : COLUM4

O: C1 CH: -DBE
```

The source of 'COLUM2' is 'DATELA' of the 'XX10' Table.

TABLE OR VIEW: SEGMENT 4
ADDITIONAL VIEW DESCRIPTION (S...DBE) 3

NOTE: The identifier expected by the System is the DATA ELEMENT CODE of the Column and not an override like the value (beginning with '*A') entered on the Segment Call of Elements screen.

REMARK - CALLING SEGMENTS

When calling Segments into a View Segment the system automatically tracks the source of the Columns.

EXAMPLE:

View description: (Note: the '**' identify 'XX10' as a Segment.)

```
A LIN : ELEM.              GR
  100 : XX10               **

O: C1 CH: S VV55 CE

Table description:

A LIN : ELEM.
  100 : COLUM1
  120 : COLUM2

O: C1 CH: S XX10 CE
```

Without any Additional View Description (-DBE) specified, the system knows that the COLUM1 Column comes from COLUM1 in the XX10 Table, and that the COLUM2 Column comes from COLUM2 in the XX10 Table.

TABLE OR VIEW: SEGMENT 4
ADDITIONAL VIEW DESCRIPTION (S...DBE) 3

EXAMPLES OF SEGMENT CALLS

1. When a View contains all the Columns of several Tables, instead of calling each Data Element individually into the View description, the user can call the Table segments into the View segment (via the Call of Elements Screen) directly. No additional data is needed on the Additional View Description.

2. For example, the View VV10 contains all the Columns of the Table XX10 plus the first Column (COLUM1) from Table XX20.

```
A LIN : ELEM.        GR
  100 : XX10         **
  120 : COLUM1
* 122 : (-DBE)

O: C1 CH: S VV10 CE


A LIN : ELEM.             TAB/ELEM.
* 100 : XX10        **
* 120 : COLUM1
  122 :                    XX20COLUM1

O: C1 CH: S VV10 DBE
```

In this example the View DATA ELEMENT CODE (COLUM1) could be different from the DATA ELEMENT CODE of its source.

TABLE OR VIEW: SEGMENT 4
ADDITIONAL VIEW DESCRIPTION (S...DBE) 3

USING THE SUB-SCHEMAS

It is possible to select the Data Elements called in the view, by indicating:

- A sub-schema number ranging from 0 to 9, or '*' in the '-DR' screen, in the KEY TYPE field. The '*' means that all Data Elements of the Segment (including the Segment Data Elements called in the Segment) belong to the View.

- In cases of selection by a number ranging from 0 to 9: the user must specify an 'S' (indication of sub-schema) on the Data Elements to be selected in the 'CONT' field of the '-CE' screen and an 'O' in the VALUE/SFC field on the umpteenth Column (n corresponding to the sub-schema number indicated on the '-DR' screen, O being 10).

IMPORTANT NOTE

For reasons of compatibility with batch and on-line generations, it is not possible to specify the sub-schema number on segment calls and group data elements. In cases of sub-schema utilization, the '-DBE' lines that might be present are ignored.

USING SEGMENT CALLS

. If the KEY TYPE Data Element is blank, it is a View, described by '-DBE' lines. In this case, it is possible to call a Segment that will be considered as a Table. All the Data Elements of the Segment will be selected, without -DBE lines having to be entered.

IMPORTANT: There can be only one level of Segment call.

. If the KEY TYPE Data Element is entered, it is a View described by a selection of sub-schemas or of the entire Table. In case of first level call, this will be considered as a Table. The Segments called in the first Segment will have their Data Elements referenced in this Table, whatever the nesting level.

TABLE OR VIEW: SEGMENT 4
ADDITIONAL VIEW DESCRIPTION (S....DBE) 3

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.260!
! ADD'L VIEW DESCRIPTION : DZ05 FOURNITURE                                      !
!                          1 2                                                  !
!  3 4                                                        5                 !
! A LIN : ELEM.                                             TAB/ELEM. DOC LIBR!
! * 100 : COCARA                                                        0067!
! * 110 : NUCOD                                                         0067!
! * 120 : FOURNI                                                        0067!
!   125 :                                                   FF10FOURNI  0234!
! * 200 : NUCLIE                                                        0067!
!   205 :                                                   CC20NUCLIE  0234!
! * 210 : DATE                                                          0067!
! * 220 : RELEA                                                         0067!
! * 230 : REFCLI                                                        0067!
!   235 :                                                   CC20RAISOC  0234!
! * 240 : RUE                                                           0067!
!   245 :                                                   CC30RUE     0234!
! * 250 : COPOS                                                         0067!
!   251 :                                                   CC30COPOS   0234!
! * 255 : VILLE                                                         0067!
!   256 :                                                   CC30VILLE   0234!
! * 260 : CORESP                                                        0067!
!       : NAME    :                                                         !
!                                                                           !
! O: C1 CH: S dz05 DBE                                                      !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QGBLOC INGRES EXAMPLE                         !
!                                                                           !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                !
! TYPE       : I                                                            !
!              CATALOG UPDATE Y/N :                                         !
!                                                                           !
! CREATE INDEX INDZ10                                                       !
!  ON DODZ10                                                                !
! (FOURNP                ,                                                  !
!  NUCOM             ASC ,                                                  !
!  LIVRABLE              )                                                  !
! ;                                                                         !
!                                                                           !
!                                                                           !
!                                                                           !
!                                                                           !
!                                                                           !
!                                                                           !
!                                                                           !
!                                                                           !
! *** END ***                                                               !
! O: C1 CH: -GEN210                                                         !
--------------------------------------------------------------------------------
```

TABLE OR VIEW: SEGMENT 4
ADDITIONAL VIEW DESCRIPTION (S...DBE) 3

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			DATA STRUCTURE / SEGMENT CODE
1	2		DATA STRUCTURE CODE (REQUIRED) This code is made up of two alphanumeric characters. This is a logical code internal to the Database and therefore independent of the names used in Database Blocks and Programs.
2	2		SEGMENT NUMBER (REQUIRED) The first character must be numeric and the second either numeric or alphabetic. However the second character can be alphabetic only if the first character is other than zero.
		00	For standard files: Used to indicate the common part of records in a file, located at the beginning of each record (Default). The control break sort keys, the record type and the keys of indexed files are contained in this Segment. A file does not necessarily have a common part. Records on files with only one type of record should be coded as a '00' Segment. With the Pactables function, this value is not allowed.
		01-99	Designates a specific Segment. The common part Data Elements are automatically concatenated with each specific part Segment. Although a data element may not be used twice in the same Segment, it may be used in both the common part and in one or more specific Segments (except data structures used as Tables).
3	1		ACTION CODE (REQUIRED)
4	3		LINE NUMBER PURE NUMERIC FIELD It is advisable to begin with line number '100' and then number in intervals of 20. This facilitates subsequent line insertions, as necessary.
5	10		COLUMN SOURCE Enter the SEGMENT CODE of the Table segment and the DATA ELEMENT CODE to specify the source of the Column. Use the format: ddsseeeeee. In batch mode, this corresponds to the UPDATE TARGET

TABLE OR VIEW: SEGMENT 4
ADDITIONAL VIEW DESCRIPTION (S...DBE) 3

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			field (columns 71 to 80).

5. SQL ACCESSES

5.1. IMPLEMENTATION MADE EASY

IMPLEMENTATION MADE EASY

With the O.L.S.D, Client/Server and Batch Functions, you can implement SQL accesses easily (connect, disconnect, commit...), without having to code them entirely in procedural code. The generated code automatically adapts to the Block type.

CODING RULES

In Procedural Code lines (-P), you must enter one of the following operators in the OPERATOR field and the Block code in the OPERANDS field.

This is the list of accesses you can implement and the syntax you must follow:

```
CONNECT (or equivalent)     : SCC cccccc d
DISCONNECT (or equivalent)  : SDC cccccc d r
COMMIT                      : SCO cccccc d
ROLLBACK                    : SRO cccccc d
WHENEVER                    : SWH statement

cccccc: VA Pac code of the Block (6 characters)
d: value '2' if distributed database (e.g. Oracle, Sybase)
r: value 'R' for DISCONNECT with ROLLBACK.

The d and r indicators can be reversed.
```

Each statement can be written on more than one line (without operator on continuation lines). On these continuation lines, you can enter options available with some RDBMS (e.g. FORCE option in a COMMIT statement for Oracle).

Ex.: Coding a CONNECT statement to the Oracle BLOCOD Block:

```
 OPE  OPERAND
 SCC  BLOCOD  2
```

GENERATION RULES

In the Segment Calls (-CS for C/S Facility or -CD for Batch Function), if you declare an SQL organization (ORGANIZATION field) and so a Block code (EXTERNAL NAME field), this organization has priority on the Block type indicated on the Bloc Definition.

In the Segment Calls, if the Block is indicated as being distributed, the accesses related to this Block will be generated as 'distributed'.

Unknown SQL statements are ignored.

END-EXEC is automatically generated and with the batch generator, it is always followed by a period.

5.2. CUSTOMIZED SQL ACCESSES

5.2.1. INTRODUCTION

CUSTOMIZED SQL ACCESSES

Warning: you must be familiar with the SQL syntax before customizing SQL accesses in VA Pac.

INTRODUCTION

With the Client/Server, O.L.S.D. and Batch Functions, you can:

. add or replace clauses in the standardly generated access. To do so, you can modify the standard access or associate the standard access with a non-standard one.

. create a new SQL access by coding a non-standard access,

. implement extraction criteria which correspond to extraction methods.

The implementation of customized standard accesses is automatic or almost automatic whereas the implementation of non-standard accesses must be requested in procedural code.

So you choose between customizing a standard access or a non-standard one according to how often this access will be used in Screens and Programs.

With VA Pac, you write customized SQL accesses on the GENERAL DOCUMENTATION lines of a Segment (CH: S....G) and implement them or ignore them in the Screens or Programs which use them. As a matter of fact you can choose to implement them in a given Screen but not in another one, or to implement only some of them... You are quite free to use them as you need.

A customized access is, for example, to select only the clients who put in an order which amounts to more than $50.

5.2.2. DESCRIPTION

DESCRIPTION OF CUSTOMIZED ACCESSES

You describe customized accesses in the same way with the Client/Server, O.L.S.D. and Batch Functions, on the Segment GENERAL DOCUMENTATION lines.

On the first line, you enter the access you want to customize and on the following lines, you specify the part(s) of the access you want to modify or add.

FIRST LINE

Enter value 'G' in the LINE TYPE field.

In C2 option, the COMMENT field contains 2 parts (tab from one to the next):
- in the first part, enter 'SQL' to indicate you want to customize an SQL access.
- in the second part, enter the access type you want to customize. The access type is standard or non-standard.

Standard Accesses

The standard access types, which will be automatically implemented, are:

```
R  : Select
RU : Select for Update
RA : Select (Client/Server Facility)
W  : Insert
RW : Update
D  : Delete
P  : Open Cursor
RN : Fetch
DC : Declare Cursor
CL : Close Cursor
```

Note: DC (Declare Cursor) standard access is not managed for SQL accesses where DC is generated in the Working Storage Section.

```
Example of the customization of the select standard access:
 T  COMMENT
 G  SQL   R
```

Non-standard Accesses

A non-standard access must be coded on any one or two characters. This access can be:

. combined with a standard access if you want to modify only part of the standard access and leave the generator to manage the syntax. In this case you must enter the code of the standard access first and, after a blank, the code of the non-standard access.

. or used alone if you want to create an entirely new access. In this case you must describe this access entirely and implement it in procedural code. You must manage the syntax (punctuation, keywork...) entirely.

```
Example of the customization of a select non-standard access: T
COMMENT
 G  SQL   R1 RA
```

```
Example of the creation of a non-standard access which counts the
number of records in the clients table. T  COMMENT
 G  SQL   CP
```

Extraction Methods (Client/Server facility)

An extraction method is a select access to a Business Component. So it is specific to the Client/Server facility.

Four access statements are required: Declare Cusor, Open, Fetch, Close.

You can then:

. partially describe only one customized access, by entering the 'EX' access type twice.

. or describe the four accesses entirely, by combining your customized accesses with each of the four accesses (DC, P, RN, CL).

```
Example of the declaration of the METHODNAME extraction method: T
COMMENT
 G  SQL   EX EX METHODNAME


Example of the customization of the METHODNAME four accesses: T
COMMENT
 G  SQL   D1 DC METHODNAME
 G  SQL   O1 P  METHODNAME
 G  SQL   F1 RN METHODNAME
 G  SQL   C1 CL METHODNAME
```

You must enter the method name in uppercase letters, from column 7, on 10 characters maximum.

FOLLOWING LINES

An SQL access is described by clauses (access statement, where, order...). Each clause is described by a keyword and data related to the keyword. From the second line onwards, you enter these keywords, which apply to the customization of both standard and non-standard accesses.

In the LINE TYPE field, enter value 'G'.

In the first part of the COMMENT field, enter the keyword and in the second part, enter the parameters required for its operation.
The corresponding data will replace the data which would have been generated otherwise. If it must be added as a complement, enter 'ADD' before or after each keyword.
A keyword described on more than one line should not be repeated on each line.

KEYWORD	PARAMETERS
ACCESS	SQL Access
FROM	List of tables
ORDER	List of columns
COLUMN	List of columns and host-variables
WHERE	Selection criteria
PARAM	Additional parameters

See next paragraphs for a detailed explanation on each keyword.

The use of these keywords is illustrated in examples at the end of this subchapter and at the end of the chapter.

The generated format of date and variable Data Elements (e.g. CURDAT (current date) column entered as a parameter of the ORDER statement) varies according to the Block type.

Punctuation Rules

The corresponding delimiter is automatically generated at the end of each line. If a column name and/or a host-variable name exceeds one line, indicate this line as being 'V'-type and continue on the next line ('G'-type line).

In this case, and if you enter a column name AND a host-variable name (with or without : -), you must code the host-variable on a new line.

On the other hand, if you code a host-variable AND its indicator under the form : - (without Segment code), you must code them on the same line.

The parameters associated with the COLUMN keyword have additional punctuation rules, which are detailed in the 'COLUMN' paragraph below.

1. ACCESS

Allows you to rewrite the clause of an access (SELECT, UPDATE, DELETE ...).

2. COLUMN

This keyword is followed by the list of columns.

These columns can be coded either in the SQL-Data Element form (in this case they are replaced during generation by their relational name) or directly under their relational name.
Each column can be followed, after one blank at least, by the code of the host variable (and indicator), coded either in the form ':-Data Element code' (during generation, the Segment code defined on the -CS screen (Screen Segment code) will be inserted before the :-Data Element code), or under the name of the host variable.

If the host variable is not coded in an access where it is required, it will be generated with the Screen Segment code and the Data Element indicated in the column (in the SQL-Data Element code form, if not the code of the host variable must be indicated).

Specific punctuation rules:

If the column and host-variable names exceed one line, you can use one or more 'V'-type lines but only for the host-variable name; the column name is entered on one line only.

For the UPDATE statement ('RW') of the COLUMN keyword, the host-variable and its indicator must be coded on the same line whatever their input format.

3. FROM

This keyword is followed by the list of tables. At generation time, FROM is either transformed into INTO or remains FROM according to the access type.

4. WHERE

Allows you to indicate the selection criteria. The column names can be coded in the 'SQL-Data Element code' form and the host variables and indicators in the ':-Data Element code' form.

5. ORDER

Allows you to indicate the Order By.
Same principle as WHERE for coding the column names.

6. PARAM

Allows you to code additional parameters such as COUNT, HAVING, ... The ADD keyword is not necessary.
Same principle as WHERE for coding the column names.

EXAMPLES:

Customization of a select non-standard access to select a client number higher than or equal to the requested number. You modify the WHERE clause only but you do not want to modify the standard access directly because this selection applies to few Screens only. So you enter:

```
T  COMMENT
G  SQL     RB RA
G  WHERE   SQL-NOTJ >= :-NOTJ
```

Creation of a non-standard access to count the number of records in the clients table. In this case it is really a specific need. So you describe a new access in the following way:

```
T  COMMENT
G  SQL     CP
G  ACCESS  SELECT COUNT (*)
G          INTO :WWCA-COUNTER
G  FROM    PTB0.CLIENT
```

Extraction Methods

If an extraction method is specified in the selection request, the selection of the occurrence list is performed according to one or more criteria.

You can:

. describe only one 'EX' customized access with the required clauses:

```
T  COMMENT
G  SQL    EX EX METHODNAME
G  WHERE  ...
G  ORDER  ...
```

. or entirely describe the four customized accesses, and specify the clauses for each one:

```
T  COMMENT
G  SQL    D1 DC METHODNAME
description...
G  SQL    O1 P  METHODNAME
description...
G  SQL    F1 RN METHODNAME
description...
G  SQL    C1 CL METHODNAME
description...
```

See also the information included in the 'Client/Server Facilty - Business Logic' User's Guide, Chapter 'Writing a Business Component'.

OPTION

The option UPPER=NO, entered on an O-type line, inhibits the lowercase/uppercase conversion of values entered between two literal delimiters (the delimiter is defined at the Library level).

RESTRICTIONS

The syntax of SQL statements is not implemented on RDMS blocks ('R' organization).

The prefixing rule is not applied. The table name is kept as it is and the period located at the beginning is deleted if it exists.

WARNING: In the case of program-macro and macro-macro overlaps, the lines generated from the Segment General Documentation (CH: S....G) cannot be deleted.

5.2.3. IMPLEMENTATION

IMPLEMENTATION OF CUSTOMIZED ACCESSES

O.L.S.D. FUNCTION AND CLIENT/SERVER FACILITY

PRESENTATION

O.L.S.D. Prerequisite: customized SQL accesses are taken into account if the PACSQL option has been entered on the -O Dialogue Complement.

All accesses are generated in function 80.

. Customized standard accesses

Customized standard accesses are automatically generated with the customization entered on the Segment GENERAL DOCUMENTATION lines (S....G).

On the other hand, if you want to ignore the customization of standard accesses, you must specify it in the O.....P lines.

. Non-standard accesses

To implement non-standard accesses, you must specifically call them in the O.....P lines.

Note: standard accesses are ignored for R (SQL RDMS) and 2 (DB2 without generated access) organizations but you can request the implementation of non-standard accesses.

CODING

You code the implementation (or non-implementation) of customized accesses in a sub-function dependent on function 80.

You must enter *C in the CONDITION TYPE OR S.F. STRUCTURE field and the Segment code in the CONDITION FOR EXECUTION field.

. To ignore the customization of a standard access, you must enter the standard access code after the Segment code.

. To implement a non-standard access, you have two possibilities:

. If you enter the standard access code before the non-standard access code, the customization of the non-standard access will be generated in the standard processing of the F80 function.

. On the other hand if you enter the non-standard access code alone (without specifiying any standard access), the customization of the non-standard access will be generated in a specific sub-function of function F80. It will then constitute a user function unknown to the generator, so you will have to describe and manage it in procedural code entirely.

```
Examples of coding in -P :

 LVTY CONDITION

 10*C SS00 R     the customized select standard access
                 entered on S SS00 G will be ignored

 10*C SS00 R R1  the R1 select non-standard access entered
                 on S SS00G will be implemented and will
                 complete the automatically generated read
                 processing of SS00 Segment.

 10*C SS00 R1    the R1 select non-standard access entered
                 on SSS00G will be implemented and generated
                 in a specific function F80-SS00-R1.
```

. Extraction Methods (C/S Facility)

If you described an 'EX' customized access, you must call this access explicitly. So you create a sub-function which depends on function 80 and enter *C in the CONDITION TYPE OR S.F. STRUCTURE field and the Segment code in the CONDITION FOR EXECUTION field. You must also enter EX and the method name in uppercase letters.

```
Examples of the implementation of the METHODNAME extraction method
in -P: LVTY  CONDITION
 10*C  SS00 EX METHODNAME
```

If you described four customized accesses (DC, P, RN, CL), you must implement these four accesses in function 80 (same coding as with 'EX' access, except that 'EX' is replaced by 'D1', 'O1', 'R1', 'C1').

```
Implementation of the four customized accesses in -P: LVTY
CONDITION
 10*C  SS00 D1 METHODNAME
 10*C  SS00 O1 METHODNAME
 10*C  SS00 F1 METHODNAME
 10*C  SS00 C1 METHODNAME
```

For more details, refer to the 'Client/Server Facility - Business Logic' User's Guide, Chapter 'Writing a Business Component'.

BATCH FUNCTION

In the Batch Function, customized accesses can be implemented only if the Program -CD contains a Block code in the EXTERNAL NAME field and an organization in the ORGANIZATION field.

You must explicitly call each customized access you want to generate in the Program procedural code lines (P.....P). In the OPERATOR field, enter 'SQL' and in the OPERANDS field, enter:

. the Segment code in the Program

. the Segment code in the Library if it is different from the Segment code in the Program,

. the access type:

. If you specify the standard access before the non-standard access, the customization of the non-standard access will be generated in the read processing of function 80.

. On the other hand if you specify only the non-standard access without specifying a standard access, the customization of the non-standard access will be generated in a specific sub-function of function 80. It will then constitute a user function unknown to the generator. You will have to describe and manage it in procedural code entirely.

The customization of a select standard access from Segment SS00 (Segment code in Program: PGSG) will be specified in the following way:

```
 OPE  OPERANDS
 SQL  SS00 SGPG R
```

The customization of a select non-standard access from Segment SS00 (Segment code in Program: PGSG) will be specified in the following way:

```
 OPE OPERANDS
 SQL SS00 SGPG R R1
```

5.2.4. EXAMPLES

EXAMPLES

EXAMPLE OF CUSTOMIZED ACCESSES

In the following example, two standard accesses have been customized: the select access and the update access.

```
--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY          *PDMB.DDDD.BMS.241!
! SEGMENT   GENERAL DOC.             PI00     PILOT                             !
!                                                                               !
! A LIN : T COMMENT                                                      LIBR.!
!   100 : G SQL                  R1 R                                     *DCC!
!   110 : G WHERE ADD            AND SQL-PILNAM LIKE W-PILNAM             *DCC!
!   120 : G SQL                  W1 RW                                    *DCC!
!   125 : G ACCESS               UPDATE                                   *DCC!
!   200 : G COLUMN               SQL-QUSAM                                *DCC!
!   205 : G                      SQL-DAQUA                                *DCC!
!   210 : G WHERE ADD            SQL-COQUA > 'A'                          *DCC!
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!                                                                               !
! O: C1 CH: SPI00 G                                                             !
--------------------------------------------------------------------------------
```

EXAMPLE OF AN EXTRACTION METHOD

The following example shows extraction methods, named 'CUSTNAME' and 'TOWN'.

The first screen shows their writing in the CN10 Segment General Documentation lines.

The second screen shows their implementations in the CLCNT Screen Procedural Code lines.

```
--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY          *PDMB.DDDD.BMS.241!
! SEGMENT   GENERAL DOC.             CN10     CUSTOMER                          !
!                                                                               !
! A LIN : T COMMENT                                                      LIBR.!
!   100 : G SQL                   EX EX CUSTNAME                          *DCC!
!   110 : G WHERE                 CUSTOMER_NUMBER >= :7-WW00-CUSTNB       *DCC!
!   120 : G                       AND CUSTNA >= :7-WW00-CUSTNA            *DCC!
!   125 : G                       ORDER BY CUSTOMER_NUMBER                *DCC!
!   200 : G SQL                   EX EX TOWN                              *DCC!
!   205 : G WHERE                 TOWN = 'PARIS'                          *DCC!
!   210 : G                       ORDER BY CUSTOMER_ NUMBER               *DCC!
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!                                                                               !
! O: C1 CH: SCN10 G                                                             !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY          *PDMB.DDDD.BMS.241!
! PROCEDURAL CODE       O CLCLNT  Customers Server             FUNCTION: 80   !
!                                                                               !
! A SF LIN OPE OPERANDS                         LVTY CONDITION                  !
!   DD     N   PHYSICAL ACCESS FOR CUSTNAME     10*C CN10 EX CUSTNAME           !
! - -- --- --- -------------------------------- ---- -------------------        !
!   EE     N   PHYSICAL ACCESS FOR TOWN         10*C CN10 EX NAME               !
! - -- --- --- -------------------------------- ---- -------------------        !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! O: C1 CH: OCLCNT P                                                            !
--------------------------------------------------------------------------------
```

6. DATABASE BLOCKS

6.1. DATABASE DEFINITION (B.....)

DATABASE DEFINITION

A Database is defined through a Database Block, accessed via the following input in the CHOICE field:

CH: B.....

The block is defined with a code, a clear name and a specific TYPE:

Q2 for DB2 blocks,

Q3 for SQL SERVER blocks,

Q4 for DB2/400 blocks,

QA for ALLBASE/SQL blocks,

QB for DB2/2 and DB2/6000 blocks,

QC for DATACOM/DB blocks,

QG for INGRES/SQL blocks,

QI for INFORMIX-ESQL blocks.

QN for NONSTOP SQL blocks,

QO for ORACLE blocks, releases earlier than V6,

QP for ORACLE blocks, from release V6 on,

QR for RDMS 1100 blocks,

QS for SQL/DS blocks,

QT for INTEREL RDBC blocks,

QU for INTEREL RFM blocks,

QV for VAX SQL blocks,

QY for SYBASE blocks.

The external name of the database is normally specified via an input in the DATABASE BLOCK EXTERNAL NAME field.

The EXTERNAL NAME OF THE SCHEMA field is not used for TYPE OF BLOCK 'Qx'. Therefore once 'Qx' is entered, the field will no longer appear on the screen.

ASSOCIATED LINES

General Documentation (-G).

The physical information necessary for generation of the database is entered on the General Documentation (-G) lines associated with the Block, in order to supplement the logical information entered on the Database Block Definition screen.

Virtual lines and P.I.A.'s facilitate entry of information. For more details on Database Block General Documentation, see Subchapter "GENERAL DOCUMENTATION".

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DATABASE DEFINITION (B.....) 1

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
!                              1                                                 !
! BLOCK DEFINITION.............:    Q2BLOC                                       !
!                                                                                !
! NAME.................:2 DB2 EXAMPLE                                           !
! TYPE.................:3 Q2 D.B.2 SQL                                          !
! VERSION..............:4                                                      !
!                                                                                !
!                                                                                !
! EXTERNAL NAME.........: EXTQ2DB2   5                                          !
!                                                                                !
!                                                                                !
!                                                                                !
! CONTROL CARDS....... FRONT: 6       BACK: 7                                    !
!                                                                                !
!                                                                                !
! EXPLICIT KEYWORDS..: 8                                                         !
!                                                                                !
!                                                                                !
! SESSION NUMBER.....: 0067        LIBRARY......: BMS    LOCK....:               !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
! O: C1 CH: B q2bloc                    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 necessary, 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	Tree-like structure (hierarchical block).
		SE	Group of sets (network block).
			HIERARCHICAL DATABASES - IMS/DL1 ----------
		DP	Physical Database Description.
		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
		Q4	DB2/400
		QA	ALLBASE/SQL
		QB	DB2/2 and DB2/6000
		QC	DATACOM/DB
		QG	INGRES/SQL
		QI	INFORMIX-ESQL
		QN	NONSTOP SQL
		QO	ORACLE (releases earlier than V6)

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		QP	ORACLE (from release V6 on)
		QR	RDMS
		QS	SQL/DS
		QT	INTEREL RDBC
		QU	INTEREL RFM
		QV	VAX SQL
		QY	SYBASE
		DB	DB2 (It is recommended to use the Q2 type)
			NETWORK DATABASES

			.CODASYL-DM4 (BULL 66 or DPS8):

		M1	DDL schema, only elementary fields are generated,
		M4	DDL schema, only group fields are generated,
		M2	DMCL schema,
		M3	Sub-schema.
			.CODASYL-IDS2 (BULL 64 or DPS7):

		I1	DDL schema,
		I2	DMCL schema,
		I3	SDDL sub-schema.
			.CODASYL-IDMS:

		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)

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		LF	AS/400 Logical file (IBM SYS. 38). DDL TURBOIMAGE ----------
		TI	TurboImage Database. DMSII DATABASE ----------
		20	DMSII Database (DASDL)
4	4		VERSION NUMBER Version number of the database system.
		2000	DB2/400 : Version 2
		3000	NONSTOP SQL: Version C30
		4000	VAX SQL : Version 4.0
		5000	RDMS 1100 : Version 5RA4
		7000	ORACLE : V7
		Blank	Other systems, all versions.
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	8		EXTERNAL NAME OF THE SCHEMA This field is only used for SE-type blocks (Group of Sets) and for CODASYL Blocks. Otherwise, it is not displayed. This is necessary at generation time if the block is a SUB-SCHEMA or a DMCL. This is the physical name of the schema to which the given block is attached. This field is not used if the block is a schema.
7	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.

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
8	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.
9	55		EXPLICIT KEYWORDS This field allows the user to enter additional (explicit) keywords. By default, keywords are generated from an occurrence's clear name (implicit keywords). This field only exists on-line. In batch mode, keywords are entered on Batch Form 'G'. 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 not permitted in keywords. Keywords are not case-sensitive: upper-case and lower-case letters are equivalent. NOTE: Characters bearing an accent and special characters can be declared as equivalent to an internal value in order to make easy the search of occurrences by keywords. For more details, refer to the Operations Manual - Vol. II: 'Administrator's Guide', Chapter 'Database Management Utilities', Subchapter 'PARM : Update of User Parameters'. A maximum of ten explicit keywords can be assigned to one entity. For more details, refer to the SPECIFICATIONS DICTIONARY Reference Manual, Chapter 'Keywords', Subchapter 'Building the Thesaurus'.

6.2. DATABASE DESCRIPTION (B.....DR)

DATABASE BLOCK DESCRIPTION

A relational database is described on a Database Block Description screen accessed via the following input in the CHOICE field:

CH: B.....DR

The description is the list of Objects which make up the database.

Seven different SQL RECORD TYPES are available on this screen. They appear in the logical order of their creation.

```
   .SPACE          ------> P
   .TABLE          ------> T
   .VIEW           ------> V
   .INDEX          ------> I
   .ALTER TABLE    ------> A
   .PRIMARY KEY    ------> K
   .FOREIGN KEY    ------> J
```

OBJECTS / BLOCKS	P	T	V	I	A	K	J
Q2	Y	Y	Y	Y	Y	Y	Y
Q3	-	Y	Y	Y	Y	Y	Y
Q4	-	Y	Y	Y	Y	-	-
QC	Y	Y	Y	Y	Y	Y	Y
QG	-	Y	Y	Y	-	-	-
QN	-	Y	Y	Y	Y	-	-
QO	Y	Y	Y	Y	Y	-	-
QP	Y	Y	Y	Y	Y	Y	Y
QR	Y	Y	Y	Y	Y	-	-
QB	-	Y	Y	Y	Y	-	-

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DATABASE DESCRIPTION (B.....DR) 2

OBJECTS / BLOCKS	P	T	V	I	A	K	J
QS	Y	Y	Y	Y	Y	Y	Y
QT	-	Y	Y	Y	Y	-	-
QU	-	Y	Y	Y	Y a	-	-
QV	-	Y	Y	Y	Y	-	-
QA	Y b	Y	Y	Y	Y	Y	Y
QI	-	Y	Y	Y	Y	Y	Y
QY	-	Y	Y	Y	Y	Y	Y
DB	Y	Y	Y	Y	Y	Y	Y

Note:
a. column add-on only
b. For ALLBASE/SQL, 'P' Spaces are assimilated to DBEfilesets.

Objects are related to the Space which precedes them. An 'Alter Table' must follow the Table it modifies. An Index must follow the Table to which it is related.

It is not possible to create an Index associated with a View; the generated 'CREATE INDEX' command will be rejected when the catalog is updated.

For RDMS and ALLBASE/SQL, the Primary Key is not generated by an I line; it is included in the generation of the Table that precedes it (T line).

The type of Index, Primary key or Foreign key may not be modified: these lines must be deleted, then created with another type.

The table code entered on Index, Primary key or Alter lines may not be modified.

Some objects are specifically taken into account in Oracle V7, Ingres/SQL, SYBASE and SQL SERVER:

For Oracle V7: Package, Function, Procedure and Trigger.
For Ingres/SQL: Procedure and Rule.

```
.PACKAGE  ------> C   (function and procedure package;
                      The difference between the Package
                      BODY and its definition is made
                      clear by a 'B' in the key type)

.FUNCTION ------> E

.PROCEDURE------> Q

.TRIGGER  ------> R   for ORACLE V7, SYBASE, SQL SERVER
.or RULE  ------> R   for INGRES/SQL
                      (Its activation depends on the key
                      type: A: AFTER or B: BEFORE;
                      The segment code references its
                      action table)
```

GENERAL DOCUMENTATION

The Database Description (-DR) screen provides the System with the logical information needed to generate DDL statements. The SQL RECORD TYPE causes system-generated 'virtual' lines to be incorporated; these lines are displayed and updated on General Documentation (-G) lines related to Database Block Description lines. (See Subchapter "GENERAL DOCUMENTATION").

NOTES: On I-type lines, you may enter a + sign to indicate that keys have been specified for this call (-K).

Enter an * character to specify that -G lines are associated to the Object called.

DATABASE BLOCKS 6
DATABASE DESCRIPTION (B.....DR) 2

```
!                    ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! RELATIONAL BLOCK DESCRIP. 1 Q2BLOC DB2 EXAMPLE                               !
! 2 3     4  5                          6              7    8                 !
! A LIN : T EXTERNAL NAME              TABLE CODE     KEY  GEN           LIBR.!
!       :                              VIEW           TY   CDE               !
!   080 : P ESP1-TABLE-Q2BLOC                             C              0067!
!   100 : T DODZ05                       DZ05             C              0067!
!   110 : K                              DZ05             C * +          0048!
!   130 : V VUDZ05S3                     DZ05         3   C              0058!
!   200 : T DODZ10                       DZ10             C *            0067!
!   210 : I INDZ10                       DZ10             C   +          0048!
!   220 : J CEXISTF  DZ05                DZ10         C   C              0048!
!   300 : T                              FO10             C              0067!
!   350 : V VUDZ09DBE                    DZ09             C              0067!
!   360 : V VUDZ09S4                     DZ09         4   C              0048!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
! *** END ***                                                                !
! O: C1 CH: B q2bloc DR                                                      !
```

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
1	6		BLOCK CODE One to six alphanumeric characters.
2	1		ACTION CODE
3	3		LINE NUMBER PURE NUMERIC FIELD It is advisable to begin with line number '100' and then number in intervals of 20. This facilitates subsequent line insertions, as necessary.
4	1		SQL RECORD TYPE
		P	Tablespace (except for INTEREL RDBC, INTEREL RFM, INGRES/SQL, DB2/400, VAX/SQL, NONSTOP SQL, INFORMIX, SYBASE and SQL SERVER)
		T	Table For ALLBASE/SQL, when a Primary Key or Foreign Key is defined in the Table (T line type) creation, the closing bracket must be entered on the line 690 of the -DRnnnG screen.
		V	View
		I	Index
		A	Alter Table: Column updating
		K	RDMS 1100, ALLBASE/SQL: Primary Key (Processed with the generation of the table that precedes it.) DB2, DATACOM/DB, INFORMIX-ESQL, SQL/DS, ORACLE V6 and V7, DB2/2, DB2/6000, SYBASE and SQL SERVER: Primary key (Processed with the generation through an ALTER TABLE command.)
		J	DB2, DATACOM/DB, SQL/DS, ORACLE V6 and V7, INFORMIX, SYBASE and SQL SERVER: Foreign key (Processed with the generation through an ALTER TABLE command.) ALLBASE/SQL: Foreign Key (Processed with the generation of the table that precedes it.)
		C	Package (ORACLE V7 only)
		E	Function (ORACLE V7 only)
		Q	Procedure (ORACLE V7, INGRES, SYBASE, SQL SERVER

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			and INFORMIX)
		R	ORACLE V7, SYBASE and SQL SERVER: Trigger INGRES/SQL: Rule
5	27		DATABASE OBJECT EXTERNAL NAME It is the name used by the end-user. It is prohibited for a Primary Key (K-type line, DB2, DB2/2, DB2/6000 or DATACOM/DB). It is required for a Tablespace (P-type line). For all other objects, this name may be defined at several levels. The priority, at generation time, will be as follows: - the external name defined here (-DR), - or the one defined in the CODE OF RECORD TYPE ELEMENT field on the Segment Definition screen, defining the corresponding object. - or the code of the Segment defining the corresponding object. For a Foreign Key (J-type line), two separate codes are required: the constraint name (8 char. maxi) and the Segment code of the reference Table.
6	4		TABLE OR VIEW CODE On a T, V or A-type line, this field contains the code of the Segment which represents the Columns of the Table or View. On an I, K or J-type line, this field contains the code of the Segment which supports the key. On a P-type line, this field must be left blank.
7	1		KEY TYPE On an I-type line:
		U	This value is entered in order to generate the UNIQUE command. Value '0' corresponds to sub-schema '10'.
		0-9	On a V-type line: View of the sub-schema Data Element selection in the Segment. Value 0 corresponds to the sub-schema 10.
		*	All Data Elements of the Segment are included in the View.
			On a J-type line:

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		R	Restrict (default value for DB2-type Databases only)
		C	Cascade (DB2, SQL/DS, DB2/2, DB2/6000 and ORACLE V7 only)
		S	S: Set null (DB2, SQL/DS, DB2/2 and DB2/6000 only)
			On a C-type line (ORACLE V7): Indicates the package type.
		B	BODY package
		BLANK	standard package
			On a R-type line: Indicates where the trigger or the rule starts to operate:
		A	After
		B	Before
8	1		TYPE OF GENERATED TRANSACTION This field is entered in order to generate the following SQL commands: CREATE, ALTER, and DROP.
		C	CREATE Default value when the corresponding line is created. (No other value may be entered on A-type lines).
		M	ALTER (Except for SQL/400 and INGRES/SQL) Only taken into account for on-line generation through the '-GEN' screen. Not allowed on K and J-type lines, except for DATACOM, where a K-type line generates an ALTER TABLE ADD PRIMARY KEY command.
		D	Cancellation: generation of a DROP command. For J (Foreign Key) and K (Primary Key) lines, a DROP PRIMARY KEY or DROP FOREIGN KEY command is generated in an ALTER TABLE command.
		Blank	No generation (-GEN); no generation through the GPRT procedure with option 'C2'.

6.3. INPUT OF KEY OR 'ALTER TABLE' (-DRnnnK)

INPUT OF KEY OR ALTER TABLE COLUMNS

The Input of Data Element of Key screen is used to select the Columns making up the Table key or the Columns selected in an Alter Table.

It is accessed via the following CHOICE:

B.....DrnnnK

where 'nnn' is the line number of a Block Description line whose type is I, K, A or J.

This screen may also be obtained by positioning the cursor on the desired description line and pressing the relevant PFkey (standard PF9).

Index Columns (I):

The Input of Data Element of Key screen displays the list of Data Elements called into the Segment specified on the corresponding I- or K-Type Block Description line.

The Columns making up the key are selected by entering a KEY RANK NUMBER from 1 to 16; the numbering sequence cannot contain gaps and must begin with 1, which corresponds to the major sort criterion.

To erase the value of this field, the user enters a non-blank alphabetic character.

The SORT ORDER field indicates the sort order: the possible values are A for ascending order, D for descending order, and a blank (no sort DDL command will be generated and the default DBMS command will be used).

A window on the right side of the screen displays the configuration of the key.

Alter Table Columns (A)

The Input of Data Element of Key screen displays the list of Data Elements called into the Segment specified on the corresponding A-Type Block Description line.

The Columns are selected by entering a RANK NUMBER from 1 to 16; the numbering sequence cannot contain gaps and must begin with 1, which corresponds to the major sort criterion.

To erase the value of this field, the user enters a non-blank alphabetic character.

The ORDER field indicates the modification type : values are Blank for column adding (default value), D or A deletion and M for modification.

DATABASES	blank	M	A or D
DB2 - DB2/6000	X		
ORACLE V7	X	X	
DATACOM	*	*	*
NONSTOP	X		
RDMS	*	*	*
SQL/DS	X		
INTEREL RDBC	X		X
INTEREL RFM	X		
VAX/SQL	*	*	*
ALLBASE	X		
INFORMIX	X	X	X

'*' indicates that the three modification types can be used simultaneously.
'X' indicates that the three modification types must be used separately.

NOTE : For SQL/400 and INGRES/SQL, it is not possible to create A-type line (ALTER TABLE).

Composition of PRIMARY KEYs and FOREIGN KEYs (K, J)

The Data Elements of the called Segment are displayed: you can select Data Elements by entering a generation rank number in front of them.

The rank number is comprised between 1 and 16 and must not include any gap. The ORDER field is ignored.

NOTE: If a Data Element used as a key is called in a Segment, it must be cancelled as a key before being cancelled in the Segment.

DATABASE BLOCKS 6
INPUT OF KEY OR 'ALTER TABLE' (-DRnnnK) 3

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.260!
! INPUT OF DATA ELEMENTS 1    QCBLOC DATACOM/DB EXAMPLE                   700 !
!                             DZ10                                          !
!                               2    3          --------------------        !
!                               RANK ORDER      !      COLUMN      !     LIBR.!
!  COCARA                                       !   QTMLI      A   !     0067 !
!  NUCOM                         03             !   FOURNP     M   !     0067 !
!  FOURNP                        02    M        !   NUCOM          !     0067 !
!  QTMLI                         01    A        !   QTMCO      D   !     0067 !
!  QTMCO                         04    D        !   INFOR          !     0067 !
!  INFOR                         05             !                  !     0067 !
!                                               !                  !          !
!                                               !                  !          !
!                                               !                  !          !
!                                               !                  !          !
!                                               !                  !          !
!                                               !                  !          !
!                                               !                  !          !
!                                               !                  !          !
!                                               !                  !          !
!                                               !                  !          !
! *** END ***                                                                  !
! O: C1 CH: -DR210K                                                            !
--------------------------------------------------------------------------------
```

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
1	6		BLOCK CODE One to six alphanumeric characters.
2	2		RANK KEY DEFINITION ----------
		1-16	This field is used to indicate the rank of the Elements making up the Table key (Primary , Foreign Keys or Index). The rank is selected by entering a number from '1' to '16' in this field. The selection must begin with '1', which is the major sort criterion, and cannot include gaps. ALTER TABLE ---------- It is also used to indicate columns taken into account for the modification of a Table, by indicating the generation order of the ALTER requests. The Elements are selected by entering a number from '1' to '16' in this field. The selection must begin with '1', and cannot include gaps. In order to reset this field to blank, enter a non-numeric character.
3	1		SORT ORDER OR MODIFICATION TYPE KEY DEFINITION ----------
		A D Blank	The Column is sorted in ascending order. The Column is sorted in descending order. Default value: no DDL sort command is generated.
			ALTER TABLE ----------
		Blank	Default value : the Column is to be added.
		A or D	The Column is to be deleted.
		M	The Column is to be modified.

6.4. DESCRIPTION OF KEY/'ALTER TABLE': BATCH FORM

BATCH FORM

Since the same Batch Form, L4, is used for the Block Description (-DR screen) and the definition of keys and Alter Tables (-DRnnnK screen), the field numbering of the batch form differs from that on the screen. You will find below a description of Batch Form L4.

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
1	1		ACTION CODE
2	6		BLOCK CODE One to six alphanumeric characters.
3	3		LINE NUMBER PURE NUMERIC FIELD It is advisable to begin with line number '100' and then number in intervals of 20. This facilitates subsequent line insertions, as necessary.
4	1		LINE TYPE This field is specific to batch input. It defines the L4 line type
		Blank	First description line, corresponding to the -DR screen. The length of the EXTERNAL NAME field is 18 characters only (27 on the screen): the last nine characters of the external name are to be enterd on a *-type L4 line. The first description line is also used to define the first six Columns of a key or an Alter Table (on line: -DRnnnK screen).
		*	Second description line: it includes the last nine characters of the external name, and key no. 6, 7 and 8, or the sixth to the eighth Columns of an Alter Table.
		1	Third description line, used for keys no. 9, 10, 11, 12 and 13, or ninth to thirteenth Columns.
		2	Fourth description line, used for keys no. 14, 15 and 16, or fourteenth to sixteenth Columns.
5	1		SQL RECORD TYPE
		P	Tablespace (except for INTEREL RDBC, INTEREL RFM, INGRES/SQL, DB2/400, VAX/SQL, NONSTOP SQL, INFORMIX, SYBASE and SQL SERVER)
		T	Table For ALLBASE/SQL, when a Primary Key or Foreign Key is defined in the Table (T line type) creation, the closing bracket must be entered on the line 690 of the -DRnnnG screen.
		V	View
		I	Index
		A	Alter Table: Column updating

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		K	RDMS 1100, ALLBASE/SQL: Primary Key (Processed with the generation of the table that precedes it.) DB2, DATACOM/DB, INFORMIX-ESQL, SQL/DS, ORACLE V6 and V7, DB2/2, DB2/6000, SYBASE and SQL SERVER: Primary key (Processed with the generation through an ALTER TABLE command.)
		J	DB2, DATACOM/DB, SQL/DS, ORACLE V6 and V7, INFORMIX, SYBASE and SQL SERVER: Foreign key (Processed with the generation through an ALTER TABLE command.) ALLBASE/SQL: Foreign Key (Processed with the generation of the table that precedes it.)
		C	Package (ORACLE V7 only)
		E	Function (ORACLE V7 only)
		Q	Procedure (ORACLE V7, INGRES, SYBASE, SQL SERVER and INFORMIX)
		R	ORACLE V7, SYBASE and SQL SERVER: Trigger INGRES/SQL: Rule
6	18		DATABASE OBJECT EXTERNAL NAME It is the name used by the end-user. It is prohibited for a Primary Key (K-type line, DB2, DB2/2, DB2/6000 or DATACOM/DB). It is required for a Tablespace (P-type line). For all other objects, this name may be defined at several levels. The priority, at generation time, will be as follows: - the external name defined here (-DR), - or the one defined in the CODE OF RECORD TYPE ELEMENT field on the Segment Definition screen, defining the corresponding object. - or the code of the Segment defining the corresponding object. For a Foreign Key (J-type line), two separate codes are required: the constraint name (8 char. maxi) and

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			the Segment code of the reference Table. On a 'blank'-type line : first 18 characters. On an '*'-type line, on the first 9 characters of the field : end of the external name.
7	4		TABLE OR VIEW CODE On a T, V or A-type line, this field contains the code of the Segment which represents the Columns of the Table or View. On an I, K or J-type line, this field contains the code of the Segment which supports the key. On a P-type line, this field must be left blank.
8	4		NOT USED
9	1		KEY TYPE On an I-type line:
		U	This value is entered in order to generate the UNIQUE command. Value '0' corresponds to sub-schema '10'.
		0-9	On a V-type line: View of the sub-schema Data Element selection in the Segment. Value 0 corresponds to the sub-schema 10.
		*	All Data Elements of the Segment are included in the View.
			On a J-type line:
		R	Restrict (default value for DB2-type Databases only)
		C	Cascade (DB2, SQL/DS, DB2/2, DB2/6000 and ORACLE V7 only)
		S	S: Set null (DB2, SQL/DS, DB2/2 and DB2/6000 only)
			On a C-type line (ORACLE V7): Indicates the package type.
		B	BODY package
		BLANK	standard package
			On a R-type line: Indicates where the trigger or the rule starts to operate:
		A	After
		B	Before
10	1		NOT USED
11	1		TYPE OF GENERATED TRANSACTION This field is entered in order to generate the following SQL commands: CREATE, ALTER, and DROP.
		C	CREATE Default value when the corresponding line is created. (No other value may be entered on A-type lines).

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		M	ALTER (Except for SQL/400 and INGRES/SQL) Only taken into account for on-line generation through the '-GEN' screen. Not allowed on K and J-type lines, except for DATACOM, where a K-type line generates an ALTER TABLE ADD PRIMARY KEY command.
		D	Cancellation: generation of a DROP command. For J (Foreign Key) and K (Primary Key) lines, a DROP PRIMARY KEY or DROP FOREIGN KEY command is generated in an ALTER TABLE command.
		Blank	No generation (-GEN); no generation through the GPRT procedure with option 'C2'.
12	6		FIELD No. 1, 6, 9, 14 On a 'blank'-type line: First Element used as key or in an Alter Table. On a '*'-type line: Sixth Element used as key or in an Alter Table. On a '1'-type line: Ninth Element used as key or in an Alter Table. On a '2'-type line: Fourteenth Element used as key or in an Alter Table.
13	1		SORT ORDER OR MODIFICATION TYPE KEY DEFINITION ----------
		A	The Column is sorted in ascending order.
		D	The Column is sorted in descending order.
		Blank	Default value: no DDL sort command is generated. ALTER TABLE ----------
		Blank	Default value : the Column is to be added.
		A or D	The Column is to be deleted.
		M	The Column is to be modified. The value entered in this field applies to the key entered in the preceding field.
14	6		FIELD No. 2, 7, 10, 15 On a 'blank'-type line: Second Element used as key or in an Alter Table. On a '*'-type line: Seventh Element used as key or in an Alter Table.

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
			On a '1'-type line: Tenth Element used as key or in an Alter Table. On a '2'-type line: Fifteenth Element used as key or in an Alter Table.
15	1		SORT ORDER OR MODIFICATION TYPE KEY DEFINITION ----------
		A D Blank	The Column is sorted in ascending order. The Column is sorted in descending order. Default value: no DDL sort command is generated.
			ALTER TABLE ----------
		Blank	Default value : the Column is to be added.
		A or D	The Column is to be deleted.
		M	The Column is to be modified.
			The value entered in this field applies to the key entered in the preceding field.
16	6		FIELD No. 3, 8, 11, 16 On a 'blank'-type line: Third element used as key or in an alter table. On a '*'-type line: Eigth element used as key or in an alter table. On a '1'-type line: Eleventh element used as key or in an alter table. On a '2'-type line: Sixteenth element used as key or in an alter table.
17	1		SORT ORDER OR MODIFICATION TYPE KEY DEFINITION ----------
		A D Blank	The Column is sorted in ascending order. The Column is sorted in descending order. Default value: no DDL sort command is generated.
			ALTER TABLE ----------
		Blank	Default value : the Column is to be added.

NUM	LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
		A or D	The Column is to be deleted.
		M	The Column is to be modified.
			The value entered in this field applies to the key entered in the preceding field.
18	6		FIELD No. 2 and 12
			On a 'blank'-type line: Fourth element used as key or in an alter table.
			On a '*'-type line: Twelth element used as key or in an alter table.
19	1		SORT ORDER OR MODIFICATION TYPE
			KEY DEFINITION ----------
		A	The Column is sorted in ascending order.
		D	The Column is sorted in descending order.
		Blank	Default value: no DDL sort command is generated.
			ALTER TABLE ----------
		Blank	Default value : the Column is to be added.
		A or D	The Column is to be deleted.
		M	The Column is to be modified.
			The value entered in this field applies to the key entered in the preceding field.
20	6		FIELD No. 5 and 13
			On a 'blank'-type line : Fifth element used as key or in an alter table.
			On a '*'-type line : Thirteenth element used as key or in an alter table.
21	1		SORT ORDER OR MODIFICATION TYPE
			KEY DEFINITION ----------
		A	The Column is sorted in ascending order.
		D	The Column is sorted in descending order.
		Blank	Default value: no DDL sort command is generated.
			ALTER TABLE ----------
		Blank	Default value : the Column is to be added.

NUM LEN	CLASS VALUE	DESCRIPTION OF FIELDS AND FILLING MODE
	A or D	The Column is to be deleted.
	M	The Column is to be modified.
		The value entered in this field applies to the key entered in the preceding field.

6.5. GENERAL DOCUMENTATION (-G; -DRnnnG)

GENERAL DOCUMENTATION

The Database Block Definition screen provides the System with the logical information necessary for source language generation.

The physical information is indicated on the General Documentation (-G) lines of the Block.

The Database Block Description (-DR) screen provides the logical information necessary for the generation of the DDL of the Spaces, Tables, Views and Indexes.

The associated physical information is entered on General Documentation lines associated with each description line (-DRnnnG).

Virtual lines and P.I.A.'s facilitate entry of the physical information.

General Documentation lines to be taken into account during generation must have the value 'G' in the TYPE OF LINE field.

NOTE: General Documentation lines are only taken into account for the generation of 'CREATE' and 'ALTER TABLE' commands generated through the '-DR' screen from 'A' type lines.

MANAGEMENT OF OPTIONS

To specify options, create a line at the beginning of the -G of a database block (B.....G) and leave its type blank. On this line, you can set options which modify the prefixing, generate 'COMMIT' order, or prevent the automatic transformation of lowercase letters into uppercase letters.

. Prefixing: to modify the standard prefixing, enter PREFIX = NO. For explanation, refer to Chapter "TABLE OR VIEW: SEGMENT", Sub-chapter "TABLE OR VIEW DEFINITION", paragraphs related to the prefixing.

. Generation of 'COMMIT' orders: to generate 'COMMIT' orders, enter COMMIT = YES. A 'COMMIT' order will be generated after each cancellation ('DROP' order generated) of SQL objects. In the same stream, you can then cancel and re-create the same object.

. Uppercase and lowercase management: to modify the standard management, enter UPPER = NO. Lowercase letters will no be transformed into uppercase letters after generation.

GENERATED LINES

The System automatically displays lines on the General Documentation screens. These lines are identified by an asterisk in the ACTION CODE field and '*VIRT' or '*GUID' in the LIB field. Collectively, these lines are called 'virtual' lines.

The lines identified by '*VIRT' are generated, except if the user deletes the 'G' in the TYPE field (see example below).

The lines identified by '*GUID' must be created to be taken into account at generation time. To do this, the '*' must be deleted if input is entered on the line, or if no input is necessary, an explicit ACTION CODE ('C' or 'X') must be used.

The physical characteristics of a Database and the elements which compose it are entered on the General Documentation (-G) screen via Parameterized Input Aids, Virtual lines, and user modifications, as needed.

The user may create new lines, modify or delete the 'virtual' lines generated by the DBD function.

Virtual lines are identified by a generated LINE NUMBER:

> To create additional lines, the user inserts a line with an appropriate LINE NUMBER at the desired place.
> To modify or delete an existing virtual line, the user repeats the LINE NUMBER of that line and enters either a modification of the line or an empty line.

EXAMPLE:

```
A LIN : T COMMENT
* 100 : G CREATE TABLE (EXTERNAL NAME) IN DATABASE-NAME

The user may inhibit the generation of the line by deleting
the 'G' in the TYPE field:

A LIN : T COMMENT
  100 :   CREATE TABLE (NAME) IN DATABASE-NAME

or modify it,

A LIN : T COMMENT
  100 : G CREATE TABLE ADDRESS IN CUSTOMERS
```

A 'G' entered in the TYPE OF LINE field means that the General Documentation lines are to be taken into account at generation time.

EXAMPLE: Insertion of lines

```
A LIN : T COMMENT
* 100 : G CREATE TABLE (EXTERNAL NAME) IN DATABASE-NAME
  160 : G  These two lines will be inserted right after
  170 : G  the CREATE statement
* 200 : G       ---> COLUMN INSERTION BEGINNING <---
* 300 : G       ---> COLUMN INSERTION END <---
```

A semi-colon (';') is generated before the inserted line if it begins in position 1 of the COMMENT field.

OVERRIDING COLUMNS

INSERTIONS:

The generated 'Virtual' lines indicate where to place the insertion lines via "--> COLUMN INSERTION BEGINNING <--" and "--> COLUMN INSERTION END <--". Use LINE NUMBERs that fall between the LINE NUMBER values assigned to these lines.

To override the Column's pre-defined values, the user identifies the Column by its DATA ELEMENT CODE left-justified between a 'less than' sign (<) and a 'greater than' sign (>). The two delimiters must be six positions apart (example: <LIBFO >). values. After identifying the Column, the user enters the desired values, beginning in column 2.

To complete the generated data, the user enters, after <LIBFO >, a space and the 'ADD' keyword, followed by the desired data. He/she must enter the end mark on the column declaration line because it will not be automatically generated.

EXAMPLE: Modification of a Column format:

```
A LIN : T COMMENT
* 100 : G CREATE TABLE (EXTERNAL NAME) IN DATABASE-NAME
* 200 : G       ---> COLUMN INSERTION BEGINNING <---
  210 : G <LIBFO >
  215 : G     DO10LIBFO   FLOAT
* 300 : G       ---> COLUMN INSERTION END <---
```

In this case, the name will be "DO10LIBFO", the format will be "FLOAT".

NOTES:

- This method cannot be used to delete a Column.

- For DB2, the comma (separator) is generated at the end of each line. In order to avoid this generation, a '&' must be inserted after the last non-blank character of the line.

'SOURCE' COLUMNS

INSERTIONS:

To insert a Column into a Table, the same technique as above is used : the start and end of the insertion area is indicated above: the start and end of the insertion area is indicated on the Virtual lines. LINE NUMBERs that fall between the start and end LINE NUMBERs are appropriate for this data.

In order to override a source Column of a Column in a View the user must create a 'G'-type line formatted as follows <FFNN-DELCO >, FFNNDELCO being the code entered in the SOURCE COLUMN field (labelled TAB/ELEM.) on the '-DBE' screen.

EXAMPLE:

```
A LIN : T COMMENT
* 100 : G CREATE VIEW (VIEW NAME)
* 200 : G     ---> COLUMN INSERTION BEGINNING <---
* 300 : G     ---> COLUMN INSERTION END <---
* 400 : G  AS SELECT ALL
* 500 : G     ---> SOURCE COLUMN INSERTION BEGINNING <---
  550 : G  <FFNN-DELCO >
  560 : G   'X'
* 600 : G     ---> SOURCE COLUMN INSERTION END <---
* 700 : G     FROM (SOURCE TABLES NAME)
```

The user must manage the Source Table (after the FROM clause).

INSERTION OF 'LABELS' AND 'COMMENTS'

At the time of generation, the labels and comments of the Tables and Columns are, by default, the codes and names entered on the definition screens. However you can replace them by the labels and comments you enter on the general documentation lines of the Table or the View.

. Insertion of Labels

You can enter labels only in the DB2, SQL/DS and DB2/400 database blocks, on the -G screen of lines T and V.
The maximum length of labels is 30 characters. You must leave the LINE TYPE blank and enter the '+LAB' command in column 1, followed by the label in the case of a Table or View, or followed by <DELCO > and the label in the case of a Column.
If you have modified the same object several times on the -G screen, only the last modification line will be taken into account.

. Insertion of Comments

You can enter comments only in the DB2, SQL/SD, DB2/400, ORACLE, VAX/SQL and NONSTOP/SQL database blocks, in the -G screen of lines T, V (except for VAX/SQL), and I (only for VAX/SQL and NONSTOP/SQL).
You must leave the LINE TYPE blank and enter the '+COM' command in column 1, followed by the comments in the case of a Table, View or Index, or by <DELCO > and the comments in the case of a Column.
You can enter the comments on several lines. At the time of generation, a maximum length of 254 characters, which varies according to the SQL in use, will be taken into account.

EXAMPLE: Insertion of labels and comments:

```
A LIN : T COMMENT
* 100 : G CREATE TABLE (EXTERNAL NAME) IN DATABASE-NAME
* 200 :          ---> COLUMN INSERTION BEGINNING <---
* 300 :          ---> COLUMN INSERTION END <---
* 400 : G        IN DATABASE-TABLESPACE
  900 :   +LAB NEW LABEL OF THE TABLE
  910 :   +LAB <DELCO > NEW LABEL OF THE COLUMN
  920 :   +COM NEW COMMENTS OF THE TABLE
  930 :   +COM <DELCO> NEW COMMENTS OF THE COLUMN
```

6.6. SQL PROCEDURES

SQL PROCEDURES: CROSS-REFERENCES

When describing the PACKAGE (C), FUNCTION (E), PROCEDURE(Q) and TRIGGER or Rule (R) objects in the -G associated to the object line, the user can obtain automatic cross-references by using the dash character ('-'). The dash character is only considered as a logical sign and can not be used in names.

The user may need:
.local data, which are prefixed by PLQ-,
.column data, which are prefixed by SLQ-.

A cross-reference can be performed on a 6-character Data Element. Longer names can however be used with a '_' character. Branching is then performed on the first part:
ex: PLQ-DATEL_COMPLEMENT.

7. EXAMPLES OF GENERAL DOCUMENTATION SCREENS

7.1. DB2

```
------------------------------
! GENERAL DOCUMENTATION: DB2 !
------------------------------
```

This sub-chapter presents the General Documentation (-G) lines of a DB2 block ('Q2').

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

```
--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK     GENERAL DOC.          Q2BLOC DB2 EXAMPLE                            !
!                                                                               !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  CREATE DATABASE (NAME)                                     *VIRT!
! * 200 : G    STOGROUP ________                                        *GUID!
! * 300 : G  BUFFERPOOL BP0                                            *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: B q2bloc G                                                       !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK DESC GENERAL DOC.          Q2BLOC DB2 EXAMPLE                     080!
!                                                                            !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  CREATE TABLESPACE (NAME) IN DATABASE-NAME                  *VIRT!
! * 200 : G    USING STOGROUP ________                                  *GUID!
! * 300 : G      PRIQTY ___                                             *GUID!
! * 400 : G      SECQTY ___                                             *GUID!
! * 500 : G      ERASE  NO                                              *GUID!
! * 600 : G    LOCKSIZE ANY                                             *GUID!
! * 700 : G    BUFFERPOOL ___                                           *GUID!
! * 800 : G    CLOSE  YES                                               *GUID!
! * 900 : G    DSETPASS ________                                        *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR080G                                                          !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK DESC GENERAL DOC.         Q2BLOC DB2 EXAMPLE                        200!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  CREATE TABLE (NAME)                                        *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
! * 500 : G      IN (DATABASE.TABLESPACE)                               *VIRT!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!                                                                             !
! O: C1 CH: -DR200G                                                           !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK DESC GENERAL DOC.         Q2BLOC DB2 EXAMPLE                        130!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  CREATE VIEW (VIEW NAME)                                    *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
! * 450 : G      AS SELECT ALL                                          *VIRT!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---           *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---                 *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                              *VIRT!
! * 850 : G      WHERE                                                  *GUID!
! * 900 : G      GROUP BY                                               *GUID!
! * 950 : G      HAVING                                                 *GUID!
! * 980 : G      WITH CHECK OPTION                                      *GUID!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!                                                                             !
! O: C1 CH: -DR130G                                                           !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK DESC GENERAL DOC.         Q2BLOC DB2 EXAMPLE                        210!
!                                                                             !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                             *VIRT!
! * 200 : G    ON (TABLE NAME)                                        *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 500 : G    USING STOGROUP ________                                *GUID!
! * 650 : G      ERASE          NO                                     *GUID!
! * 700 : G    SUBPAGES         4                                      *GUID!
! * 750 : G    BUFFERPOOL       ___                                    *GUID!
! * 800 : G    CLOSE            YES                                    *GUID!
! * 900 : G    DSETPASS         ________                               *GUID!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!                                                                             !
! O: C1 CH: -DR210G                                                           !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.260!
! BLOCK DESC GENERAL DOC.         Q2BLOC DB2 EXAMPLE                        370!
!                                                                             !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  ALTER TABLE (NAME)                                       *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
! *** END ***                                                                 !
! O: C1 CH: -DR370G                                                           !
--------------------------------------------------------------------------------
```

7.2. SQL SERVER

```
------------------------------------
! GENERAL DOCUMENTATION: SQL SERVER !
------------------------------------
```

This subchapter presents the General Documentation (-G) lines of an SQL SERVER block ('QR').

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
SQL SERVER 2

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK DESC GENERAL DOC.         Q3BLOC SQL SERVER  EXAMPLE                100!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  CREATE TABLE (NAME)                                        *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
! * 420 : G    ON ______                                                *VIRT!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!                                                                             !
! O: C1 CH: -DR100G                                                           !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK DESC GENERAL DOC.         Q3BLOC SQL SERVER  EXAMPLE                130!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  CREATE VIEW (VIEW NAME)                                    *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
! * 450 : G      AS SELECT ALL                                          *VIRT!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---           *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---                 *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                              *VIRT!
! * 850 : G      WHERE                                                  *GUID!
! * 900 : G      WITH CHECK OPTION                                      *GUID!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!                                                                             !
! O: C1 CH: -DR130G                                                           !
--------------------------------------------------------------------------------
```

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
SQL SERVER 2

```
-------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK DESC GENERAL DOC.         Q3BLOC SQL SERVER  EXAMPLE                210!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                               *VIRT!
! * 200 : G    ON (TABLE NAME)                                          *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
! * 420 : G   WITH  FILLFACTOR = _                                      *GUID!
! * 440 : G    IGNORE_DUP_KEY                                           *GUID!
! * 450 : G    SORTED_DATA                                              *GUID!
! * 460 : G    IGNORE_DUP_ROW   / ALLOW_DUP_ROW                         *GUID!
! * 500 : G    ON  _________                                            *GUID!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!                                                                             !
! O: C1 CH: -DR210G                                                           !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.260!
! BLOCK DESC GENERAL DOC.         Q3BLOC SQL SERVER  EXAMPLE                110!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  ALTER TABLE (NAME)                                         *VIRT!
! * 180 : G     ADD                                                     *VIRT!
! * 190 : G      CONSTRAINT (CONSTRAINT NAME)                           *VIRT!
! * 195 : G       PRIMARY KEY                                           *VIRT!
! * 196 : G       NONCLUSTERED                                          *GUID!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
! * 500 : G         WITH FILLFACTOR = _                                 *GUID!
! * 550 : G         ON ________                                         *GUID!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
! *** END ***                                                                 !
! O: C1 CH: -DR110G                                                           !
-------------------------------------------------------------------------------
```

7.3. DB2/400

```
---------------------------------
! GENERAL DOCUMENTATION: DB2/400 !
---------------------------------
```

This sub-chapter presents the General Documentation (-G) lines of a DB2/400 block ('Q4').

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

```
--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY         *PDIE.DDDD.BMS.255!
! BLOCK     GENERAL DOC.          Q4BLOC DB2/400 EXAMPLE                       !
!                                                                              !
! A LIN : T COMMENT                                                     LIB !
! * 150 : G  CREATE COLLECTION (NAME)                                  *VIRT!
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!                                                                              !
! O: C1 CH: B q4bloc G                                                         !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY         *PDIE.DDDD.BMS.255!
! BLOCK DESC GENERAL DOC.          Q4BLOC DB2/400 EXAMPLE                 100!
!                                                                              !
! A LIN : T COMMENT                                                     LIB !
! * 150 : G  CREATE TABLE (NAME)                                       *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!                                                                              !
! O: C1 CH: -DR100G                                                            !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY         *PDIE.DDDD.BMS.255!
! BLOCK DESC GENERAL DOC.         Q4BLOC DB2/400 EXAMPLE                  130!
!                                                                            !
! A LIN : T COMMENT                                                     LIB !
! * 150 : G  CREATE VIEW (VIEW NAME)                                   *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
! * 450 : G      AS SELECT ALL                                         *VIRT!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---          *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---                *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                             *VIRT!
! * 850 : G      WHERE                                                 *GUID!
! * 900 : G      GROUP BY                                              *GUID!
! * 950 : G      HAVING                                                *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR130G                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY         *PDIE.DDDD.BMS.255!
! BLOCK DESC GENERAL DOC.         Q4BLOC DB2/400 EXAMPLE                  210!
!                                                                            !
! A LIN : T COMMENT                                                     LIB !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                              *VIRT!
! * 200 : G    ON (TABLE NAME)                                         *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR210G                                                          !
--------------------------------------------------------------------------------
```

7.4. DATACOM/DB

```
-------------------------------------
! GENERAL DOCUMENTATION: DATACOM/DB !
-------------------------------------
```

This sub-chapter presents the General Documentation (-G) lines of a DATACOM/DB block ('QC').

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

```
--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.255!
! BLOCK     GENERAL DOC.          QCBLOB DATACOM/DB EXAMPLE                     !
!                                                                              !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G CREATE SCHEMA AUTHORIZATION (AUTH-ID)                            !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!                                                                              !
! O: C1 CH: B qcbloc G                                                         !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.255!
! BLOCK DESC GENERAL DOC.         QCBLOC DATACOM/DB EXAMPLE                100!
!                                                                              !
! A LIN : T COMMENT                                                       LIB !
! * 150 : G  CREATE TABLE (NAME)                                        *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
! * 500 :        PRIMARY KEY (___________)                              *VIRT!
! * 600 : G      IN (AREA-NAME)                                         *GUID!
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!                                                                              !
! O: C1 CH: -DR100G                                                            !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.255!
! BLOCK DESC GENERAL DOC.         QCBLOC DATACOM/DB EXAMPLE                100!
!                                                                            !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE INDEX (NAME)                                      *VIRT!
! * 200 :      ON (TABLE NAME)                                        *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR210G                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.255!
! BLOCK DESC GENERAL DOC.         QCBLOC DATACOM/DB EXAMPLE                130!
!                                                                            !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE VIEW (VIEW NAME)                                  *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 450 : G      AS SELECT ALL                                        *VIRT!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---         *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---               *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                            *VIRT!
! * 850 : G      WHERE                                                *GUID!
! * 900 : G      GROUP BY                                             *GUID!
! * 950 : G      HAVING                                               *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR130G                                                          !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.255!
! BLOCK DESC GENERAL DOC.         QCBLOC DATACOM/DB EXAMPLE                700!
!                                                                              !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  ALTER TABLE (NAME)                                         *VIRT!
! * 180 : G      ADD PRIMARY KEY                                        *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!                                                                              !
! O: C1 CH: -DR700G                                                            !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.255!
! BLOCK DESC GENERAL DOC.         QCBLOC DATACOM/DB EXAMPLE                220!
!                                                                              !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  ALTER TABLE (NAME)                                         *VIRT!
! * 180 : G      ADD FOREIGN KEY                                        *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
! * 450 : G      REFERENCES (TABLE NAME)                                *VIRT!
! * 700 : G      CONSTRAINT (CONSTRAINT NAME)                           *VIRT!
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!                                                                              !
! O: C1 CH: -DR220G                                                            !
--------------------------------------------------------------------------------
```

7.5. INGRES/SQL

```
-------------------------------------
! GENERAL DOCUMENTATION: INGRES/SQL !
-------------------------------------
```

This subchapter presents the General Documentation (-G) lines of a INGRES/SQL ('QG').

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.255!
! BLOCK DESC GENERAL DOC.         QGBLOC INGRES/SQL EXAMPLE                100!
!                                                                            !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE TABLE (NAME)                                      *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 420 : G  WITH                                                     *VIRT!
! * 440 : G   STRUCTURE=_____                                         *GUID!
! * 460 : G   LOCATION=________                                       *GUID!
! * 480 : G   NOJOURNALING                                            *GUID!
! * 490 : G   NODUPLICATES                                            *GUID!
! * 500 : G   KEY=________                                            *GUID!
! * 520 : G   FILLFACTOR=___                                          *GUID!
! * 540 : G   MINPAGES=___                                            *GUID!
! * 550 : G   MAXPAGES=___                                            *GUID!
! * 560 : G   LEAFFILL=___                                            *GUID!
! * 570 : G   NONLEAFFIL=___                                          *GUID!
! * 580 : G   COMPRESSION=_____                                       *GUID!
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!                                                                         !
! O: C1 CH: -DR100G                                                       !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.255!
! BLOCK DESC GENERAL DOC.         QGBLOC INGRES/SQL EXAMPLE                130!
!                                                                            !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE VIEW (VIEW NAME)                                  *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 450 : G      AS SELECT                                            *GUID!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---         *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---               *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                            *VIRT!
! * 850 : G      WHERE                                                *GUID!
! * 950 : G      WITH CHECK OPTION                                    *GUID!
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!                                                                         !
! O: C1 CH: -DR130G                                                       !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.255!
! BLOCK DESC GENERAL DOC.         QGBLOC INGRES/SQL EXAMPLE                210!
!                                                                             !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                             *VIRT!
! * 200 : G    ON (TABLE NAME)                                        *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 420 : G  WITH                                                     *VIRT!
! * 440 : G   STRUCTURE=_____                                         *GUID!
! * 500 : G   KEY=________                                            *GUID!
! * 520 : G   FILLFACTOR=___                                          *GUID!
! * 540 : G   MINPAGES=___                                            *GUID!
! * 550 : G   MAXPAGES=___                                            *GUID!
! * 560 : G   LEAFFILL=___                                            *GUID!
! * 570 : G   NONLEAFFIL=___                                          *GUID!
! * 580 : G   COMPRESSION=______                                      *GUID!
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!                                                                           !
! O: C1 CH: -DR210G                                                         !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.255!
! BLOCK DESC GENERAL DOC.         QGBLOC INGRES/SQL EXAMPLE                500!
!                                                                             !
! A LIN : T COMMENT                                                    LIB !
! * 010 : G  CREATE PROCEDURE (PROCEDURE NAME)                        *VIRT!
! * 020 :        ---> PARAMETERS INSERTION <---                       *VIRT!
! * 100 : G  AS                                                       *GUID!
! * 150 : G  BEGIN                                                    *GUID!
! * 990 : G  END                                                      *GUID!
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
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!                                                                           !
! O: C1 CH: -DR500G                                                         !
--------------------------------------------------------------------------------
```

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
INGRES/SQL 5

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.255!
! BLOCK DESC GENERAL DOC.         QGBLOC INGRES/SQL EXAMPLE                 550!
!                                                                             !
! A LIN : T COMMENT                                                    LIB !
! * 010 : G  CREATE RULE (RULE NAME) AFTER                            *VIRT!
! * 015 : G  DELETE FROM                                              *GUID!
! * 025 : G  INSERT INTO                                              *GUID!
! * 035 :    UPDATE (______) OF                                       *GUID!
! * 040 : G     (TABLE NAME)                                          *GUID!
! * 050 : G  REFERENCING OLD AS ______ NEW AS ______                  *GUID!
! * 070 : G  WHERE                                                    *GUID!
! * 100 : G  EXECUTE PROCEDURE __________                             *GUID!
! * 110 :     --->  PARAMETERS INSERTION  <---                         *VIRT!
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
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!       :                                                                   !
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! O: C1 CH: -DR550G                                                         !
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```

7.6. SQL/DS

```
---------------------------------
! GENERAL DOCUMENTATION: SQL/DS !
---------------------------------
```

This subchapter presents the General Documentation (-G) lines of an SQL/DS block ('QS' type).

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QSBLOC SQL/DS EXAMPLE                    080!
!                                                                            !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  ACQUIRE PRIVATE DBSPACE NAMED (NAME)                     *VIRT!
! * 200 : G    NHEADER  = ___                                         *GUID!
! * 300 : G    PAGES    = ___                                         *GUID!
! * 400 : G    PCTINDEX = ___                                         *GUID!
! * 500 : G    PCTFREE  = ___                                         *GUID!
! * 600 : G    LOCK     = ___                                         *GUID!
! * 700 : G    STORPOOL = ___                                         *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR080G                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QSBLOC SQL/DS EXAMPLE                    100!
!                                                                            !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE TABLE (NAME)                                      *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 500 : G      IN (DBSPACE-NAME)                                    *VIRT!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR100G                                                          !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QSBLOC SQL/DS EXAMPLE                    350!
!                                                                            !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE VIEW (VIEW NAME)                                  *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 450 : G      AS SELECT                                            *VIRT!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---         *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---               *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                            *VIRT!
! * 850 : G      WHERE                                                *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR350G                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QSBLOC SQL/DS EXAMPLE                    210!
!                                                                            !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                             *VIRT!
! * 200 : G    ON (TABLE NAME)                                        *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 500 : G    PCTFREE = ___                                          *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR210G                                                          !
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QSBLOC SQL/DS EXAMPLE                    700!
!                                                                            !
! A LIN : T COMMENT                                                   LIB !
! * 150 : G  ALTER TABLE (NAME)                                      *VIRT!
! * 180 : G      ADD PRIMARY KEY                                     *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---               *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                     *VIRT!
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
!       :                                                                 !
! *** END ***                                                             !
! O: C1 CH: -DR110 G                                                      !
-------------------------------------------------------------------------------
```

7.7. NONSTOP SQL

```
-------------------------------------
! GENERAL DOCUMENTATION: NONSTOP SQL !
-------------------------------------
```

This sub-chapter presents the General Documentation (-G) lines of a NONSTOP SQL block ('QN').

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
NONSTOP SQL 7

```
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.256!
! BLOCK DESC GENERAL DOC.         QNBLOC NONSTOP SQL EXAMPLE                100!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  CREATE TABLE (NAME)                                        *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
! * 500 : G      CATALOG (CATALOG-NAME)                                 *GUID!
! * 550 : G      ORGANIZATION KEY SEQUENCED                             *GUID!
! * 600 : G      PARTITION                                              *GUID!
! * 650 : G      SECURE                                                 *GUID!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!                                                                             !
! O: C1 CH: -DR100G                                                           !
```

```
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.256!
! BLOCK DESC GENERAL DOC.         QNBLOC NONSTOP SQL EXAMPLE                130!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  CREATE VIEW (VIEW NAME)                                    *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
! * 450 : G      AS SELECT ALL                                          *VIRT!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---           *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---                 *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                              *VIRT!
! * 850 : G      WHERE                                                  *GUID!
! * 900 : G      FOR PROTECTION                                         *GUID!
! * 950 : G      CATALOG (NOM-CATALOGUE)                                *GUID!
! * 960 : G      SECURE                                                 *GUID!
! * 970 : G      WITH CHECK OPTION                                      *GUID!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!                                                                             !
! O: C1 CH: -DR130G                                                           !
```

```
-------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.256!
! BLOCK DESC GENERAL DOC.         QNBLOC NONSTOP SQL EXAMPLE                210!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                               *VIRT!
! * 200 : G    ON (TABLE NAME)                                          *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
! * 500 : G    CATALOG (CATALOG-NAME)                                   *GUID!
! * 550 : G    KEYTAG (KEY-IDENTIFIER)                                  *GUID!
! * 600 : G    PARTITION                                                *GUID!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!                                                                             !
! O: C1 CH: -DR210G                                                           !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.260!
! BLOCK DESC GENERAL DOC.         QNBLOC NONSTOP SQL EXAMPLE                700!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  ALTER TABLE (NAME)                                         *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
! *** END ***                                                                 !
! O: C1 CH: -DR700G                                                           !
-------------------------------------------------------------------------------
```

7.8. ORACLE (V5, V6 and V7)

```
---------------------------------
! GENERAL DOCUMENTATION: ORACLE !
---------------------------------
```

This subchapter presents the General Documentation (-G) lines of an ORACLE block (QO and QP types).

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
ORACLE (V5, V6 and V7) 8

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.256!
! BLOCK DESC GENERAL DOC.         QOBLOC ORACLE EXAMPLE                    080!
!                                                                            !
! A LIN : T COMMENT                                                    LIB   !
! * 150 : G  CREATE SPACE (NAME)                                       *VIRT!
! * 200 : G    DATAPAGES (INITIAL __     ,INCREMENT __,                *GUID!
! * 300 : G               MAXEXTENTS ____,PCTFREE __)                  *GUID!
! * 400 : G    INDEXPAGES INITIAL __     ,INCREMENT __,                *GUID!
! * 500 : G               MAXEXTENTS ____)                             *GUID!
! * 600 : G    PARTITION (NAME)                                        *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR080G                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QOBLOC ORACLE EXAMPLE                    100!
!                                                                            !
! A LIN : T COMMENT                                                    LIB   !
! * 150 : G  CREATE TABLE (NAME)                                       *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
! * 500 : G      (SPACE-NAME)                                          *VIRT!
! * 600 : G          PCTFREE __                                        *GUID!
! * 650 : G          CLUSTER ________                                  *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR100G                                                          !
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```

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
ORACLE (V5, V6 and V7) 8

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.256!
! BLOCK DESC GENERAL DOC.         QOBLOC ORACLE EXAMPLE                    350!
!                                                                            !
! A LIN : T COMMENT                                                    LIB   !
! * 150 : G  CREATE VIEW (VIEW NAME)                                   *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
! * 450 : G      AS SELECT                                             *VIRT!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING<---           *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---                *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                             *VIRT!
! * 850 : G      WHERE                                                 *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR350G                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.256!
! BLOCK DESC GENERAL DOC.         QOBLOC ORACLE EXAMPLE                    210!
!                                                                            !
! A LIN : T COMMENT                                                    LIB   !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                              *VIRT!
! * 200 : G    ON (TABLE NAME)                                         *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
! * 500 : G    COMPRESS                                                *GUID!
! * 600 : G    SYSSORT                                                 *GUID!
! * 700 : G    ROWS    = ___                                           *GUID!
! * 800 : G    PCTFREE = ___                                           *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
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!                                                                            !
! O: C1 CH: -DR210G                                                          !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QOBLOC ORACLE EXAMPLE                    510!
!                                                                            !
! A LIN : T COMMENT                                                    LIB   !
! * 150 : G  ALTER TABLE (NAME)                                        *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
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!       :                                                                    !
!       :                                                                    !
! *** END ***                                                                !
! O: C1 CH: -DR510G                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.256!
! BLOCK DESC GENERAL DOC.          QPBLOC ORACLE V6 EXAMPLE                  080!
!                                                                            !
! A LIN : T COMMENT                                                    LIB   !
! * 150 : G  CREATE TABLESPACE (NAME)                                  *VIRT!
! * 200 : G    DATAFILE ________                                       *GUID!
! * 300 : G      DEFAULT STORAGE ( INITIAL ____   NEXT _____          *GUID!
! * 310 : G                        MINEXTENTS __  MAXEXTENTS __        *GUID!
! * 320 : G                        PCTINCREASE __    )                 *GUID!
! * 400 : G      ONNLGE                                                 *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR080G                                                          !
--------------------------------------------------------------------------------
```

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
ORACLE (V5, V6 and V7) 8

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QPBLOC ORACLE V6 EXAMPLE                  200!
!                                                                             !
! A LIN : T COMMENT                                                    LIB  !
! * 150 : G  CREATE TABLE (NAME)                                       *VIRT!
! * 200 :         ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :         ---> COLUMNS INSERTION END <---                      *VIRT!
! * 500 : G     TABLESPACE (TABLESPACE-NAME)                           *VIRT!
! * 600 : G      PCTFREE ___      PCTUSED  ___                         *GUID!
! * 650 : G      INITRANS ___     MAXTRANS ___                         *GUID!
! * 700 : G      STORAGE ( INITIAL ____  NEXT _____                   *GUID!
! * 710 : G                MINIXTENTS __ MAXEXTENTS __                 *GUID!
! * 720 : G                PCTINCREASE __   )                          *GUID!
! * 800 : G      CLUSTER _________                                      *GUID!
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!                                                                           !
! O: C1 CH: -DR200G                                                         !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.256!
! BLOCK DESC GENERAL DOC.         QPBLOC ORACLE V6 EXAMPLE                  350!
!                                                                             !
! A LIN : T COMMENT                                                    LIB  !
! * 150 : G  CREATE VIEW (VIEW NAME)                                   *VIRT!
! * 200 :         ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :         ---> COLUMNS INSERTION END <---                      *VIRT!
! * 450 : G      AS SELECT                                             *VIRT!
! * 500 :         ---> SOURCE COLUMNS INSERTION BEGINNING<---          *VIRT!
! * 700 :         ---> SOURCE COLUMNS INSERTION END <---               *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                             *VIRT!
! * 850 : G      WHERE                                                 *GUID!
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!                                                                           !
! O: C1 CH: -DR350G                                                         !
--------------------------------------------------------------------------------
```

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
ORACLE (V5, V6 and V7) 8

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.256!
! BLOCK DESC GENERAL DOC.         QPBLOC ORACLE V6 EXAMPLE                  210!
!                                                                             !
! A LIN : T COMMENT                                                    LIB  !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                              *VIRT!
! * 200 : G    ON (TABLE NAME)                                         *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
! * 500 : G      CLUSTER _________                                     *GUID!
! * 550 : G      INITRANS  ___    MAXTRANS ___                         *GUID!
! * 600 : G     TABLESPACE (TABLESPACE NAME )                         *GUID!
! * 700 : G      STORAGE ( INITIAL ____   NEXT _____                  *GUID!
! * 710 : G                MINEXTENTS __  MAXEXTENTS __               *GUID!
! * 720 : G                PCTINCREASE __    )                        *GUID!
! * 800 : G      PCTFREE __                                           *GUID!
! * 850 : G      NOSORT                                               *GUID!
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!                                                                           !
! O: C1 CH: -DR210G                                                         !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QPBLOC ORACLE V6 EXAMPLE                  510!
!                                                                             !
! A LIN : T COMMENT                                                    LIB  !
! * 150 : G  ALTER TABLE (NAME)                                        *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
!       :                                                                   !
!       :                                                                   !
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! *** END ***                                                               !
! O: C1 CH: -DR510G                                                         !
--------------------------------------------------------------------------------
```

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
ORACLE (V5, V6 and V7) 8

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.256!
! BLOCK DESC GENERAL DOC.        QPV7BLOC ORACLE V7 EXAMPLE                 080!
!                                                                             !
! A LIN : T COMMENT                                                     LIB   !
! * 150 : G  CREATE TABLESPACE (NAME)                                   *VIRT!
! * 200 : G    DATAFILE ________                                        *GUID!
! * 300 : G      DEFAULT STORAGE ( INITIAL ____   NEXT _____           *GUID!
! * 310 : G                        MINEXTENTS __  MAXEXTENTS __         *GUID!
! * 320 : G                        PCTINCREASE __    )                  *GUID!
! * 400 : G      ONNLGE                                                  *GUID!
!       :                                                                     !
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! O: C1 CH: -DR080G                                                           !
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!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.       QPV7BLOC ORACLE V7 EXAMPLE                  200!
!                                                                             !
! A LIN : T COMMENT                                                     LIB   !
! * 150 : G  CREATE TABLE (NAME)                                        *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
! * 500 : G     TABLESPACE (TABLESPACE-NAME)                            *VIRT!
! * 600 : G      PCTFREE ___      PCTUSED  ___                          *GUID!
! * 650 : G      INITRANS ___     MAXTRANS ___                          *GUID!
! * 700 : G      STORAGE ( INITIAL _____  NEXT _____                    *GUID!
! * 710 : G                MINIXTENTS __ MAXEXTENTS __                  *GUID!
! * 720 : G                PCTINCREASE __   )                           *GUID!
! * 800 : G      CLUSTER ________                                        *GUID!
! * 810 :        ---> NEW PARAMETERS (V7)                               *VIRT!
! * 820 : G      DISABLE CONSTRAINT ______                              *GUID!
!       :                                                                     !
!       :                                                                     !
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! O: C1 CH: -DR200G                                                           !
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```

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
ORACLE (V5, V6 and V7) 8

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-------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.256!
! BLOCK DESC GENERAL DOC.       QPV7BLOC ORACLE V7 EXAMPLE                350!
!                                                                           !
! A LIN : T COMMENT                                                   LIB   !
! * 150 : G  CREATE VIEW (VIEW NAME)                                  *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 450 : G      AS SELECT                                            *GUID!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING<---          *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---               *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                            *VIRT!
! * 850 : G      WHERE                                                *GUID!
!       :                                                                   !
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! O: C1 CH: -DR350G                                                         !
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-------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.256!
! BLOCK DESC GENERAL DOC.       QPV7BLOC ORACLE V7 EXAMPLE                210!
!                                                                           !
! A LIN : T COMMENT                                                   LIB   !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                             *VIRT!
! * 200 : G    ON (TABLE NAME)                                        *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 500 : G      CLUSTER _________                                    *GUID!
! * 550 : G      INITRANS  ___    MAXTRANS ___                        *GUID!
! * 600 : G     TABLESPACE (TABLESPACE NAME )                         *GUID!
! * 700 : G      STORAGE ( INITIAL _____   NEXT ______                *GUID!
! * 710 : G                MINEXTENTS __  MAXEXTENTS __               *GUID!
! * 720 : G                PCTINCREASE __    )                        *GUID!
! * 800 : G      PCTFREE __                                           *GUID!
! * 850 : G      NOSORT                                               *GUID!
!       :                                                                   !
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! O: C1 CH: -DR210G                                                         !
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EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
ORACLE (V5, V6 and V7) 8

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.       QPV7BLOC ORACLE V7 EXAMPLE                  510!
!                                                                             !
! A LIN : T COMMENT                                                     LIB   !
! * 150 : G  ALTER TABLE (NAME)                                         *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
!       :                                                                     !
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! O: C1 CH: -DR510G                                                           !
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--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.       QPV7BLOC ORACLE V7 EXAMPLE                  560!
!                                                                             !
! A LIN : T COMMENT                                                     LIB   !
! * 010 : G  CREATE OR REPLACE (BODY) PACKAGE (PACKAGE NAME) AS         *VIRT!
!       :                                                                     !
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! O: C1 CH: -DR560G                                                           !
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!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.       QPV7BLOC ORACLE V7 EXAMPLE                580!
!                                                                           !
! A LIN : T COMMENT                                                   LIB   !
! * 010 : G  CREATE OR REPLACE FUNCTION (FUNCTION NAME)               *VIRT!
! * 020 :        ---> ARGUMENTS INSERTION <---                        *VIRT!
! * 090 : G    RETURN _____________                                   *GUID!
! * 100 : G    AS                                                     *GUID!
! * 150 : G    BEGIN                                                  *GUID!
! * 990 : G    END                                                    *GUID!
!       :                                                                   !
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! O: C1 CH: -DR580G                                                         !
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-------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.       QPV7BLOC ORACLE V7 EXAMPLE                630!
!                                                                           !
! A LIN : T COMMENT                                                   LIB   !
! * 010 : G  CREATE OR REPLACE PROCEDURE (PROCEDURE NAME)             *VIRT!
! * 020 :        ---> ARGUMENTS INSERTION <---                        *VIRT!
! * 100 : G    AS                                                     *GUID!
! * 150 : G    BEGIN                                                  *GUID!
! * 990 : G    END                                                    *GUID!
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! O: C1 CH: -DR630G                                                         !
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```

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
ORACLE (V5, V6 and V7) 8

```
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!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.       QPV7BLOC ORACLE V7 EXAMPLE                  650!
!                                                                             !
! A LIN : T COMMENT                                                    LIB  !
! * 010 : G  CREATE TRIGGER (TRIGGER NAME)     BEFORE/AFTER           *VIRT!
! * 030 : G    DELETE OR INSERT OR UPDATE                             *GUID!
! * 040 : G    ON (TABLE NAME)                                        *GUID!
! * 050 : G    REFERENCING OLD AS ______ NEW AS ______                *GUID!
! * 060 : G    FOR EACH ROW                                           *GUID!
! * 070 : G    WHEN                                                   *GUID!
! * 100 : G    DECLARE                                                *GUID!
! * 150 : G    BEGIN                                                  *GUID!
! * 990 : G    END                                                    *GUID!
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
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!       :                                                                   !
!       :                                                                   !
! *** END ***                                                               !
! O: C1 CH: -DR650G                                                         !
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7.9. RDMS

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! GENERAL DOCUMENTATION: RDMS !
------------------------------
```

This subchapter presents the General Documentation (-G) lines of a RDMS block ('QR').

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

```
-------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY         *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QRBLOC RDMS EXAMPLE                     080!
!                                                                           !
! A LIN : T COMMENT                                                  LIB !
! * 150 : G  CREATE STORAGE-AREA (NAME)                             *VIRT!
! * 300 : G     FOR SCHEMA      (NAME)                              *VIRT!
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
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! O: C1 CH: -DR080G                                                         !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY         *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QRBLOC RDMS EXAMPLE                     100!
!                                                                           !
! A LIN : T COMMENT                                                  LIB !
! * 150 : G  CREATE PERMANENT TABLE (NAME)                          *VIRT!
! * 200 : G     IN              (SCHEMA NAME.STORAGE-AREA NAME)     *VIRT!
! * 250 :        ---> COLUMNS INSERTION BEGINNING <---              *VIRT!
! * 450 :        ---> COLUMNS INSERTION END <---                    *VIRT!
! * 600 : G      PRIMARY KEY    (NAME)     IS (COLUMN NAME)         *VIRT!
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
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! O: C1 CH: -DR100G                                                         !
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!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QRBLOC RDMS EXAMPLE                      130!
!                                                                            !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE VIEW (VIEW NAME)                                  *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 450 : G      AS SELECT ALL                                        *VIRT!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---         *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---               *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                            *VIRT!
! * 850 : G      WHERE                                                *GUID!
! * 900 : G      GROUP BY                                             *GUID!
! * 950 : G      HAVING                                               *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
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!                                                                            !
! O: C1 CH: -DR130G                                                          !
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--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QRBLOC RDMS EXAMPLE                      210!
!                                                                            !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE INDEX       (NAME)                                *VIRT!
! * 200 : G    ON               (TABLE NAME)                          *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
!       :                                                                    !
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! O: C1 CH: -DR210G                                                          !
--------------------------------------------------------------------------------
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```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY         *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QRBLOC RDMS EXAMPLE                      700!
!                                                                            !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  ALTER TABLE (NAME)                                       *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
!       :                                                                    !
!       :                                                                    !
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! *** END ***                                                                !
! O: C1 CH: -DR700G                                                          !
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7.10. INTEREL RDBC

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! GENERAL DOCUMENTATION: INTEREL RDBC !
---------------------------------------
```

This subchapter presents the General Documentation (-G) lines of an INTEREL RDBC block ('QT').

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

```
--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK     GENERAL DOC.          QTBLOC INTEREL RDBC EXAMPLE                   !
!                                                                              !
! A LIN : T COMMENT                                                     LIB !
! * 150 : G  CREATE DATABASE (NAME)                                    *VIRT!
! * 200 : G  AS PERMANENT = ___ BYTES                                  *GUID!
! * 300 : G    ,SPOOL = ___ BYTES                                      *GUID!
! * 400 : G    ,ACCOUNT = '______'                                     *GUID!
! * 500 : G    ,NO FALLBACK PROTECTION                                 *GUID!
! * 600 : G    ,DUAL BEFORE JOURNAL                                    *GUID!
! * 700 : G    ,DEFAULT JOURNAL TABLE = ______                         *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
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! O: C1 CH: -G                                                               !
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!                    ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QTBLOC INTEREL RDBC EXAMPLE               100!
!                                                                            !
! A LIN : T COMMENT                                                     LIB !
! * 150 : G  CREATE TABLE (NAME)                                       *VIRT!
! * 160 : G    ,NO FALLBACK PROTECTION                                 *GUID!
! * 170 : G    ,DUAL BEFORE JOURNAL                                    *GUID!
! * 180 : G    ,WITH JOURNAL TABLE = ______                            *GUID!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
! * 500 : G     UNIQUE PRIMARY INDEX (______)                          *GUID!
! * 600 : G    ,UNIQUE INDEX (______)                                  *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
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! O: C1 CH: -DR100G                                                          !
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--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QTBLOC INTEREL RDBC EXAMPLE               130!
!                                                                             !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE VIEW (VIEW NAME)                                  *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 450 : G      AS                                                   *VIRT!
! * 460 : G      LOCKING TABLE ______ FOR EXCLUSIVE MODE              *GUID!
! * 480 : G      SELECT                                               *VIRT!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---         *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---               *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                            *VIRT!
! * 850 : G      WHERE                                                *GUID!
!       :                                                                   !
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! O: C1 CH: -DR130G                                                         !
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!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QTBLOC INTEREL RDBC EXAMPLE               210!
!                                                                             !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                             *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 500 : G    ON (TABLE NAME)                                        *VIRT!
!       :                                                                   !
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! O: C1 CH: -DR210G                                                         !
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!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QTBLOC INTEREL RDBC EXAMPLE               700!
!                                                                              !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  ALTER TABLE (NAME)                                         *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
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! *** END ***                                                                  !
! O: C1 CH: -DR700G                                                            !
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7.11. INTEREL RFM

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! GENERAL DOCUMENTATION: INTEREL RFM !
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```

This subchapter presents the General Documentation (-G) lines of an INTEREL RFM block ('QU').

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QUBLOC INTEREL RFM  EXAMPLE               100!
!                                                                             !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE TABLE (NAME)                                      *VIRT!
! * 160 : G  VOLUME                                                   *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
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! O: C1 CH: -DR100G                                                         !
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!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QUBLOC INTEREL RFM  EXAMPLE               130!
!                                                                             !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE VIEW (VIEW NAME)                                  *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 450 : G      AS                                                   *GUID!
! * 480 : G      SELECT                                               *GUID!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---         *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---               *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                            *VIRT!
! * 850 : G      WHERE                                                *GUID!
!       :                                                                   !
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! O: C1 CH: -DR130G                                                         !
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!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QUBLOC INTEREL RFM  EXAMPLE               210!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                               *VIRT!
! * 200 : G    ON (TABLE NAME)                                          *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
!       :                                                                     !
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! O: C1 CH: -DR210G                                                           !
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!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.257!
! BLOCK DESC GENERAL DOC.         QUBLOC INTEREL RFM  EXAMPLE               700!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  ALTER TABLE (NAME)                                         *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
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! *** END ***                                                                 !
! O: C1 CH: -DR700G                                                           !
--------------------------------------------------------------------------------
```

7.12. VAX SQL

```
---------------------------------
! GENERAL DOCUMENTATION: VAX SQL !
---------------------------------
```

This subchapter presents the General Documentation (-G) lines of a VAX SQL block ('QV').

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

```
--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.258!
! BLOCK     GENERAL DOC.          QVBLOC VAX SQL EXAMPLE                        !
!                                                                              !
! A LIN : T COMMENT                                                     LIB    !
! * 150 : G  CREATE SCHEMA AUTHORIZATION -------                       *VIRT!
! * 160 :            FILENAME (NAME)                                   *VIRT!
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
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!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
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!                                                                              !
! O: C1 CH: B qvbloc G                                                         !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                    ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.258!
! BLOCK DESC GENERAL DOC.          QVBLOC VAX SQL EXAMPLE                  100!
!                                                                              !
! A LIN : T COMMENT                                                     LIB    !
! * 150 : G  CREATE TABLE (NAME)                                       *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
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!       :                                                                      !
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!       :                                                                      !
!                                                                              !
! O: C1 CH: -DR100G                                                            !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.258!
! BLOCK DESC GENERAL DOC.         QVBLOC VAX SQL EXAMPLE                    130!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  CREATE VIEW (VIEW NAME)                                    *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
! * 450 : G      AS SELECT ALL                                          *VIRT!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---           *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---                 *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                              *VIRT!
! * 850 : G      WHERE                                                  *GUID!
! * 900 : G      GROUP BY                                               *GUID!
! * 950 : G      HAVING                                                 *GUID!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!                                                                             !
! O: C1 CH: -DR130G                                                           !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.258!
! BLOCK DESC GENERAL DOC.         QVBLOC VAX SQL EXAMPLE                    210!
!                                                                             !
! A LIN : T COMMENT                                                      LIB !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                               *VIRT!
! * 200 : G    ON (TABLE NAME)                                          *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                  *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                        *VIRT!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!                                                                             !
! O: C1 CH: -DR210G                                                           !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.258!
! BLOCK DESC GENERAL DOC.         QVBLOC VAX SQL EXAMPLE                   700!
!                                                                            !
! A LIN : T COMMENT                                                   LIB !
! * 150 : G  ALTER TABLE (NAME)                                      *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---               *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                     *VIRT!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
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!       :                                                                    !
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!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR700G                                                          !
--------------------------------------------------------------------------------
```

7.13. ALLBASE/SQL

```
-------------------------------------
! GENERAL DOCUMENTATION: ALLBASE/SQL !
-------------------------------------
```

This subchapter presents the General Documentation (-G) lines of an ALLBASE/SQL block.

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
ALLBASE/SQL 13

```
!                  ENGLISH DOCUMENTATION LIBRARY           *PDIE.DDDD.BMS.477!
! BLOCK     GENERAL DOC.          QABLOC EXEMPLE ALLBASE/SQL                    !
!                                                                              !
! A LIN : T COMMENT                                                    LIB     !
! * 150 : G  START DBE '(NAME)' MULTI NEW                              *VIRT   !
! * 200 : G    DUAL LOG                                                *GUID   !
! * 300 : G    BUFFER = ___                                            *GUID   !
! * 400 : G    LANG = ________                                         *GUID   !
! * 500 : G    TRANSACTION = ___                                       *GUID   !
! * 600 : G    DBEFILE0 DBEFILE _________                              *GUID   !
! * 650 : G     WITH PAGES = ___                                        *GUID   !
! * 660 : G     NAME = '_________'                                      *GUID   !
! * 700 : G    LOG DBEFILE _________  AND _________                    *GUID   !
! * 750 : G     WITH PAGES = ___                                        *GUID   !
! * 760 : G     NAME = '_________' AND '_________'                      *GUID   !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!                                                                              !
! O: C1 CH: B qabloc G                                                         !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                  ENGLISH DOCUMENTATION LIBRARY           *PDIE.DDDD.BMS.477!
! BLOCK DESC GENERAL DOC.         QABLOC EXEMPLE ALLBASE/SQL                080!
!                                                                              !
! A LIN : T COMMENT                                                    LIB     !
! * 150 : G  CREATE DBEFILESET (NAME)                                  *VIRT   !
! * 200 : G CREATE DBEFILE _________                                   *GUID   !
! * 205 : G     WITH PAGES = ___ , NAME = '______ '                    *GUID   !
! * 207 : G     , INCREMENT = ___ , MAXPAGES = ___                     *GUID   !
! * 210 : G     , TYPE = MIXED                                         *GUID   !
! * 250 : G ADD DBEFILE ________ TO DBEFILESET (NAME)                  *GUID   !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!                                                                              !
! O: C1 CH: -DR080G                                                            !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                   ENGLISH DOCUMENTATION LIBRARY           *PDIE.DDDD.BMS.477!
! BLOCK DESC GENERAL DOC.         QABLOC EXEMPLE ALLBASE/SQL               100!
!                                                                            !
! A LIN : T COMMENT                                                 LIB      !
! * 150 : G  CREATE PUBLIC TABLE (NAME)                             *VIRT    !
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---              *VIRT    !
! * 400 :        ---> COLUMNS INSERTION END <---                    *VIRT    !
! * 500 : G      PRIMARY KEY (___________)  CONSTRAINT _______      *VIRT    !
! * 600 : G      FOREIGN KEY (___) REFERENCES  ___ CONSTRAINT ___   *VIRT    !
! * 700 : G      UNIQUE HASH ON (________,_________) PAGES = _____  *GUID    !
! * 720 : G      HASH ON CONSTRAINT _______ PAGES = ____            *GUID    !
! * 740 : G      CLUSTERING ON CONSTRAINT _______                   *GUID    !
! * 800 : G      IN (DBEFILESET)                                    *VIRT    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
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! O: C1 CH: -DR100G                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                   ENGLISH DOCUMENTATION LIBRARY           *PDIE.DDDD.BMS.477!
! BLOCK DESC GENERAL DOC.         QABLOC EXEMPLE ALLBASE/SQL               130!
!                                                                            !
! A LIN : T COMMENT                                                 LIB      !
! * 150 : G  CREATE VIEW (VIEW NAME)                                *VIRT    !
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---              *VIRT    !
! * 400 :        ---> COLUMNS INSERTION END <---                    *VIRT    !
! * 450 : G      AS SELECT                                          *VIRT    !
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---       *VIRT    !
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---             *VIRT    !
! * 800 : G      FROM (SOURCE TABLES NAME)                          *VIRT    !
! * 850 : G      WHERE                                              *GUID    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR130G                                                          !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                   ENGLISH DOCUMENTATION LIBRARY           *PDIE.DDDD.BMS.477!
! BLOCK DESC GENERAL DOC.         QABLOC EXEMPLE ALLBASE/SQL               210!
!                                                                            !
! A LIN : T COMMENT                                                 LIB      !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                          *VIRT     !
! * 200 : G    ON (TABLE NAME)                                     *VIRT     !
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---             *VIRT     !
! * 400 :        ---> COLUMNS INSERTION END <---                   *VIRT     !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
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!       :                                                                    !
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!                                                                            !
! O: C1 CH: -DR210G                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                   ENGLISH DOCUMENTATION LIBRARY           *PDIE.DDDD.BMS.477!
! BLOCK DESC GENERAL DOC.         QABLOC EXEMPLE ALLBASE/SQL               300!
!                                                                            !
! A LIN : T COMMENT                                                 LIB      !
! * 150 : G  ALTER TABLE (NAME)                                    *VIRT     !
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---             *VIRT     !
! * 400 :        ---> COLUMNS INSERTION END <---                   *VIRT     !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR300G                                                          !
--------------------------------------------------------------------------------
```

7.14. INFORMIX-ESQL

```
----------------------------------------
! GENERAL DOCUMENTATION: INFORMIX-ESQL !
----------------------------------------
```

This subchapter presents the General Documentation (-G) lines of an INFORMIX-ESQL block.

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
INFORMIX-ESQL 14

```
!                   ENGLISH DOCUMENTATION LIBRARY           *PDIE.DDDD.BMS.477!
! BLOCK     GENERAL DOC.          QIBLOC INFORMIX SQL                           !
!                                                                               !
! A LIN : T COMMENT                                                    LIB      !
! * 150 : G  CREATE DATABASE (NAME)                                    *VIRT    !
! * 200 : G    WITH LOG IN "________"                                  *GUID    !
! * 300 : G    MODE ANSI                                               *GUID    !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!                                                                               !
! O: C1 CH: B qibloc G                                                          !
```

```
!                   ENGLISH DOCUMENTATION LIBRARY           *PDIE.DDDD.BMS.477!
! BLOCK DESC GENERAL DOC.         QIBLOC INFORMIX SQL                     100!
!                                                                               !
! A LIN : T COMMENT                                                    LIB      !
! * 150 : G  CREATE TABLE (NAME)                                       *VIRT    !
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT    !
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT    !
! * 700 : G      WITH NO LOG                                           *GUID    !
! * 800 : G      IN ____________                                       *VIRT    !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!                                                                               !
! O: C1 CH: -DR100G                                                             !
```

```
--------------------------------------------------------------------------------
!                   ENGLISH DOCUMENTATION LIBRARY           *PDIE.DDDD.BMS.477!
! BLOCK DESC GENERAL DOC.         QIBLOC INFORMIX SQL                    110!
!                                                                           !
! A LIN : T COMMENT                                                 LIB     !
! * 150 : G  ALTER TABLE (NAME)                                     *VIRT   !
! * 180 :        ADD CONSTRAINT UNIQUE                              *VIRT   !
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---              *VIRT   !
! * 400 :        ---> COLUMNS INSERTION END <---                    *VIRT   !
! * 700 :        CONSTRAINT (CONSTRAINT NAME)                       *VIRT   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!                                                                           !
! O: C1 CH: -DR110G                                                         !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                   ENGLISH DOCUMENTATION LIBRARY           *PDIE.DDDD.BMS.477!
! BLOCK DESC GENERAL DOC.         QIBLOC INFORMIX SQL                    130!
!                                                                           !
! A LIN : T COMMENT                                                 LIB     !
! * 150 : G  CREATE VIEW (VIEW NAME)                                *VIRT   !
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---              *VIRT   !
! * 400 :        ---> COLUMNS INSERTION END <---                    *VIRT   !
! * 450 : G      AS SELECT                                          *VIRT   !
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---       *VIRT   !
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---             *VIRT   !
! * 800 : G      FROM (SOURCE TABLES NAME)                          *VIRT   !
! * 850 : G      WHERE                                              *GUID   !
! * 900 : G      WITH CHECK OPTION                                  *GUID   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!                                                                           !
! O: C1 CH: -DR130G                                                         !
--------------------------------------------------------------------------------
```

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
INFORMIX-ESQL 14

```
--------------------------------------------------------------------------------
!                   ENGLISH DOCUMENTATION LIBRARY           *PDIE.DDDD.BMS.477!
! BLOCK DESC GENERAL DOC.         QIBLOC INFORMIX SQL                     210!
!                                                                            !
! A LIN : T COMMENT                                                 LIB      !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                           *VIRT    !
! * 200 : G    ON (TABLE NAME)                                      *VIRT    !
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---              *VIRT    !
! * 400 :        ---> COLUMNS INSERTION END <---                    *VIRT    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
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!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR210G                                                          !
--------------------------------------------------------------------------------
```

7.15. DB2/2 AND DB2/6000

```
-----------------------------------------------
!   GENERAL DOCUMENTATION: DB2/2 AND DB2/6000   !
-----------------------------------------------
```

This sub-chapter presents the general documentation lines for a DB2/2 or DB2/6000 block.

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
DB2/2 AND DB2/6000 15

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK DESC GENERAL DOC.         QBBLOC DB2/2 AND DB2/6000                200!
!                                 EXAMPLE                                    !
! A LIN : T COMMENT                                                     LIB !
! * 150 : G  CREATE TABLE (NAME)                                       *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
! * 500 : G      IN (DATABASE.TABLESPACE)                              *VIRT!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR200G                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK DESC GENERAL DOC.         QBBLOC DB2/2 AND DB2/6000                130!
!                                 EXAMPLE                                    !
! A LIN : T COMMENT                                                     LIB !
! * 150 : G  CREATE VIEW (VIEW NAME)                                   *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
! * 450 : G      AS SELECT ALL                                         *VIRT!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---          *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---                *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                             *VIRT!
! * 850 : G      WHERE                                                 *GUID!
! * 900 : G      GROUP BY                                              *GUID!
! * 950 : G      HAVING                                                *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR130G                                                          !
--------------------------------------------------------------------------------
```

EXAMPLES OF GENERAL DOCUMENTATION SCREENS 7
DB2/2 AND DB2/6000 15

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK DESC GENERAL DOC.         QBBLOC DB2/2 AND DB2/6000                210!
!                                 EXAMPLE                                    !
! A LIN : T COMMENT                                                     LIB !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                              *VIRT!
! * 200 : G    ON (TABLE NAME)                                         *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
! * 500 : G    USING STOGROUP ________                                 *GUID!
! * 650 : G      ERASE          NO                                      *GUID!
! * 700 : G    SUBPAGES         4                                       *GUID!
! * 750 : G    BUFFERPOOL       ___                                     *GUID!
! * 800 : G    CLOSE            YES                                     *GUID!
! * 900 : G    DSETPASS         ________                                *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR210G                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.260!
! BLOCK DESC GENERAL DOC.         QBBLOC DB2/2 AND DB2/6000                370!
!                                 EXAMPLE                                    !
! A LIN : T COMMENT                                                     LIB !
! * 150 : G  ALTER TABLE (NAME)                                        *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                 *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                       *VIRT!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
! *** END ***                                                                !
! O: C1 CH: -DR370G                                                          !
--------------------------------------------------------------------------------
```

7.16. SYBASE

```
---------------------------------
! GENERAL DOCUMENTATION: SYBASE !
---------------------------------
```

This subchapter presents the General Documentation (-G) lines of a SYBASE block ('QR').

They are called by the -DRnnnG command, nnn being a line number found in the block description (-DR).

```
--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK DESC GENERAL DOC.         QYBLOC SYBASE  EXAMPLE                   100!
!                                                                            !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE TABLE (NAME)                                      *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 420 : G    ON ______                                              *VIRT!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR100G                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK DESC GENERAL DOC.         QYBLOC SYBASE EXAMPLE                    130!
!                                                                            !
! A LIN : T COMMENT                                                    LIB !
! * 150 : G  CREATE VIEW (VIEW NAME)                                  *VIRT!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---                *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                      *VIRT!
! * 450 : G      AS SELECT ALL                                        *VIRT!
! * 500 :        ---> SOURCE COLUMNS INSERTION BEGINNING <---         *VIRT!
! * 700 :        ---> SOURCE COLUMNS INSERTION END <---               *VIRT!
! * 800 : G      FROM (SOURCE TABLES NAME)                            *VIRT!
! * 850 : G      WHERE                                                *GUID!
! * 900 : G      WITH CHECK OPTION                                    *GUID!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!                                                                            !
! O: C1 CH: -DR130G                                                          !
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.254!
! BLOCK DESC GENERAL DOC.         QYBLOC SYBASE EXAMPLE                   210!
!                                                                           !
! A LIN : T COMMENT                                                  LIB !
! * 150 : G  CREATE (UNIQUE) INDEX (NAME)                           *VIRT!
! * 200 : G    ON (TABLE NAME)                                      *VIRT!
! * 300 :        ---> COLUMNS INSERTION BEGINNING <---              *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                    *VIRT!
! * 420 : G   WITH  FILLFACTOR = _                                  *GUID!
! * 440 : G    IGNORE_DUP_KEY                                       *GUID!
! * 450 : G    SORTED_DATA                                          *GUID!
! * 460 : G    IGNORE_DUP_ROW   / ALLOW_DUP_ROW                     *GUID!
! * 500 : G    ON  _________                                        *GUID!
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!                                                                           !
! O: C1 CH: -DR210G                                                         !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH DOCUMENTATION LIBRARY          *PDIE.DDDD.BMS.260!
! BLOCK DESC GENERAL DOC.         QYBLOC SYBASE EXAMPLE                   110!
!                                                                           !
! A LIN : T COMMENT                                                  LIB !
! * 150 : G  ALTER TABLE (NAME)                                     *VIRT!
! * 180 : G     ADD                                                 *VIRT!
! * 190 : G      CONSTRAINT (CONSTRAINT NAME)                       *VIRT!
! * 195 : G       PRIMARY KEY                                       *VIRT!
! * 196 : G       NONCLUSTERED                                      *GUID!
! * 200 :        ---> COLUMNS INSERTION BEGINNING <---              *VIRT!
! * 400 :        ---> COLUMNS INSERTION END <---                    *VIRT!
! * 500 : G         WITH FILLFACTOR = _                             *GUID!
! * 550 : G         ON ________                                     *GUID!
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
! *** END ***                                                               !
! O: C1 CH: -DR110G                                                         !
-------------------------------------------------------------------------------
```

8. BLOCK GENERATION

8.1. DDL GENERATION (B.....GEN)

DDL GENERATION

Generation of the DDL is based on the logical information specified via:

. Data Elements and Segments used to define Tables, Views and Columns,

. Block Definition and Description, which define Databases, Spaces and Indexes;

and the physical information entered on the General Documentation lines associated with the Block Definition and Description lines.

The generated DDL is displayed on-line on the SQL Commands Generation (-GEN) screen, accessed via the following CHOICE:

CH: B.....GEN

for the Database generation,
OR

CH: B.....GENnnn

for the generation of the object described on line 'nnn' of the Database Block Description (-DR) screen.

The -GENnnn screen can also be accessed by entering a 'Q' in the ACTION CODE field on the corresponding Block Description line; this Action Code cannot be used if the THE TYPE OF GENERATED TRANSACTION field (-DR screen) is blank.

On the first screen, the user must indicate the TYPE and the EXTERNAL NAME (for Databases and Tablespaces); or the SEGMENT code (for Tables, Views or Indexes).

This information is automatically displayed when this screen is accessed via the CHOICE '-GENnnn' or the ACTION CODE 'Q'.

The TYPE OF GENERATED TRANSACTION value entered on the Block Description screen is also displayed.

Pressing the 'ENTER' key causes the generation of the corresponding DDL, which is then displayed on-line.

From the -GEN screen, the -GEN of another object may be accessed by entering:

- for Spaces:

the TYPE and EXTERNAL NAME fields,

- for Tables, Views and Indexes:

the TYPE and SEGMENT code fields.

For example, to obtain the -GEN screen of a Table calling Segment DDSS, the user enters 'T' in the TYPE field and 'DDSS' in the SEGMENT field.

NOTE Command -GEN can only generate SQL objects PACKAGE (C), FUNCTION (E), PROCEDURE (Q), TRIGGER or RULE (R) in batch procedure.

For generation procedure:
- local data is not taken into account.
- column data: the Data Element code is replaced by its relational name.

GENERATION OF 'ALTER' COMMANDS

ALTER TABLE commands are generated for 'I' and 'J' lines. To modify a Table, it is necessary to modify its description, ie. the description of the corresponding segment.

ALTER commands may only be generated through the -GEN screen.

They are executed in two steps:

. Once the -GEN screen corresponding to the Table is displayed, the user presses the 'ENTER' key.

. The full description is then displayed: the user must select the Table Columns for which an ALTER command is to be generated by entering a 'C' in the SELECTION (SEL.) field (see screen examples which follow). For ORACLE, the value 'M' is used to generate 'MODIFY' commands.

Depending on the type of line, there are three ways of specifying an ALTER TABLE command:

- ALTER TABLE on the 'I' and 'J' lines for Primary and Foreign Keys.

- ALTER TABLE on the 'A' lines for a Column update; in this case, the columns must be specified through -DR...K.

- ALTER TABLE on the 'T' lines, with the 'M' transaction code; in this case , the generation is performed in two stages.

NOTES: ALTER commands ON THE 'T' lines with the 'M' transaction code can only be generated on the '-GEN' screens. They cannot be generated through the GPRT procedure.

ALTER commands are not taken into account for DB2/400 ('Q4') blocks.

BLOCK GENERATION 8
DDL GENERATION (B.....GEN) 1

```
!                      ENGLISH LIBRARY                          *PDMB.DDDD.BMS.202!
! SQL COMMANDS GENERATION     QCBLOC DATACOM/DB EXAMPLE                            !
!                                                                                  !
! SEGMENT    : DZ10   EXTERNAL NAME :                                              !
! TYPE       : A                                                                   !
!              CATALOG UPDATE Y/N :                                                !
!                                                                                  !
! ALTER TABLE DZ10                                                                 !
!                                                                                  !
!                                                                                  !
!                                                                                  !
!                                                                                  !
!                                                                                  !
!                                                                                  !
!                                                                                  !
!                                                                                  !
!                                                                                  !
!                                                                                  !
!                                                                                  !
!                                                                                  !
!                                                                                  !
! O: C1 CH:                                                                        !
-----------------------------------------------------------------------------------

-----------------------------------------------------------------------------------
!                      ENGLISH DOCUMENTATION LIBRARY            *PDIE.DDDD.BMS.260!
! INPUT OF DATA ELEMENTS 1    QCBLOC DATACOM/DB EXAMPLE                      700 !
!                             DZ10                                               !
!                               2    3           --------------------           !
!                               RANK ORDER       !      COLUMN      !     LIBR.!
!  COCARA                                        !   QTMLI      A   !     0067 !
!  NUCOM                        03               !   FOURNP     M   !     0067 !
!  FOURNP                       02    M          !   NUCOM          !     0067 !
!  QTMLI                        01    A          !   QTMCO      D   !     0067 !
!  QTMCO                        04    D          !   INFOR          !     0067 !
!  INFOR                        05               !                  !     0067 !
!                                                !                  !          !
!                                                !                  !          !
!                                                !                  !          !
!                                                !                  !          !
!                                                !                  !          !
!                                                !                  !          !
!                                                !                  !          !
!                                                !                  !          !
!                                                !                  !          !
!                                                !                  !          !
! *** END ***                                                                      !
! O: C1 CH: -DR210K                                                                !
-----------------------------------------------------------------------------------
```

8.2. CATALOG UPDATING

CATALOG UPDATING

The generated DDL may be used to update the DB2 catalog on-line.

This immediately ensures consistency between the catalog and the database description.

On the SQL Commands Generation (-GEN) screen, when all input is entered, the following message is displayed:

CATALOG UPDATE Y/N:

On-line updating of the DB2 catalog may thus be requested by entering a 'Y' (for 'YES') in the input field following the message.

(Refer to the OPERATIONS Manual for details on the catalog updating program.)

DB2 AUTHORIZATIONS

SQL users need to be granted some authorizations for the following reasons:

1. When the user creates a Table, he is considered as its "owner". His code is then used as the prefix in the Table's name.

2. The user may work on a Table he has not created, provided its owner has granted him the corresponding authorization.

There are three different kinds of Table prefixing:

A. Explicit prefixing,

B. Prefixing via the USERID,

C. Prefixing via DB2 USER.

There are two ways of generating Tables and updating the DB2 Catalog.

FIRST MODE: Batch generation via the GPRT procedure.

In cases A and B, the TSO LOGON used to update the DB2 Catalog must have authorization on the Tables corresponding to the prefix and the USERID.

In case C, the TSO LOGON is the prefix.

SECOND MODE: On-line updating.

On-line updating of the DB2 Catalog via the transaction (CICS or IMS/DC) necessitates some caution as to the organization and the granting of the System and DB2 authoriza- tions.

The user is identified differently depending on whether he works under CICS or IMS/DC and whether or not a Security system is being used. For more information please refer to the Subchapter "TABLE OR VIEW DEFINITION".

If the Table is prefixed (cases A and B), the user identified by DB2 must be granted the corresponding authorization by this Table's owner, i.e. via the prefix.

If the Table is not prefixed (case C), the user's identifier is used as the prefix.

9. ACCESS COMMANDS

9.1. ON-LINE ACCESS COMMANDS

DATABASE BLOCKS: ON-LINE ACCESS

LISTS

CHOICE	SCREEN	UPD
LCBaaaaaa	List of database blocks by code (starting with block 'aaaaaa').	NO
LTBaabbbbbb	List of database blocks by type (starting with type 'aa' and block 'bbbbbb').	NO
LEBaaaaaaaa	List of database blocks by external name (starting with name 'aaaaaaaa').	NO

DESCRIPTION OF BLOCK 'aaaaaa'

CHOICE	SCREEN	UPD
Baaaaaa	Definition of database block 'aaaaaa'	YES
BaaaaaaGbbb	General documentation for block 'aaaaaa' (starting with line 'bbb').	YES
BaaaaaaATbbbbbb	Text assigned to block 'aaaaaa' (starting with text 'bbbbbb').	NO
BaaaaaaX	X-references of block 'aaaaaa'.	NO
BaaaaaaXBbbbbbb	X-references of block 'aaaaaa' to PSB's (starting with PSB 'bbbbbb').	NO
BaaaaaaXObbbbbb	X-references of block 'aaaaaa' to screens (starting with screen 'bbbbbb').	NO
BaaaaaaXObbbbbbCScdddd	X-references of 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	X-references of block 'aaaaaa' to the Work Areas of screen 'bbbbbb' (starting with work area 'cc', line number'ddd').	NO
BaaaaaaXQbbbbbb	List of entities linked to block 'aaaaaa' through user-defined relation-ship 'bbbbbb'.	NO
BaaaaaaXVvvvvvv	X-references of block 'aaaaaa' to volumes (starting with volume 'vvvvvv').	NO
BaaaaaaXPbbbbbb	X-references of block 'aaaaaa' to programs (starting with program 'bbbbbb').	NO

BaaaaaaXPbbbbbbWccddd	X-references of block 'aaaaaa' to Work Areas of program 'bbbbbb' (starting with work area 'cc', line number 'ddd').	NO

LIST OF RELATIONAL/SQL OBJECTS

CHOICE	SCREEN	UPD
LTStddss	List of relational/SQL objects by type and code (starting with type 't', code 'ddss').	NO
LESteeeeeeeeeee	List of relational/SQL objects by type and external name (starting with type 't' and external name 'eeeeeeeeeee'). Note: If the external name is indicated on the segment definition, it is not taken into account in the list.	NO

RELATIONAL/SQL DATABASE BLOCK DESCRIPTION

CHOICE	SCREEN	UPD
BaaaaaaDRbbb	Description of relational/SQL block 'aaaaaa' (starting with line 'bbb').	YES
BaaaaaaDRbbbGccc	General documentation of relational/SQL block 'aaaaaa' description line 'bbb' (starting with general documentation line 'ccc').	YES
BaaaaaaDRbbbK	Building of relational/SQL key 'K' on description line 'bbb' of block 'aaaaaa'.	YES
BaaaaaaGEN	Generation of SQL commands for relational/SQL block 'aaaaaa'.	YES
BaaaaaaGENnnn	Generation of SQL commands for the object defined on description line 'nnn' of block 'aaaaaa'.	YES

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

All notations between parentheses are optional.

CROSS-REFERENCES OF DATA ELEMENTS USED IN SQL KEYS

CHOICE	SCREEN	UPD
EaaaaaaXK	X-references of Data Element 'aaaaaa' to the key of relational /SQL database blocks.	NO

LIST OF RELATIONAL INTEGRITY CONSTRAINTS

CHOICE	SCREEN
SbbbbCNaaaaaa	List of integrity constraints of Segment 'bbbb', starting with block 'a' or 'aaa'.

9.2. BATCH ACCESS COMMANDS

DATABASE BLOCKS: BATCH ACCESS

DEFINITION

Batch Form 'L1' is used to define a Database Block.

ACTION CODES

```
C     = Creation of a line in the library.

M     = Modification of a line.

Blank = Creation or modification of a line,  depending
        on its presence or absence in the library.

X     = Creation or modification with possible use of
        ampersands (&).

D     = Deletion of a line.

B     = Deletion of the database block and of its de-
        pendent lines.
```

RELATIONAL/SQL DATABASE BLOCK DESCRIPTION

BATCH FORM

Batch Form 'L4' is used to describe a Relational/SQL Database Block.

ACTION CODES

```
C     = Creation of a line in the library.

M     = Modification of a line.

Blank = Creation or modification of a line,  depending
        on its presence or absence in the library.

X     = Creation or modification with possible use  of
        ampersands (&).

D     = Deletion of a line.

B     = Deletion of database block starting with this
        line (including associated documentation
        lines).

R     = End of multiple deletion.
```

If a 'B' line is not followed by an 'R' line, the deletion ends with the last line of the block.

DATA ELEMENT DEFINITION

Batch Form 'C' is used for the definition of a Data Element.

DATA ELEMENT DESCRIPTION

Batch Form 'E' is used for the description of a Data Element.

SEGMENT DEFINITION

Batch Form '2' is used for the definition of a Segment.

SEGMENT DESCRIPTION

Batch Form '3' is used for the description of a Segment.

ACTION CODES

The batch action codes for these entities are identical to the ones used for the Database Block entity.

NOTE CONCERNING DELETION OF A DATA ELEMENT

Deletion of a Data Element (using ACTION CODE 'D') is only possible if the Data Element is not used in screens, reports and Segments and if it has no child Data Element.

It is possible to globally delete (using ACTION CODE 'B') a Data Element and all of its uses in screens, reports or Segments.

When a multiple deletion is done on a parent Data Element, all of its child Data Elements will be deleted along with all of the uses of the parent and child Data Elements.

9.3. GENERATION AND/OR PRINTING

DATABASE BLOCKS: GENERATION-PRINT

Lists and description reports on Database Blocks may be obtained by entering certain commands, either on-line on the Generation and Print Commands (GP) screen, or in batch mode using Batch Form 'Z'. The COMMANDS FOR PRINT REQUEST are listed below.

LISTS

LCB: List of all database blocks, sequenced by their codes.

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

LEB: List of database blocks, sequenced by external names, without explicit printed keywords.

LTB: List of database blocks, sequenced by their types.

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

LKB: List of all database blocks, by keywords.

After typing LKB, a selection field (SEL:) enables the user to choose implicit ('L') or explicit ('M') keywords, or both (' ').
Keywords are entered on a continuation line or in columns 31 to 80 in batch mode.

LTS: List of SQL objects by codes,

LES: List of SQL objects by external names.

DESCRIPTION

DTB: Definition, description and general documentation for the database block entered in the ENTITY CODE field. If no code is specified, ALL occurrences of the Database Block entity type are listed.

A Type selection is requested by entering the desired TYPE CODE field or columns 17-18 in batch mode.

C1 OPTION: Provides definition, description, general documentation, and X-references,
C2 OPTION: With assigned text.

GENERATION OPTION

GSQ: Generation of the DDL for the block whose code is entered in the ENTITY CODE field;

. C1 Option: Generation of Creation DDL (CREATE DATABASE and CREATE of all the objects of the block);

. C2 Option: Generation of the DDL according to the TYPE OF TRANSACTION TO GENERATE field (-DR screen).

NOTE: ALTER commands may only be generated on-line through the -GEN screen.

. C3 Option: Generation of the LABEL command for DB2, SQL/DS, and SQL400 Databases.

. C4 Option: Generation of the COMMENT command for DB2, SQL/DS, SQL400, ORACLE, VAX/SQL, and NONSTOP/SQL Databases.

The date, time and session number will appear on the first line of the generated program.

FLS: Flow control of the block. The user may specify a generation environment (PEI module), control card options, and parameters (as needed).

10. EXAMPLES

10.1. COMMON SCREENS

EXAMPLES

This chapter shows examples of generated Blocks.

For all the Block types, you will find an example of a Table generation, of an Index generation and of a View generation.
For all the Blocks which accept it, you will also find an example of a Space generation.

This subchapter shows the screens which are common to all the Block types: the requests for a Space generation, for an Index generation and for a View generation as well as the description of the Segments used to generate these objects. As you will see in the subchapter specific to each Block type, each Block description includes three identical lines (line 100 for a Table creation, line 210 for an Index creation and line 350 for a View creation).

This subchapter shows, in the order:

. the request to generate a Table from Segment DZ05, indicated on line 100 of the Block description,
. the description of Segment DZ05,
. the request to generate an Index from Segment DZ10, indicated on line 210 of the Block description,
. the description of Segment DZ10,
. the Index composition,
. the request to generate a View from Segment DZ09, indicated on line 350 of the Block description,
. the description of Segment DZ09.

However, the results of these generation requests vary according to the Block type. So they are presented in the subchapters specific to each Block type.

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.201!
! SQL COMMANDS GENERATION                                                      !
!                                                                              !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                   !
! TYPE       : T                    PREFIX :                                   !
!              CREATE TABLE                                                    !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
! *** END ***                                                                  !
! O: C1 CH: -GEN100                                                            !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.201!
! SEGMENT CALL OF ELEMENTS : DZ05 STOCK                                        !
!                                                                              !
! A LIN : ELEM.  INT.FORM U OCC GR I CMD456 CONT  VALUE/SFC UPD/TRGET DOC LIBR.!
!   100 : COCARA X        D          O                                 0067!
!   110 : NUCOD  S9(3)    C          P         S     O                 0067!
!   120 : FOURNI X(3)     D                                            0067!
!   200 : NUCLIE X(8)     D                   S   O                     0067!
!   255 : VILLE  X(20)    D        V          S   O                     0067!
!   260 : CORESP X(256)   D        V          S      O                  0067!
!   270 : REMISE S9(4)V99 3                                            0067!
!   280 : MATE   X(8)     D        V                    A*MATERIEL     0067!
!   310 : DATED  X(10)    D                                            0067!
!   330 : HEURE  T        D                                            0067!
!   340 : PRECIS TS       D                   S     O                  0067!
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       : NAME :                                                               !
! *** END ***                                                                  !
! O: C2 CH: S dz05 CE                                                          !
--------------------------------------------------------------------------------
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.197!
! SQL COMMANDS GENERATION                                                      !
!                                                                             !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                  !
! TYPE       : I                      PREFIX :                                !
!              CREATE INDEX                                                   !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
! *** END ***                                                                 !
! O: C1 CH: -GEN210                                                           !
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.201!
! SEGMENT CALL OF ELEMENTS : DZ10 STOCK                                       !
!                                                                             !
! A LIN : ELEM.  INT.FORM U OCC GR I CMD456 CONT  VALUE/SFC UPD/TRGET DOC LIBR.!
!   100 : COCARA X        D          O         S  O    O                  0067!
!   110 : NUCOM  S9(5)    C          P         S  O O  O  O               0067!
!   120 : FOURNP X(3)     D                    S  O                       0067!
!   200 : QTMLI  S9(2)    C                    S  O O     O A*LIVRABLE    0067!
!   210 : QTMCO  S9(2)    C                    S  O    O                  0067!
!   240 : INFOR  X(35)    D        V           S  O    O                  0067!
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       : NAME :                                                              !
! *** END ***                                                                 !
! O: C2 CH: S dz10 CE                                                         !
```

```
 --------------------------------------------------------------------------------
 !                    ENGLISH LIBRARY                       *PDMB.DDDD.BMS.197!
 ! INPUT OF DATA ELEMENTS                                                 210 !
 ! INDZ10                     DZ10                                            !
 !                                                  --------------------      !
 !                             RANK ORDER         !     COLUMN        !     LIBR.!
 !  COCARA                                        !   FOURNP          !     0067 !
 !  NUCOM                        02    A          !   NUCOM      A    !     0067 !
 !  FOURNP                       01               !   QTMLI           !     0067 !
 !  QTMLI                        03               !                   !     0067 !
 !  QTMCO                                         !                   !     0067 !
 !  INFOR                                         !                   !     0067 !
 !                                                !                   !          !
 !                                                !                   !          !
 !                                                !                   !          !
 !                                                !                   !          !
 !                                                !                   !          !
 !                                                !                   !          !
 !                                                !                   !          !
 !                                                !                   !          !
 !                                                !                   !          !
 !                                                !                   !          !
 !                                                !                   !          !
 ! *** END ***                                                                 !
 ! O: C1 CH: -DR210K                                                           !
 --------------------------------------------------------------------------------

 --------------------------------------------------------------------------------
 !                    ENGLISH LIBRARY                       *PDMB.DDDD.BMS.197!
 ! SQL COMMANDS GENERATION                                                     !
 !                                                                             !
 ! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                               !
 ! TYPE       : V                    PREFIX :                                  !
 !              CREATE VIEW                                                    !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 !                                                                             !
 ! *** END ***                                                                 !
 ! O: C1 CH: -GEN350                                                           !
 --------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.201!
! SEGMENT CALL OF ELEMENTS : DZ09 INTERN. STOCK                                  !
!                                                                                !
! A LIN : ELEM.  INT.FORM U OCC GR I CMD456 CONT VALUE/SFC UPD/TRGET DOC  LIBR.!
!   110 : FO10                 **                                        0067!
! 1 090 : CLEFO          D                                                0067!
! 1 100 : FOURNI X(3)    D        U           S    O                      0067!
! 1 110 : MATE   X(8)    D                    S OOO OOOOOO               0067!
! 1 120 : RELEA  X(3)    D        1                        LIVRABLE       0067!
! 1 130 : LANGU  X       D                                                0067!
! 1 140 : QTMAS  S9(4)   C        2                                       0067!
! 1 150 : QTMAM  S9(4)   C                                                0067!
! 1 160 : LIBFO  X(20)   D        3                                       0067!
! 1 200 : DATE   M       D                    S    O                      0067!
! 1 210 : HEURE  T       D                    S    O                      0067!
! 1 999 : FILLER XX      D                                                0067!
!   120 : COMMEN X       D                                                0067!
! * 130 : (-DBE)                                                             !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       : NAME :                                                             !
!                                                                            !
! O: C2 CH: S dz09 CE                                                        !
--------------------------------------------------------------------------------
```

10.2. DB2

```
---------------
! DB2 EXAMPLE !
---------------
```

The purpose of this subchapter is to show the specific screens of a DB2-type Block ('Q2BLOC' code).

You will find, in the order:

- the Block description,
- the request to generate a Space, from line 080 of the Block description,
- the result of the generation of this Space,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
!                     ENGLISH LIBRARY                        *PDMB.D801.BMS.258!
! RELATIONAL BLOCK DESCRIP.   Q2BLOC DB2 EXAMPLE                                 !
!                                                                                !
! A LIN : T EXTERNAL NAME              TABLE CODE     KEY GEN            LIBR.!
!       :                              VIEW           TY  CDE                 !
!   080 : P ESP1-TABLE-Q2BLOC                              C              0067!
!   100 : T DODZ05                       DZ05              C              0067!
!   110 : K                              DZ05              C              0048!
!   130 : V VUDZ05S3                     DZ05          3   C              0058!
!   200 : T DODZ10                       DZ10              C              0067!
!   210 : I INDZ10                       DZ10              C              0048!
!   220 : J CEXISTF  DZ05                DZ10          C   C              0048!
!   300 : T                              FO10              C              0067!
!   350 : V VUDZ09DBE                    DZ09              C              0067!
!   360 : V VUDZ09S4                     DZ09          4   C              0048!
!   370 : A                              FO10              C              0256!
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
! *** END ***                                                                 !
! O: C1 CH: BQ2BLOC DR                                                        !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.197!
! SQL COMMANDS GENERATION     Q2BLOC DB2 EXAMPLE                              !
!                                                                             !
! SEGMENT    :        EXTERNAL NAME : ESP1-TABLE-Q2BLOC                       !
! TYPE       : P                                                             !
!              CREATE TABLESPACE                                              !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
!                                                                             !
! *** END ***                                                                 !
! O: C1 CH: -GEN080                                                           !
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.197!
! SQL COMMANDS GENERATION     Q2BLOC DB2 EXAMPLE                                !
!                                                                               !
! SEGMENT    :        EXTERNAL NAME : ESP1-TABLE-Q2BLOC                        !
! TYPE       : P                                                              !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE TABLESPACE ESP1-TABLE-Q2BLOC           IN EXTQ2DB2                   !
! ;                                                                             !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH:                                                                     !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.197!
! SQL COMMANDS GENERATION     Q2BLOC DB2 EXAMPLE                                !
!                                                                               !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                    !
! TYPE       : T                                                              !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE TABLE PDCL.DODZ05                                                      !
!  (COCARA             CHAR        (00001)     NOT NULL,                      !
!   NUCOD              SMALLINT                NOT NULL WITH DEFAULT,         !
!   FOURNI             CHAR        (00003),                                   !
!   NUCLIE             CHAR        (00008),                                   !
!   VILLE              VARCHAR     (00020),                                   !
!   CORESP             LONG VARCHAR,                                          !
!   REMISE             DECIMAL     (00006, 02),                               !
!   MATERIEL           VARCHAR     (00008),                                   !
!   DATED              CHAR        (00010),                                   !
!   HEURE              TIME,                                                  !
!   PRECIS             TIMESTAMP)                                             !
!    IN EXTQ2DB2.ESP1-TABLE-Q2BLOC                                            !
! ;                                                                             !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN100                                                             !
-------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.197!
! SQL COMMANDS GENERATION     Q2BLOC DB2 EXAMPLE                                !
!                                                                               !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                    !
! TYPE       : I                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE INDEX PDCL.INDZ10                                                      !
!  ON PDCL.DODZ10                                                               !
! (FOURNP                ,                                                      !
!  NUCOM                 ASC ,                                                  !
!  LIVRABLE                  )                                                  !
! ;                                                                             !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN210                                                             !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.197!
! SQL COMMANDS GENERATION     Q2BLOC DB2 EXAMPLE                                !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE VIEW PDCL.VUDZ09DBE                                                    !
!  (CLEFO             ,                                                         !
!   FOURNI            ,                                                         !
!   MATE              ,                                                         !
!   RELEA             ,                                                         !
!   LANGU             ,                                                         !
!   QTMAS             ,                                                         !
!   QTMAM             ,                                                         !
!   LIBFO             ,                                                         !
!   DATE              ,                                                         !
!   HEURE             ,                                                         !
!   FILLER            ,                                                         !
!   COMMEN            )                                                         !
!  AS SELECT                                                                    !
!  PDCL.FOUR.CLEFO                                    ,                         !
! PLEASE ENTER TO CONTINUE                                                      !
! O: C1 CH: -GEN350                                                             !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.197!
! SQL COMMANDS GENERATION     Q2BLOC DB2 EXAMPLE                                !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! PDCL.FOUR.FOURNI                                        ,                     !
! PDCL.FOUR.MATE                                          ,                     !
! PDCL.FOUR.RELEA                                         ,                     !
! PDCL.FOUR.LANGU                                         ,                     !
! PDCL.FOUR.QTMAS                                         ,                     !
! PDCL.FOUR.QTMAM                                         ,                     !
! PDCL.FOUR.LIBFO                                         ,                     !
! PDCL.FOUR.DATE                                          ,                     !
! PDCL.FOUR.HEURE                                         ,                     !
! PDCL.FOUR.FILLER                                        ,                     !
! PDCL.DODZ05.COCARA                                                            !
!FROM  PDCL.FOUR                          ,                                    !
!      PDCL.DODZ05                                                              !
!;                                                                              !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH:                                                                     !
--------------------------------------------------------------------------------
```

10.3. SQL SERVER

```
------------------------
!  SQL SERVER EXAMPLE  !
------------------------
```

The purpose of this subchapter is to show the specific screens of an SQL SERVER-type Block ('Q3BLOC' code).

You will find, in the order:

- the Block description,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   Q3BLOC SQL SERVER EXAMPLE                         !
!                                                                              !
! A LIN : T EXTERNAL NAME              TABLE VIEW     KEY GEN            LIBR.!
!       :                              CODE           TY  CDE                 !
!   100 : T DODZ05                       DZ05               C              0067!
!   130 : V VUDZ05S3                     DZ05           3   C              0058!
!   200 : T DODZ10                       DZ10               C              0067!
!   210 : I INDZ10                       DZ10               C              0048!
!   300 : T                              FO10               C              0067!
!   350 : V VUDZ09DBE                    DZ09               C              0067!
!   360 : V VUDZ09S4                     DZ09           4   C              0048!
!   510 : A ADDTABLE                     DZ05               C              0213!
!   700 : T EXTERNAL-PI00                PI00               C              0219!
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
! *** END ***                                                                  !
! O: C1 CH: BQ3BLOC DR                                                         !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     Q3BLOC SQL SERVER EXAMPLE                        !
!                                                                              !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                   !
! TYPE       : T                                                               !
!              CATALOG UPDATE Y/N :                                            !
!                                                                              !
! CREATE TABLE DODZ05                                                          !
!  (COCARA             CHAR        (00001)     NOT NULL,                       !
!   NUCOD              SMALLINT                NULL,                           !
!   FOURNI             CHAR        (00003)     NULL,                           !
!   NUCLIE             CHAR        (00008)     NULL,                           !
! *** CORESP FIELD LENGTH >         00255 NOT TAKEN INTO ACCOUNT               !
!   VILLE              VARCHAR     (00020)     NULL,                           !
!   REMISE             NUMERIC     (00006,02)  NULL,                           !
!   MATERIEL           VARCHAR     (00008)     NULL,                           !
!   DATED              DATETIME                NULL,                           !
!   HEURE              DATETIME                NULL,                           !
!   PRECIS             CHAR        (00026)     NULL)                           !
! ;                                                                            !
!                                                                              !
!                                                                              !
! *** END ***                                                                  !
! O: C1 CH: -GEN100                                                            !
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     Q3BLOC SQL SERVER EXAMPLE                         !
!                                                                               !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                    !
! TYPE       : I                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE INDEX INDZ10                                                           !
!  ON DODZ10                                                                    !
! (FOURNP                ,                                                      !
!  NUCOM              ASC ,                                                     !
!  LIVRABLE               )                                                     !
! ;                                                                             !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN210                                                             !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     Q3BLOC SQL SERVER EXAMPLE                         !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE VIEW VUDZ09DBE                                                         !
!  (CLEFO             ,                                                         !
!   FOURNI            ,                                                         !
!   MATE              ,                                                         !
!   RELEA             ,                                                         !
!   LANGU             ,                                                         !
!   QTMAS             ,                                                         !
!   QTMAM             ,                                                         !
!   LIBFO             ,                                                         !
!   DATE              ,                                                         !
!   HEURE             ,                                                         !
!   FILLER            ,                                                         !
!   COMMEN            )                                                         !
!  AS SELECT                                                                    !
!  FOUR.CLEFO                          ,                                        !
! PLEASE ENTER TO CONTINUE                                                      !
! O: C1 CH:                                                                     !
-------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     Q3BLOC SQL SERVER EXAMPLE                          !
!                                                                                !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                  !
! TYPE       : V                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
!  FOUR.FOURNI                                              ,                   !
!  FOUR.MATE                                                ,                   !
!  FOUR.RELEA                                               ,                   !
!  FOUR.LANGU                                               ,                   !
!  FOUR.QTMAS                                               ,                   !
!  FOUR.QTMAM                                               ,                   !
!  FOUR.LIBFO                                               ,                   !
!  FOUR.DATE                                                ,                   !
!  FOUR.HEURE                                               ,                   !
!  FOUR.FILLER                                              ,                   !
!  DODZ05.COCARA                                                                 !
! FROM  FOUR                              ,                                      !
!       DODZ05                                                                   !
! ;                                                                              !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH:                                                                      !
--------------------------------------------------------------------------------
```

10.4. SQL/400

```
--------------------
!  SQL/400 EXAMPLE  !
--------------------
```

The purpose of this subchapter is to show the specific screens of an SQL/400-type Block ('Q4BLOC' code).

You will find, in the order:

- the Block description,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
!                     ENGLISH LIBRARY                        *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   Q4BLOC SQL/400 EXAMPLE                            !
!                                                                               !
! A LIN : T EXTERNAL NAME              TABLE CODE     KEY GEN            LIBR.!
!       :                              VIEW           TY  CDE                 !
!   100 : T DODZ05                       DZ05               C              0067!
!   130 : V VUDZ05S3                     DZ05           3   C              0058!
!   200 : T DODZ10                       DZ10               C              0067!
!   210 : I INDZ10                       DZ10               C       +      0048!
!   300 : T                              FO10               C              0067!
!   350 : V VUDZ09DBE                    DZ09               C              0067!
!   360 : V VUDZ09S4                     DZ09           4   C              0048!
!   700 : T EXTERNAL-PI00                PI00               C              0219!
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
! *** END ***                                                                   !
! O: C1 CH: BQ4BLOC DR                                                          !
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     Q4BLOC SQL/400 EXAMPLE                            !
!                                                                               !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                    !
! TYPE       : T                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE TABLE DODZ05                                                           !
!  (COCARA             CHAR        (00001)     NOT NULL,                      !
!   NUCOD              SMALLINT                NOT NULL WITH DEFAULT,         !
!   FOURNI             CHAR        (00003),                                   !
!   NUCLIE             CHAR        (00008),                                   !
!   VILLE              CHAR        (00020),                                   !
!   CORESP             CHAR        (00256),                                   !
!   REMISE             DECIMAL     (00006, 02),                               !
!   MATERIEL           CHAR        (00008),                                   !
!   DATED              CHAR        (00010),                                   !
!   HEURE              TIME,                                                  !
!   PRECIS             TIMESTAMP)                                             !
! ;                                                                             !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN100                                                             !
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     Q4BLOC SQL/400 EXAMPLE                             !
!                                                                                !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                     !
! TYPE       : I                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
! CREATE INDEX INDZ10                                                            !
!  ON DODZ10                                                                     !
! (FOURNP                ,                                                       !
!  NUCOM              ASC ,                                                      !
!  LIVRABLE               )                                                     !
! ;                                                                              !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH: -GEN210                                                              !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     Q4BLOC SQL/400 EXAMPLE                             !
!                                                                                !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                  !
! TYPE       : V                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
! CREATE VIEW VUDZ09DBE                                                          !
!  (CLEFO             ,                                                         !
!   FOURNI            ,                                                         !
!   MATE              ,                                                         !
!   RELEA             ,                                                         !
!   LANGU             ,                                                         !
!   QTMAS             ,                                                         !
!   QTMAM             ,                                                         !
!   LIBFO             ,                                                         !
!   DATE              ,                                                         !
!   HEURE             ,                                                         !
!   FILLER            ,                                                         !
!   COMMEN            )                                                         !
!  AS SELECT                                                                     !
!  FOUR.CLEFO                                ,                                   !
! PLEASE ENTER TO CONTINUE                                                       !
! O: C1 CH: -GEN350                                                              !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     Q4BLOC SQL/400 EXAMPLE                            !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
!  FOUR.FOURNI                                                 ,                !
!  FOUR.MATE                                                   ,                !
!  FOUR.RELEA                                                  ,                !
!  FOUR.LANGU                                                  ,                !
!  FOUR.QTMAS                                                  ,                !
!  FOUR.QTMAM                                                  ,                !
!  FOUR.LIBFO                                                  ,                !
!  FOUR.DATE                                                   ,                !
!  FOUR.HEURE                                                  ,                !
!  FOUR.FILLER                                                 ,                !
!  DODZ05.COCARA                                                                !
! FROM  FOUR                                ,                                   !
!       DODZ05                                                                  !
! ;                                                                             !
!                                                                               !
!                                                                               !
! O: C1 CH:                                                                     !
--------------------------------------------------------------------------------
```

10.5. ALL BASE SQL

```
--------------------------
!  ALL BASE SQL EXAMPLE  !
--------------------------
```

The purpose of this subchapter is to show the specific screens of an ALL BASE SQL-type Block ('QABLOC' code).

You will find, in the order:

- the Block description,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
!                     ENGLISH LIBRARY                        *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QABLOC ALL BASE EXAMPLE                           !
!                                                                               !
! A LIN : T EXTERNAL NAME              TABLE CODE     KEY GEN            LIBR.!
!       :                              VIEW           TY  CDE                 !
!   100 : T DODZ05                       DZ05             C              0067!
!   200 : T                              DZ10             C              0058!
!   210 : I INDZ10                       DZ10             C              0067!
!   300 : T                              FO10             C              0048!
!   350 : V VUDZ09S4                     DZ09             C              0067!
!   400 : T                              CD20             C              0067!
!   500 : T                              ME00             C              0048!
!   700 : A                              DZ05             C     +        0219!
!   800 : T EXTERNAL-PI00                PI00             C                 !
!   805 : K EXTKEY                       PI00             C     +           !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
! *** END ***                                                                 !
! O: C1 CH: BQABLOC DR                                                        !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QABLOC ALL BASE EXAMPLE                         !
!                                                                             !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                  !
! TYPE       : T                                                              !
!              CATALOG UPDATE Y/N :                                           !
!                                                                             !
! CREATE PUBLIC TABLE PDCL.DODZ05                                             !
!  (COCARA             CHAR        (00001)     NOT NULL,                      !
!   NUCOD              SMALLINT,                                              !
!   FOURNI             CHAR        (00003),                                   !
!   NUCLIE             CHAR        (00008),                                   !
!   VILLE              VARCHAR     (00020),                                   !
!   CORESP             VARCHAR     (00256),                                   !
!   REMISE             DECIMAL     (00006, 02),                               !
!   MATERIEL           VARCHAR     (00008),                                   !
!   DATED              CHAR        (00010),                                   !
!   HEURE              TIME,                                                  !
!   PRECIS             DATETIME)                                              !
! ;                                                                           !
!                                                                             !
!                                                                             !
! *** END ***                                                                 !
! O: C1 CH: -GEN100                                                           !
-------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QABLOC ALL BASE EXAMPLE                          !
!                                                                              !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                   !
! TYPE       : I                                                               !
!              CATALOG UPDATE Y/N :                                            !
!                                                                              !
! CREATE INDEX PDCL.INDZ10                                                     !
!  ON PDCL.DZ10                                                                !
! (FOURNP                ,                                                     !
!  NUCOM                 ASC ,                                                 !
!  LIVRABLE                  )                                                 !
! ;                                                                            !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
! *** END ***                                                                  !
! O: C1 CH: -GEN210                                                            !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QABLOC ALL BASE EXAMPLE                          !
!                                                                              !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                !
! TYPE       : V                                                               !
!              CATALOG UPDATE Y/N :                                            !
!                                                                              !
! CREATE VIEW PDCL.VUDZ09S4                                                    !
!  (CLEFO             ,                                                        !
!   FOURNI            ,                                                        !
!   MATE              ,                                                        !
!   RELEA             ,                                                        !
!   LANGU             ,                                                        !
!   QTMAS             ,                                                        !
!   QTMAM             ,                                                        !
!   LIBFO             ,                                                        !
!   DATE              ,                                                        !
!   HEURE             ,                                                        !
!   FILLER            ,                                                        !
!   COMMEN            )                                                        !
!  AS SELECT                                                                   !
!  PDCL.FOUR.CLEFO                          ,                                  !
! PLEASE ENTER TO CONTINUE                                                     !
! O: C1 CH: -GEN350                                                            !
-------------------------------------------------------------------------------
```

EXAMPLES **10**
ALL BASE SQL **5**

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QABLOC ALL BASE EXAMPLE                           !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
!  PDCL.FOUR.FOURNI                                        ,                    !
!  PDCL.FOUR.MATE                                          ,                    !
!  PDCL.FOUR.RELEA                                         ,                    !
!  PDCL.FOUR.LANGU                                         ,                    !
!  PDCL.FOUR.QTMAS                                         ,                    !
!  PDCL.FOUR.QTMAM                                         ,                    !
!  PDCL.FOUR.LIBFO                                         ,                    !
!  PDCL.FOUR.DATE                                          ,                    !
!  PDCL.FOUR.HEURE                                         ,                    !
!  PDCL.FOUR.FILLER                                        ,                    !
!  PDCL.DODZ05.COCARA                                                           !
! FROM  PDCL.FOUR                          ,                                    !
!       PDCL.DODZ05                                                             !
! ;                                                                             !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH:                                                                     !
--------------------------------------------------------------------------------
```

10.6. DBD/2

```
------------------
!  DB2/2 EXAMPLE  !
------------------
```

The purpose of this subchapter is to show the specific screens of a DB2/2-type Block ('QBBLOC' code).

You will find, in the order:

- the Block description,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
!                     ENGLISH LIBRARY                        *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QBBLOC DB2/2 EXAMPLE                              !
!                                                                               !
! A LIN : T EXTERNAL NAME              TABLE CODE     KEY GEN            LIBR.!
!       :                              VIEW           TY  CDE                 !
!   100 : T DODZ05                       DZ05               C             0067!
!   110 : K                              DZ05               C             0058!
!   130 : V VUDZ05S3                     DZ05           3   C             0067!
!   200 : T DODZ10                       DZ10               C             0048!
!   210 : I INDZ10                       DZ10               C             0067!
!   220 : J CEXISTF  DZ05                DZ10           C   C             0067!
!   300 : T                              FO10               C             0048!
!   350 : V VUDZ09DBE                    DZ09               C     +       0219!
!   360 : V VUDZ09S4                     DZ09           4   C                !
!   370 : A                              FO10               C     +          !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
!       :                                                                     !
! *** END ***                                                                   !
! O: C1 CH: BQBBLOC DR                                                        !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QBBLOC DB2/2 EXAMPLE                            !
!                                                                             !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                  !
! TYPE       : T                                                              !
!              CATALOG UPDATE Y/N :                                           !
!                                                                             !
! CREATE TABLE PDCL.DODZ05                                                    !
!  (COCARA             CHAR        (00001)     NOT NULL,                      !
!   NUCOD              SMALLINT                NOT NULL WITH DEFAULT,         !
!   FOURNI             CHAR        (00003),                                   !
!   NUCLIE             CHAR        (00008),                                   !
!   VILLE              VARCHAR     (00020),                                   !
!   CORESP             VARCHAR     (00256),                                   !
!   REMISE             DECIMAL     (00006, 02),                               !
!   MATERIEL           VARCHAR     (00008),                                   !
!   DATED              CHAR        (00010),                                   !
!   HEURE              TIME,                                                  !
!   PRECIS             TIMESTAMP)                                             !
! ;                                                                           !
!                                                                             !
!                                                                             !
! *** END ***                                                                 !
! O: C1 CH: -GEN100                                                           !
-------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QBBLOC DB2/2 EXAMPLE                               !
!                                                                                !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                     !
! TYPE       : I                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
! CREATE INDEX PDCL.INDZ10                                                       !
!  ON PDCL.DODZ10                                                                !
! (FOURNP                ,                                                       !
!  NUCOM                 ASC ,                                                   !
!  LIVRABLE                  )                                                   !
! ;                                                                              !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH: -GEN210                                                              !
--------------------------------------------------------------------------------


--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QBBLOC DB2/2 EXAMPLE                               !
!                                                                                !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                  !
! TYPE       : V                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
! CREATE VIEW PDCL.VUDZ09DBE                                                     !
!  (CLEFO             ,                                                         !
!   FOURNI            ,                                                         !
!   MATE              ,                                                         !
!   RELEA             ,                                                         !
!   LANGU             ,                                                         !
!   QTMAS             ,                                                         !
!   QTMAM             ,                                                         !
!   LIBFO             ,                                                         !
!   DATE              ,                                                         !
!   HEURE             ,                                                         !
!   FILLER            ,                                                         !
!   COMMEN            )                                                         !
!  AS SELECT                                                                     !
!  PDCL.FOUR.CLEFO                                        ,                      !
! PLEASE ENTER TO CONTINUE                                                       !
! O: C1 CH: -GEN350                                                              !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QBBLOC DB2/2 EXAMPLE                               !
!                                                                                !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                  !
! TYPE       : V                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
!  PDCL.FOUR.FOURNI                                        ,                     !
!  PDCL.FOUR.MATE                                          ,                     !
!  PDCL.FOUR.RELEA                                         ,                     !
!  PDCL.FOUR.LANGU                                         ,                     !
!  PDCL.FOUR.QTMAS                                         ,                     !
!  PDCL.FOUR.QTMAM                                         ,                     !
!  PDCL.FOUR.LIBFO                                         ,                     !
!  PDCL.FOUR.DATE                                          ,                     !
!  PDCL.FOUR.HEURE                                         ,                     !
!  PDCL.FOUR.FILLER                                        ,                     !
!  PDCL.DODZ05.COCARA                                                            !
! FROM  PDCL.FOUR                          ,                                     !
!       PDCL.DODZ05                                                              !
! ;                                                                              !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH:                                                                      !
--------------------------------------------------------------------------------
```

10.7. DATACOM/DB

```
------------------------
!  DATACOM/DB EXAMPLE  !
------------------------
```

The purpose of this subchapter is to show the specific screens of a DATACOM/DB-type Block ('QCBLOC' code).

You will find, in the order:

- the Block description,
- the request to generate a Space, from line 080 of the Block description,
- the result of the generation of this Space,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
!                     ENGLISH LIBRARY                          *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QCBLOC DATACOM/DB EXAMPLE                          !
!                                                                                !
! A LIN : T EXTERNAL NAME               TABLE CODE     KEY GEN            LIBR.!
!       :                               VIEW           TY  CDE                !
!   080 : P ESP1-TABLE-QCBLOC                               C              0067!
!   100 : T DODZ05                        DZ05              C              0058!
!   130 : V VUDZ05S3                      DZ05          3   C              0067!
!   200 : T DODZ10                        DZ10              C              0067!
!   210 : I INDZ10                        DZ10              C              0067!
!   220 : J CEXISTF  DZ05                 DZ10              C              0048!
!   300 : T                               FO10              C              0219!
!   350 : V VUDZ09DBE                     DZ09              C                  !
!   360 : V VUDZ09S4                      DZ09          4   C                  !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
! *** END ***                                                                   !
! O: C1 CH: BQCBLOC DR                                                          !
---------------------------------------------------------------------------------

---------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                          *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QCBLOC DATACOM/DB EXAMPLE                          !
!                                                                                !
! SEGMENT    :        EXTERNAL NAME : ESP1-TABLE-QCBLOC                          !
! TYPE       : P                                                                 !
!              CREATE SCHEMA                                                     !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
! *** END ***                                                                   !
! O: C1 CH: -GEN080                                                             !
---------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QCBLOC DATACOM/DB EXAMPLE                          !
!                                                                                !
! SEGMENT    :        EXTERNAL NAME : ESP1-TABLE-QCBLOC                          !
! TYPE       : P                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
!  CREATE SCHEMA AUTHORIZATION ESP1-TABLE-QCBLOC                                 !
!  ;                                                                             !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH:                                                                      !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QCBLOC EXEMPLE DATCOM/DB                           !
!                                                                                !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                     !
! TYPE       : T                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
! CREATE TABLE DODZ05                                                            !
!  (COCARA             CHAR        (00001)     NOT NULL,                         !
!   NUCOD              SMALLINT                NOT NULL WITH DEFAULT,           !
!   FOURNI             CHAR        (00003),                                     !
!   NUCLIE             CHAR        (00008),                                     !
!   VILLE              CHAR        (00020),                                     !
!   CORESP             CHAR        (00256),                                     !
!   REMISE             DECIMAL     (00006,02),                                  !
!   MATERIEL           CHAR        (00008),                                     !
!   DATED              CHAR        (00010),                                     !
!   HEURE              TIME,                                                    !
!   PRECIS             TIMESTAMP,                                               !
! ;                                                                              !
!                                                                                !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH: -GEN100                                                              !
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QCBLOC DATACOM/DB EXAMPLE                         !
!                                                                               !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                    !
! TYPE       : I                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE INDEX INDZ10                                                           !
!  ON DODZ10                                                                    !
! (FOURNP                 ,                                                     !
!  NUCOM                  ,                                                     !
!  LIVRABLE               )                                                     !
! ;                                                                             !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN210                                                             !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QCBLOC DATACOM/DB EXAMPLE                         !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE VIEW VUDZ09DBE                                                         !
!  (CLEFO             ,                                                         !
!   FOURNI            ,                                                         !
!   MATE              ,                                                         !
!   RELEA             ,                                                         !
!   LANGU             ,                                                         !
!   QTMAS             ,                                                         !
!   QTMAM             ,                                                         !
!   LIBFO             ,                                                         !
!   DATE              ,                                                         !
!   HEURE             ,                                                         !
!   FILLER            ,                                                         !
!   COMMEN            )                                                         !
!  AS SELECT                                                                    !
!  FOUR.CLEFO                                          ,                        !
! PLEASE ENTER TO CONTINUE                                                      !
! O: C1 CH: -GEN350                                                             !
-------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QCBLOC DATACOM/DB EXAMPLE                          !
!                                                                                !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                  !
! TYPE       : V                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
!  FOUR.FOURNI                                              ,                   !
!  FOUR.MATE                                                ,                   !
!  FOUR.RELEA                                               ,                   !
!  FOUR.LANGU                                               ,                   !
!  FOUR.QTMAS                                               ,                   !
!  FOUR.QTMAM                                               ,                   !
!  FOUR.LIBFO                                               ,                   !
!  FOUR.DATE                                                ,                   !
!  FOUR.HEURE                                               ,                   !
!  FOUR.FILLER                                              ,                   !
!  DODZ05.COCARA                                                                 !
! FROM  FOUR                              ,                                      !
!       DODZ05                                                                   !
! ;                                                                              !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH:                                                                      !
--------------------------------------------------------------------------------
```

10.8. INGRES

```
--------------------
!  INGRES EXAMPLE  !
--------------------
```

The purpose of this subchapter is to show the specific screens of an INGRES-type Block ('QGBLOC' code).

You will find, in the order:

- the Block description,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
!                     ENGLISH LIBRARY                        *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QGBLOC INGRES EXAMPLE                              !
!                                                                                !
! A LIN : T EXTERNAL NAME               TABLE CODE     KEY GEN            LIBR.!
!       :                               VIEW           TY  CDE               !
!   100 : T DODZ05                        DZ05               C              0067!
!   130 : V VUDZ05S3                      DZ05           3   C              0058!
!   200 : T DODZ10                        DZ10               C              0067!
!   210 : I INDZ10                        DZ10               C              0067!
!   300 : T                               FO10               C              0067!
!   350 : V VUDZ09DBE                     DZ09               C              0048!
!   360 : V VUDZ09S4                      DZ09           4   C              0219!
!   800 : T EXTERNAL-PI00                 PI00               C              0219!
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
! *** END ***                                                                   !
! O: C1 CH: BQGBLOC DR                                                          !
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QGBLOC INGRES EXAMPLE                             !
!                                                                               !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                    !
! TYPE       : T                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE TABLE DODZ05                                                           !
!  (COCARA             CHAR        (00001)     NOT NULL,                        !
!   NUCOD              SMALLINT,                                                !
!   FOURNI             CHAR        (00003),                                     !
!   NUCLIE             CHAR        (00008),                                     !
!   VILLE              VARCHAR     (00020),                                     !
!   CORESP             VARCHAR     (00256),                                     !
!   REMISE             FLOAT,                                                   !
!   MATERIEL           VARCHAR     (00008),                                     !
!   DATED              CHAR        (00010),                                     !
!   HEURE              CHAR        (00008),                                     !
!   PRECIS             CHAR        (00026))                                     !
! ;                                                                             !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN100                                                             !
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QGBLOC INGRES EXAMPLE                            !
!                                                                              !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                   !
! TYPE       : I                                                               !
!              CATALOG UPDATE Y/N :                                            !
!                                                                              !
! CREATE INDEX INDZ10                                                          !
!  ON DODZ10                                                                   !
! (FOURNP                ,                                                     !
!  NUCOM              ASC ,                                                    !
!  LIVRABLE               )                                                   !
! ;                                                                            !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
! *** END ***                                                                  !
! O: C1 CH: -GEN210                                                            !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QGBLOC INGRES EXAMPLE                            !
!                                                                              !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                !
! TYPE       : V                                                               !
!              CATALOG UPDATE Y/N :                                            !
!                                                                              !
! CREATE VIEW VUDZ09DBE                                                        !
!  (CLEFO             ,                                                        !
!   FOURNI            ,                                                        !
!   MATE              ,                                                        !
!   RELEA             ,                                                        !
!   LANGU             ,                                                        !
!   QTMAS             ,                                                        !
!   QTMAM             ,                                                        !
!   LIBFO             ,                                                        !
!   DATE              ,                                                        !
!   HEURE             ,                                                        !
!   FILLER            ,                                                        !
!   COMMEN            )                                                        !
!  AS SELECT                                                                   !
!  FOUR.CLEFO                                          ,                       !
! PLEASE ENTER TO CONTINUE                                                     !
! O: C1 CH: -GEN350                                                            !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QGBLOC INGRES EXAMPLE                             !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
!  FOUR.FOURNI                                              ,                   !
!  FOUR.MATE                                                ,                   !
!  FOUR.RELEA                                               ,                   !
!  FOUR.LANGU                                               ,                   !
!  FOUR.QTMAS                                               ,                   !
!  FOUR.QTMAM                                               ,                   !
!  FOUR.LIBFO                                               ,                   !
!  FOUR.DATE                                                ,                   !
!  FOUR.HEURE                                               ,                   !
!  FOUR.FILLER                                              ,                   !
!  DODZ05.COCARA                                                                !
!  FROM FOUR                        ,                                           !
!       DODZ05                                                                  !
! ;                                                                             !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH:                                                                     !
--------------------------------------------------------------------------------
```

10.9. INFORMIX

```
----------------------
!  INFORMIX EXAMPLE  !
----------------------
```

The purpose of this subchapter is to show the specific screens of an INFORMIX-type Block ('QIBLOC' code).

You will find, in the order:

- the Block description,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
!                     ENGLISH LIBRARY                        *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QIBLOC INFORMIX EXAMPLE                           !
!                                                                               !
! A LIN : T EXTERNAL NAME               TABLE CODE     KEY GEN            LIBR.!
!       :                               VIEW           TY  CDE               !
!   100 : T DODZ05                        DZ05               C              0067!
!   130 : V VUDZ05S3                      DZ05           3   C              0058!
!   200 : T DODZ10                        DZ10               C              0067!
!   210 : I INDZ10                        DZ10               C              0067!
!   300 : T                               FO10               C              0067!
!   350 : V VUDZ09DBE                     DZ09               C              0048!
!   360 : V VUDZ09S4                      DZ09           4   C              0219!
!   700 : T EXTERNAL-PI00                 PI00               C              0219!
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
! *** END ***                                                                   !
! O: C1 CH: BQIBLOC DR                                                          !
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QIBLOC INFORMIX EXAMPLE                           !
!                                                                               !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                    !
! TYPE       : T                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE TABLE PDCL.DODZ05                                                      !
!  (COCARA             CHAR        (00001)           NOT NULL,                  !
!   NUCOD              SMALLINT,                                                !
!   FOURNI             CHAR        (00003),                                     !
!   NUCLIE             CHAR        (00008),                                     !
!   VILLE              CHAR        (00020),                                     !
!   CORESP             CHAR        (00256),                                     !
!   REMISE             DECIMAL     (00006,02),                                  !
!   MATERIEL           CHAR        (00008),                                     !
!   DATED              DATETIME YEAR TO HOUR,                                   !
!   HEURE              CHAR        (00008),                                     !
!   PRECIS             CHAR        (00026))                                     !
! ;                                                                             !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN100                                                             !
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QIBLOC INFORMIX EXAMPLE                           !
!                                                                               !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                    !
! TYPE       : I                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE INDEX PDCL.INDZ10                                                      !
!  ON PDCL.DODZ10                                                               !
! (FOURNP                ,                                                      !
!  NUCOM                 ASC ,                                                  !
!  LIVRABLE                  )                                                  !
! ;                                                                             !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN210                                                             !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QIBLOC INFORMIX EXAMPLE                           !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE VIEW PDCL.VUDZ09DBE                                                    !
!  (CLEFO             ,                                                         !
!   FOURNI            ,                                                         !
!   MATE              ,                                                         !
!   RELEA             ,                                                         !
!   LANGU             ,                                                         !
!   QTMAS             ,                                                         !
!   QTMAM             ,                                                         !
!   LIBFO             ,                                                         !
!   DATE              ,                                                         !
!   HEURE             ,                                                         !
!   FILLER            ,                                                         !
!   COMMEN            )                                                         !
!  AS SELECT                                                                    !
!  FOUR.CLEFO                                          ,                        !
! PLEASE ENTER TO CONTINUE                                                      !
! O: C1 CH: -GEN350                                                             !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QIBLOC INFORMIX EXAMPLE                           !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
!  PDCL.FOUR.FOURNI                                        ,                    !
!  PDCL.FOUR.MATE                                          ,                    !
!  PDCL.FOUR.RELEA                                         ,                    !
!  PDCL.FOUR.LANGU                                         ,                    !
!  PDCL.FOUR.QTMAS                                         ,                    !
!  PDCL.FOUR.QTMAM                                         ,                    !
!  PDCL.FOUR.LIBFO                                         ,                    !
!  PDCL.FOUR.DATE                                          ,                    !
!  PDCL.FOUR.HEURE                                         ,                    !
!  PDCL.FOUR.FILLER                                        ,                    !
!  PDCL.DODZ05.COCARA                                                           !
! FROM  PDCL.FOUR                          ,                                    !
!       PDCL.DODZ05                                                             !
! ;                                                                             !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH:                                                                     !
--------------------------------------------------------------------------------
```

10.10. NONSTOP SQL

```
------------------------
!  NONSTOP SQL EXAMPLE  !
------------------------
```

The purpose of this subchapter is to show the specific screens of a NONSTOP SQL-type Block ('QNBLOC' code).

You will find, in the order:

- the Block description,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
!                     ENGLISH LIBRARY                          *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QNBLOC NONSTOP EXAMPLE                              !
!                                                                                 !
! A LIN : T EXTERNAL NAME               TABLE CODE     KEY GEN            LIBR.!
!       :                               VIEW           TY  CDE                 !
!   100 : T DZ05                          DZ05               C              0067!
!   130 : V VUDZ04S3                      DZ04           3   C              0058!
!   200 : T DODZ10                        DZ10               C              0067!
!   210 : I INDZ10                        DZ10               C              0067!
!   300 : T                               FO10               C              0067!
!   350 : V VUDZ09DBE                     DZ09               C              0048!
!   360 : V VUDZ09S4                      DZ09           4   C              0219!
!   800 : T EXTERNAL-PI00                 PI00               C              0219!
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
! *** END ***                                                                   !
! O: C1 CH: BQNBLOC DR                                                          !
---------------------------------------------------------------------------------

---------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                          *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QNBLOC NONSTOP EXAMPLE                            !
!                                                                               !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                    !
! TYPE       : T                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE TABLE DZ05                                                             !
!  (COCARA             CHAR        (00001)             NOT NULL,                !
!   NUCOD              SMALLINT                SIGNED  DEFAULT SYSTEM,          !
!   FOURNI             CHAR        (00003),                                     !
!   NUCLIE             CHAR        (00008),                                     !
!   VILLE              VARCHAR     (00020),                                     !
! *** REMISE INVALID USAGE                                          ***         !
!   CORESP             VARCHAR     (00256),                                     !
!   MATERIEL           VARCHAR     (00008),                                     !
!   DATED              DATETIME YEAR TO HOUR,                                   !
!   HEURE              TIME,                                                    !
!   PRECIS             TIMESTAMP)                                               !
! ;                                                                             !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN100                                                             !
---------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QNBLOC NONSTOP EXAMPLE                           !
!                                                                              !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                   !
! TYPE       : I                                                               !
!              CATALOG UPDATE Y/N :                                            !
!                                                                              !
! CREATE INDEX INDZ10                                                          !
!  ON DODZ10                                                                   !
! (FOURNP                ,                                                     !
!  NUCOM                 ASC ,                                                 !
!  LIVRABLE                  )                                                 !
! ;                                                                            !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
! *** END ***                                                                  !
! O: C1 CH: -GEN210                                                            !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QNBLOC NONSTOP EXAMPLE                           !
!                                                                              !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                !
! TYPE       : V                                                               !
!              CATALOG UPDATE Y/N :                                            !
!                                                                              !
! CREATE VIEW VUDZ09DBE                                                        !
!  (CLEFO             ,                                                        !
!   FOURNI            ,                                                        !
!   MATE              ,                                                        !
!   RELEA             ,                                                        !
!   LANGU             ,                                                        !
!   QTMAS             ,                                                        !
!   QTMAM             ,                                                        !
!   LIBFO             ,                                                        !
!   DATE              ,                                                        !
!   HEURE             ,                                                        !
!   FILLER            ,                                                        !
!   COMMEN            )                                                        !
!  AS SELECT                                                                   !
!  FOUR.CLEFO                                          ,                       !
! PLEASE ENTER TO CONTINUE                                                     !
! O: C1 CH: -GEN350                                                            !
-------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QNBLOC NONSTOP EXAMPLE                            !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
!  FOUR.FOURNI                                          ,                      !
!  FOUR.MATE                                            ,                      !
!  FOUR.RELEA                                           ,                      !
!  FOUR.LANGU                                           ,                      !
!  FOUR.QTMAS                                           ,                      !
!  FOUR.QTMAM                                           ,                      !
!  FOUR.LIBFO                                           ,                      !
!  FOUR.DATE                                            ,                      !
!  FOUR.HEURE                                           ,                      !
!  FOUR.FILLER                                          ,                      !
!  DODZ05.COCARA                                                               !
! FROM  FOUR                          ,                                         !
!       DODZ05                                                                  !
! ;                                                                             !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH:                                                                     !
--------------------------------------------------------------------------------
```

10.11. ORACLE (<V6)

```
--------------------
!  ORACLE EXAMPLE  !
--------------------
```

The purpose of this subchapter is to show the specific screens of an ORACLE-type Block ('QOBLOC' code).

You will find, in the order:

- the Block description,
- the request to generate a Space, from line 080 of the Block description,
- the result of the generation of this Space,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QOBLOC ORACLE EXAMPLE                            !
!                                                                              !
! A LIN : T EXTERNAL NAME              TABLE CODE     KEY GEN            LIBR.!
!       :                              VIEW           TY  CDE                !
!   080 : P ESP1-TABLE-QOBLOC                              C              0067!
!   100 : T DODZ05                       DZ05              C              0058!
!   130 : V VUDZ05S3                     DZ05          3   C              0067!
!   200 : T DODZ10                       DZ10              C              0067!
!   210 : I INDZ10                       DZ10              C     +        0067!
!   300 : T                              FO10              C              0048!
!   350 : V VUDZ09DBE                    DZ09              C              0219!
!   360 : V VUDZ09S4                     DZ09          4   C              0219!
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
! *** END ***                                                                  !
! O: C1 CH: BQOBLOC DR                                                         !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QOBLOC ORACLE EXAMPLE                            !
!                                                                              !
! SEGMENT    :        EXTERNAL NAME : ESP1-TABLE-QOBLOC                        !
! TYPE       : P                                                               !
!              CREATE SPACE                                                    !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
! *** END ***                                                                  !
! O: C1 CH: -GEN080                                                            !
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                       *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QOBLOC ORACLE EXAMPLE                             !
!                                                                               !
! SEGMENT    :        EXTERNAL NAME : ESP1-TABLE-QOBLOC                         !
! TYPE       : P                                                               !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
!  CREATE SPACE ESP1-TABLE-QOBLOC                                               !
!  ;                                                                            !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH:                                                                     !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                       *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QOBLOC ORACLE EXAMPLE                             !
!                                                                               !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                    !
! TYPE       : T                                                               !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE TABLE DODZ05                                                           !
!  (COCARA             CHAR        (00001)    NOT NULL,                         !
!   NUCOD              INTEGER,                                                 !
!   FOURNI             CHAR        (00003),                                     !
!   NUCLIE             CHAR        (00008),                                     !
!   VILLE              VARCHAR     (00020),                                     !
!   CORESP             LONG VARCHAR,                                            !
!   REMISE             NUMBER      (00006,02),                                  !
!   MATERIEL           VARCHAR     (00008),                                     !
!   DATED              DATE,                                                    !
!   HEURE              DATE,                                                    !
!   PRECIS             CHAR        (00026))                                     !
! ;                                                                             !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN100                                                             !
-------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                       *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QOBLOC ORACLE EXAMPLE                             !
!                                                                               !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                    !
! TYPE       : I                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE INDEX INDZ10                                                           !
!  ON DODZ10                                                                    !
! (FOURNP                ,                                                      !
!  NUCOM                 ASC ,                                                  !
!  LIVRABLE                  )                                                  !
! ;                                                                             !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN210                                                             !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                       *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QOBLOC ORACLE EXAMPLE                             !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE VIEW VUDZ09DBE                                                         !
!  (CLEFO             ,                                                         !
!   FOURNI            ,                                                         !
!   MATE              ,                                                         !
!   RELEA             ,                                                         !
!   LANGU             ,                                                         !
!   QTMAS             ,                                                         !
!   QTMAM             ,                                                         !
!   LIBFO             ,                                                         !
!   DATE              ,                                                         !
!   HEURE             ,                                                         !
!   FILLER            ,                                                         !
!   COMMEN            )                                                         !
!  AS SELECT                                                                    !
!  FOUR.CLEFO                                          ,                        !
! PLEASE ENTER TO CONTINUE                                                      !
! O: C1 CH: -GEN350                                                             !
-------------------------------------------------------------------------------
```

EXAMPLES **10**
ORACLE (<V6) **11**

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QOBLOC ORACLE EXAMPLE                            !
!                                                                              !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                !
! TYPE       : V                                                               !
!              CATALOG UPDATE Y/N :                                            !
!                                                                              !
!  FOUR.FOURNI                                          ,                     !
!  FOUR.MATE                                            ,                     !
!  FOUR.RELEA                                           ,                     !
!  FOUR.LANGU                                           ,                     !
!  FOUR.QTMAS                                           ,                     !
!  FOUR.QTMAM                                           ,                     !
!  FOUR.LIBFO                                           ,                     !
!  FOUR.DATE                                            ,                     !
!  FOUR.HEURE                                           ,                     !
!  FOUR.FILLER                                          ,                     !
!  DODZ05.COCARA                                                              !
! FROM  FOUR                              ,                                    !
!       DODZ05                                                                 !
! ;                                                                            !
!                                                                              !
! *** END ***                                                                  !
! O: C1 CH:                                                                    !
--------------------------------------------------------------------------------
```

10.12. ORACLE V7

```
-----------------------
!  ORACLE V7 EXAMPLE  !
-----------------------
```

The purpose of this subchapter is to show the specific screens of an ORACLE V7-type Block ('QPBLOC' code).

You will find, in the order:

- the Block description,
- the request to generate a Space, from line 080 of the Block description,
- the result of the generation of this Space,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.
- the request to alter a Table, from line 510 of the Block description.
- the result of the Alter Table,

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QPBLOC ORACLE V7 EXAMPLE                          !
!                                                                               !
! A LIN : T EXTERNAL NAME              TABLE CODE     KEY GEN            LIBR.!
!       :                              VIEW           TY  CDE                !
!   080 : P ESP1-TABLE-QPBLOC                             C              0067!
!   100 : T DODZ05                       DZ05             C              0058!
!   130 : V VUDZ05S3                     DZ05         3   C              0067!
!   200 : T DODZ10                       DZ10             C              0048!
!   210 : I INDZ10                       DZ10             C              0067!
!   300 : T                              FO10             C              0067!
!   350 : V VUDZ09DBE                    DZ09             C              0048!
!   360 : V VUDZ09S4                     DZ09         4   C              0213!
!   510 : A ADDTABLE                     DZ05             C              0219!
!   700 : T EXTERNAL-PI00                PI00             C    +         0219!
!   805 : K                              PI00             C              0219!
!   810 : E FONCTION                                      C              0219!
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
!       :                                                                   !
! *** END ***                                                               !
! O: C1 CH: BQPBLOC DR                                                      !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QPBLOC ORACLE V7 EXAMPLE                          !
!                                                                               !
! SEGMENT    :        EXTERNAL NAME : ESP1-TABLE-QPBLOC                         !
! TYPE       : P                                                              !
!              CREATE TABLESPACE                                                !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN080                                                             !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QPBLOC ORACLE V7 EXAMPLE                          !
!                                                                               !
! SEGMENT    :        EXTERNAL NAME : ESP1-TABLE-QPBLOC                         !
! TYPE       : P                                                               !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE TABLESPACE ESP1-TABLE-QPBLOC                                           !
! ;                                                                             !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH:                                                                     !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QPBLOC ORACLE V7 EXAMPLE                          !
!                                                                               !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                    !
! TYPE       : T                                                               !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE TABLE DODZ05                                                           !
!  (COCARA             VARCHAR2    (00001)    NOT NULL,                         !
!   NUCOD              INTEGER,                                                 !
!   FOURNI             VARCHAR2    (00003),                                     !
!   NUCLIE             VARCHAR2    (00008),                                     !
!   VILLE              VARCHAR     (00020),                                     !
!   CORESP             VARCHAR     (00256),                                     !
!   REMISE             NUMBER      (00006,02),                                  !
!   MATERIEL           VARCHAR     (00008),                                     !
!   DATED              DATE,                                                    !
!   HEURE              DATE,                                                    !
!   PRECIS             VARCHAR2    (00026))                                     !
! TABLESPACE ESP1-TABLE-QPBLOC                                                  !
! ;                                                                             !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN100                                                             !
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QPBLOC ORACLE V7 EXAMPLE                          !
!                                                                               !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                    !
! TYPE       : I                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE INDEX INDZ10                                                           !
!  ON DODZ10                                                                    !
! (FOURNP                ,                                                      !
!  NUCOM                 ASC ,                                                  !
!  LIVRABLE                  )                                                  !
! ;                                                                             !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN210                                                             !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QPBLOC ORACLE V7 EXAMPLE                          !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE VIEW VUDZ09DBE                                                         !
!  (CLEFO             ,                                                         !
!   FOURNI            ,                                                         !
!   MATE              ,                                                         !
!   RELEA             ,                                                         !
!   LANGU             ,                                                         !
!   QTMAS             ,                                                         !
!   QTMAM             ,                                                         !
!   LIBFO             ,                                                         !
!   DATE              ,                                                         !
!   HEURE             ,                                                         !
!   FILLER            ,                                                         !
!   COMMEN            )                                                         !
!  AS SELECT                                                                    !
!  FOUR.CLEFO                              ,                                    !
! PLEASE ENTER TO CONTINUE                                                      !
! O: C1 CH: -GEN350                                                             !
-------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QPBLOC ORACLE V7 EXAMPLE                          !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
!  FOUR.FOURNI                                              ,                   !
!  FOUR.MATE                                                ,                   !
!  FOUR.RELEA                                               ,                   !
!  FOUR.LANGU                                               ,                   !
!  FOUR.QTMAS                                               ,                   !
!  FOUR.QTMAM                                               ,                   !
!  FOUR.LIBFO                                               ,                   !
!  FOUR.DATE                                                ,                   !
!  FOUR.HEURE                                               ,                   !
!  FOUR.FILLER                                              ,                   !
!  DODZ05.COCARA                                                                !
! FROM  FOUR                              ,                                     !
!       DODZ05                                                                  !
! ;                                                                             !
!                                      ,                                        !
! *** END ***                                                                   !
! O: C1 CH:                                                                     !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.D801.BMS.259!
! SQL COMMANDS GENERATION     QPBLOC ORACLE V7 EXAMPLE                          !
!                                                                               !
! SEGMENT    : DZ05   EXTERNAL NAME :                                           !
! TYPE       : A                                                                !
!              ALTER TABLE                                                      !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN510                                                             !
--------------------------------------------------------------------------------
```

EXAMPLES **10**
ORACLE V7 **12**

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.D801.BMS.259!
! SQL COMMANDS GENERATION     QPBLOC ORACLE V7 EXAMPLE                          !
!                                                                               !
! SEGMENT    : DZ05   EXTERNAL NAME :                                           !
! TYPE       : A                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! ALTER TABLE DZ05                                                              !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! O: C1 CH:                                                                     !
--------------------------------------------------------------------------------
```

10.13. RDMS

```
------------------
!  RDMS EXAMPLE  !
------------------
```

The purpose of this subchapter is to show the specific screens of an RDMS-type Block ('QRBLOC' code).

You will find, in the order:

- the Block description,
- the request to generate a Space, from line 080 of the Block description,
- the result of the generation of this Space,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QRBLOC RDMS EXAMPLE                               !
!                                                                               !
! A LIN : T EXTERNAL NAME              TABLE CODE     KEY GEN            LIBR.!
!       :                              VIEW           TY  CDE                !
!   080 : P ESP1-TABLE-QRBLOC                             C              0067!
!   100 : T DZ05                         DZ05             C              0058!
!   200 : T DODZ10                       DZ10             C              0067!
!   210 : I INDZ10                       DZ10             C     +        0067!
!   300 : T                              FO10             C              0067!
!   350 : V VUDZ09DBE                    DZ09             C              0048!
!   360 : V VUDZ09S4                     DZ09         4   C              0219!
!   700 : T EXTERNAL-PI00                PI00             C              0219!
!   805 : K EXTKEY                       PI00             C     +        0219!
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
! *** END ***                                                                   !
! O: C1 CH: BQRBLOC DR                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QRBLOC RDMS EXAMPLE                               !
!                                                                               !
! SEGMENT    :        EXTERNAL NAME : ESP1-TABLE-QRBLOC                         !
! TYPE       : P                                                               !
!              CREATE STORAGE-AREA                                              !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN080                                                             !
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QRBLOC RDMS EXAMPLE                                !
!                                                                                !
! SEGMENT    :        EXTERNAL NAME : ESP1-TABLE-QRBLOC                          !
! TYPE       : P                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
!  CREATE STORAGE-AREA ESP1-TABLE-QRBLOC                                         !
!  FOR SCHEMA EXTQRBLC                                                           !
!  ;                                                                             !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH:                                                                      !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QRBLOC RDMS EXAMPLE                                !
!                                                                                !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                     !
! TYPE       : T                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
! CREATE TABLE DZ05                                                              !
! IN EXTQRBLC.ESP1-TABLE-QRBLOC                                                  !
! COLUMNS ARE COCARA             : CHARACTER   (00001)   NOT NULL  ,             !
!             NUCOD              : DECIMAL     (00004)             ,             !
!             FOURNI             : CHARACTER   (00003)             ,             !
!             NUCLIE             : CHARACTER   (00008)             ,             !
!             VILLE              : CHARACTER   (00020)             ,             !
!             CORESP             : CHARACTER   (00256)             ,             !
!             REMISE             : DECIMAL     (00007.02)          ,             !
!             MATERIEL           : CHARACTER   (00008)             ,             !
!             DATED              : CHARACTER   (00010)             ,             !
!             HEURE              : CHARACTER   (00008)             ,             !
!             PRECIS             : CHARACTER   (00026)                           !
! ;                                                                              !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH: -GEN100                                                              !
--------------------------------------------------------------------------------
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QRBLOC RDMS EXAMPLE                                !
!                                                                                !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                     !
! TYPE       : I                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
! CREATE INDEX INDZ10                                                            !
!  ON DODZ10                                                                     !
! (FOURNP                ,                                                       !
!  NUCOM              ASC ,                                                      !
!  LIVRABLE               )                                                      !
! ;                                                                              !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH: -GEN210                                                              !
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QRBLOC RDMS EXAMPLE                                !
!                                                                                !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                  !
! TYPE       : V                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
! CREATE VIEW VUDZ09DBE                                                          !
!  (CLEFO             ,                                                         !
!   FOURNI            ,                                                         !
!   MATE              ,                                                         !
!   RELEA             ,                                                         !
!   LANGU             ,                                                         !
!   QTMAS             ,                                                         !
!   QTMAM             ,                                                         !
!   LIBFO             ,                                                         !
!   DATE              ,                                                         !
!   HEURE             ,                                                         !
!   FILLER            ,                                                         !
!   COMMEN            )                                                         !
!  AS SELECT                                                                     !
!  FOUR.CLEFO                                          ,                         !
! PLEASE ENTER TO CONTINUE                                                       !
! O: C1 CH: -GEN350                                                              !
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QRBLOC RDMS EXAMPLE                               !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
!  FOUR.FOURNI                                              ,                   !
!  FOUR.MATE                                                ,                   !
!  FOUR.RELEA                                               ,                   !
!  FOUR.LANGU                                               ,                   !
!  FOUR.QTMAS                                               ,                   !
!  FOUR.QTMAM                                               ,                   !
!  FOUR.LIBFO                                               ,                   !
!  FOUR.DATE                                                ,                   !
!  FOUR.HEURE                                               ,                   !
!  FOUR.FILLER                                              ,                   !
!  DODZ05.COCARA                                                                !
! FROM  FOUR                              ,                                     !
!       DODZ05                                                                  !
! ;                                                                             !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH:                                                                     !
--------------------------------------------------------------------------------
```

10.14. SQL/DS

```
--------------------
!  SQL/DS EXAMPLE  !
--------------------
```

The purpose of this subchapter is to show the specific screens of an SQL/DS-type Block ('QSBLOC' code).

You will find, in the order:

- the Block description,
- the request to generate a Space, from line 080 of the Block description,
- the result of the generation of this Space,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QSBLOC SQL/DS EXAMPLE                            !
!                                                                              !
! A LIN : T EXTERNAL NAME              TABLE CODE     KEY GEN            LIBR.!
!       :                              VIEW           TY  CDE               !
!   080 : P ESP1-TABLE-QSBLOC                             C              0067!
!   100 : T DODZ05                       DZ05             C              0058!
!   110 : K                              DZ05             C              0067!
!   130 : V VUDZ05S3                     DZ05         3   C              0067!
!   200 : T DODZ10                       DZ10             C              0067!
!   210 : I INDZ10                       DZ10             C     +        0048!
!   220 : J CEXISTF  DZ05                DZ10         C   C              0219!
!   300 : T                              FO10             C              0219!
!   350 : V VUDZ09DBE                    DZ09             C              0219!
!   360 : V VUDZ09S4                     DZ09         4   C                  !
!   700 : T EXTERNAL-PI00                PI00             C                  !
!   805 : K                              PI00             C     +            !
!       :                                                                    !
!       :                                                                    !
!       :                                                                    !
! *** END ***                                                                  !
! O: C1 CH: BQSBLOC DR                                                         !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QSBLOC SQL/DS EXAMPLE                            !
!                                                                              !
! SEGMENT    :        EXTERNAL NAME : ESP1-TABLE-QSBLOC                        !
! TYPE       : P                                                               !
!              CREATE DBSPACE                                                  !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
!                                                                              !
! *** END ***                                                                  !
! O: C1 CH: -GEN080                                                            !
-------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QSBLOC SQL/DS EXAMPLE                             !
!                                                                               !
! SEGMENT    :        EXTERNAL NAME : ESP1-TABLE-QSBLOC                         !
! TYPE       : P                                                               !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
!  ACQUIRE PUBLIC  DBSPACE NAMED ESP1-TABLE-QSBLOC                              !
!  ;                                                                            !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH:                                                                     !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QSBLOC SQL/DS EXAMPLE                             !
!                                                                               !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                    !
! TYPE       : T                                                               !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE TABLE PDCL.DODZ05                                                      !
!  (COCARA             CHAR        (00001)     NOT NULL,                        !
!   NUCOD              SMALLINT,                                                !
!   FOURNI             CHAR        (00003),                                     !
!   NUCLIE             CHAR        (00008),                                     !
!   VILLE              VARCHAR     (00020),                                     !
!   CORESP             LONG VARCHAR,                                            !
!   REMISE             DECIMAL     (00006, 02),                                 !
!   MATERIEL           VARCHAR     (00008),                                     !
!   DATED              CHAR        (00010),                                     !
!   HEURE              TIME,                                                    !
!   PRECIS             TIMESTAMP)                                               !
!    IN EXQSBLOC.ESP1-TABLE-QSBLOC                                              !
! ;                                                                             !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN100                                                             !
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                       *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QSBLOC SQL/DS EXAMPLE                             !
!                                                                               !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                    !
! TYPE       : I                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE INDEX PDCL.INDZ10                                                      !
!  ON PDCL.DODZ10                                                               !
! (FOURNP                ,                                                      !
!  NUCOM                 ASC ,                                                  !
!  LIVRABLE                  )                                                  !
! ;                                                                             !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN210                                                             !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                       *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QSBLOC SQL/DS EXAMPLE                             !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE VIEW PDCL.VUDZ09DBE                                                    !
!  (CLEFO             ,                                                         !
!   FOURNI            ,                                                         !
!   MATE              ,                                                         !
!   RELEA             ,                                                         !
!   LANGU             ,                                                         !
!   QTMAS             ,                                                         !
!   QTMAM             ,                                                         !
!   LIBFO             ,                                                         !
!   DATE              ,                                                         !
!   HEURE             ,                                                         !
!   FILLER            ,                                                         !
!   COMMEN            )                                                         !
!  AS SELECT                                                                    !
!  PDCL.FOUR.CLEFO                                          ,                   !
! PLEASE ENTER TO CONTINUE                                                      !
! O: C1 CH: -GEN350                                                             !
-------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QSBLOC SQL/DS EXAMPLE                            !
!                                                                              !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                !
! TYPE       : V                                                               !
!              CATALOG UPDATE Y/N :                                            !
!                                                                              !
!  PDCL.FOUR.FOURNI                                        ,                   !
!  PDCL.FOUR.MATE                                          ,                   !
!  PDCL.FOUR.RELEA                                         ,                   !
!  PDCL.FOUR.LANGU                                         ,                   !
!  PDCL.FOUR.QTMAS                                         ,                   !
!  PDCL.FOUR.QTMAM                                         ,                   !
!  PDCL.FOUR.LIBFO                                         ,                   !
!  PDCL.FOUR.DATE                                          ,                   !
!  PDCL.FOUR.HEURE                                         ,                   !
!  PDCL.FOUR.FILLER                                        ,                   !
!  PDCL.DODZ05.COCARA                                                          !
! FROM  PDCL.FOUR                          ,                                   !
!       PDCL.DODZ05                                                            !
! ;                                                                            !
!                                                                              !
! *** END ***                                                                  !
! O: C1 CH:                                                                    !
--------------------------------------------------------------------------------
```

10.15. INTEREL RDBC

```
-------------------------
!  INTEREL RDBC EXAMPLE  !
-------------------------
```

The purpose of this subchapter is to show the specific screens of an INTEREL RDBC-type Block ('QTBLOC' code).

You will find, in the order:

- the Block description,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
!                     ENGLISH LIBRARY                          *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QTBLOC INTEREL RDBC EXAMPLE                        !
!                                                                                !
! A LIN : T EXTERNAL NAME               TABLE CODE     KEY GEN            LIBR.!
!       :                               VIEW           TY  CDE                 !
!   100 : T DODZ05                        DZ05               C              0067!
!   200 : T DODZ11                        DZ11               C              0058!
!   210 : I INDZ10                        DZ10               C     +        0067!
!   300 : T                               FO11               C              0067!
!   350 : V VUDZ09DBE                     DZ09               C              0067!
!   360 : V VUDZ08S4                      DZ08           4   C              0048!
!   800 : T EXTERNAL-PI00                 PI00               C              0219!
!       :                                                                        !
!       :                                                                        !
!       :                                                                        !
!       :                                                                        !
!       :                                                                        !
!       :                                                                        !
!       :                                                                        !
!       :                                                                        !
! *** END ***                                                                    !
! O: C1 CH: BQTBLOC DR                                                           !
```

```
!                     ENGLISH LIBRARY                          *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QTBLOC INTEREL RDBC EXAMPLE                        !
!                                                                                !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                     !
! TYPE       : T                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
! CREATE TABLE DODZ05                                                            !
! /*  NUCOD  INVALID USAGE                                    */                 !
!  (COCARA             CHAR        (00001)     NOT NULL,                         !
!   FOURNI             CHAR        (00003),                                      !
!   NUCLIE             CHAR        (00008),                                      !
!   VILLE              VARCHAR     (00020),                                      !
! /*  REMISE INVALID USAGE                                    */                 !
!   CORESP             VARCHAR     (00256),                                      !
!   MATERIEL           VARCHAR     (00008),                                      !
!   DATED              CHAR        (00010),                                      !
!   HEURE              CHAR        (00008),                                      !
!   PRECIS             CHAR        (00026))                                      !
! ;                                                                              !
!                                                                                !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH: -GEN100                                                              !
```

EXAMPLES **10**
INTEREL RDBC **15**

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QTBLOC INTEREL RDBC EXAMPLE                       !
!                                                                               !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                    !
! TYPE       : I                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE INDEX INDZ10                                                           !
!  ON DODZ10                                                                    !
! (FOURNP                ,                                                      !
!  NUCOM              ASC ,                                                     !
!  LIVRABLE               )                                                     !
! ;                                                                             !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN210                                                             !
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QTBLOC INTEREL RDBC EXAMPLE                       !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
!  CREATE VIEW VUDZ09DBE                                                        !
!   (CLEFO             ,                                                       !
!    FOURNI            ,                                                       !
!    MATE              ,                                                       !
!    RELEA             ,                                                       !
!  /*  QTMAS  INVALID USAGE                                 */                  !
!  /*  QTMAM  INVALID USAGE                                 */                  !
!    LANGU             ,                                                       !
!    LIBFO             ,                                                       !
!    DATE              ,                                                       !
!    HEURE             ,                                                       !
!    FILLER            ,                                                       !
!    COMMEN            )                                                       !
!  AS                                                                           !
!  SELECT                                                                       !
! PLEASE ENTER TO CONTINUE                                                      !
! O: C1 CH: -GEN350                                                             !
```

EXAMPLES **10**
INTEREL RDBC **15**

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QTBLOC INTEREL RDBC EXAMPLE                       !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
!                                                                               !
!  FOUR.CLEFO                          ,                                        !
!  FOUR.FOURNI                         ,                                        !
!  FOUR.MATE                           ,                                        !
!  FOUR.RELEA                          ,                                        !
!  FOUR.LANGU                          ,                                        !
!  FOUR.LIBFO                          ,                                        !
!  FOUR.DATE                           ,                                        !
!  FOUR.HEURE                          ,                                        !
!  FOUR.FILLER                         ,                                        !
!  DODZ05.COCARA                                                                !
!  FROM FOUR                       ,                                            !
!       DODZ05                                                                  !
! ;                                                                             !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH:                                                                     !
--------------------------------------------------------------------------------
```

10.16. INTEREL RFM

```
-------------------------
!  INTEREL RFM EXAMPLE  !
-------------------------
```

The purpose of this subchapter is to show the specific screens of an INTEREL RFM-type Block ('QUBLOC' code).

You will find, in the order:

- the Block description,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QUBLOC INTEREL RFM EXAMPLE                        !
!                                                                               !
! A LIN : T EXTERNAL NAME              TABLE CODE     KEY GEN            LIBR.!
!       :                              VIEW           TY  CDE                 !
!   100 : T DODZ05                       DZ05               C              0067!
!   200 : T DODZ11                       DZ11               C              0058!
!   210 : I INDZ10                       DZ10               C     +        0067!
!   300 : T                              FO11               C              0067!
!   350 : V VUDZ09DBE                    DZ09               C              0067!
!   360 : V VUDZ08S4                     DZ08          4    C              0048!
!   800 : T EXTERNAL-PI00                PI00               C              0219!
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
!       :                                                                       !
! *** END ***                                                                   !
! O: C1 CH: BQUBLOC DR                                                          !
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QUBLOC INTEREL RFM EXAMPLE                        !
!                                                                               !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                    !
! TYPE       : T                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE TABLE DODZ05                                                           !
! --  NUCOD  INVALID USAGE                                                      !
!  (COCARA             CHAR        (00001)     NOT NULL,                      !
!   FOURNI             CHAR        (00003),                                   !
!   NUCLIE             CHAR        (00008),                                   !
!   VILLE              CHAR        (00020),                                   !
! --  REMISE INVALID USAGE                                                      !
!   CORESP             CHAR        (00256),                                   !
!   MATERIEL           CHAR        (00008),                                   !
!   DATED              CHAR        (00010),                                   !
!   HEURE              CHAR        (00008),                                   !
!   PRECIS             CHAR        (00026))                                   !
! ;                                                                             !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN100                                                             !
--------------------------------------------------------------------------------
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QUBLOC INTEREL RFM EXAMPLE                        !
!                                                                               !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                    !
! TYPE       : I                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE INDEX INDZ10                                                           !
!  ON DODZ10                                                                    !
! (FOURNP                ,                                                      !
!  NUCOM                 ASC ,                                                  !
!  LIVRABLE                  )                                                  !
! ;                                                                             !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN210                                                             !
---------------------------------------------------------------------------------

---------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QUBLOC INTEREL RFM EXAMPLE                        !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE VIEW VUDZ09DBE                                                         !
!  (CLEFO             ,                                                         !
!   FOURNI            ,                                                         !
!   MATE              ,                                                         !
!   RELEA             ,                                                         !
! --  QTMAS  INVALID USAGE                                                      !
! --  QTMAM  INVALID USAGE                                                      !
!   LANGU             ,                                                         !
!   LIBFO             ,                                                         !
!   DATE              ,                                                         !
!   HEURE             ,                                                         !
!   FILLER            ,                                                         !
!   COMMEN            )                                                         !
! AS                                                                            !
! SELECT                                                                        !
! PLEASE ENTER TO CONTINUE                                                      !
! O: C1 CH: -GEN350                                                             !
---------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QUBLOC INTEREL RFM EXAMPLE                         !
!                                                                                !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                  !
! TYPE       : V                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
!                                                                                !
!  FOUR.CLEFO                          ,                                         !
!  FOUR.FOURNI                         ,                                         !
!  FOUR.MATE                           ,                                         !
!  FOUR.RELEA                          ,                                         !
!  FOUR.LANGU                          ,                                         !
!  FOUR.LIBFO                          ,                                         !
!  FOUR.DATE                           ,                                         !
!  FOUR.HEURE                          ,                                         !
!  FOUR.FILLER                         ,                                         !
!  DODZ05.COCARA                                                                 !
!  FROM FOUR                       ,                                             !
!       DODZ05                                                                   !
! ;                                                                              !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH:                                                                      !
--------------------------------------------------------------------------------
```

10.17. VAX SQL

```
--------------------
!  VAX SQL EXAMPLE  !
--------------------
```

The purpose of this subchapter is to show the specific screens of a VAX/SQL-type Block ('QVBLOC' code).

You will find, in the order:

- the Block description,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QVBLOC VAX SQL EXAMPLE                           !
!                                                                              !
! A LIN : T EXTERNAL NAME              TABLE CODE     KEY GEN            LIBR.!
!       :                              VIEW           TY  CDE                !
!   100 : T DODZ05                       DZ05               C             0067!
!   200 : T DODZ11                       DZ11               C             0058!
!   210 : I INDZ10                       DZ10               C     +       0067!
!   300 : T                              FO11               C             0067!
!   350 : V VUDZ09DBE                    DZ09               C             0067!
!   360 : V VUDZ08S4                     DZ08           4   C             0048!
!   800 : T EXTERNAL-PI00                PI00               C             0219!
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
!       :                                                                      !
! *** END ***                                                                  !
! O: C1 CH: BQVBLOC DR                                                         !
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QVBLOC VAX SQL EXAMPLE                           !
!                                                                              !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                   !
! TYPE       : T                                                               !
!              CATALOG UPDATE Y/N :                                            !
!                                                                              !
! CREATE TABLE DODZ05                                                          !
!  (COCARA             CHAR        (00001)     NOT NULL,                       !
!   NUCOD              SMALLINT,                                               !
!   FOURNI             CHAR        (00003),                                    !
!   NUCLIE             CHAR        (00008),                                    !
!   VILLE              VARCHAR     (00020),                                    !
!   CORESP             VARCHAR     (00256),                                    !
!   REMISE             DECIMAL     (00006, 02),                                !
!   MATERIEL           VARCHAR     (00008),                                    !
!   DATED              CHAR        (00010),                                    !
!   HEURE              CHAR        (00008),                                    !
!   PRECIS             CHAR        (00026))                                    !
! ;                                                                            !
!                                                                              !
!                                                                              !
! *** END ***                                                                  !
! O: C1 CH: -GEN100                                                            !
-------------------------------------------------------------------------------
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QVBLOC VAX SQL EXAMPLE                            !
!                                                                               !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                    !
! TYPE       : I                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE INDEX INDZ10                                                           !
!  ON DODZ10                                                                    !
! (FOURNP                ,                                                      !
!  NUCOM                 ASC ,                                                  !
!  LIVRABLE                  )                                                  !
! ;                                                                             !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH: -GEN210                                                             !
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QVBLOC VAX SQL EXAMPLE                            !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
! CREATE VIEW VUDZ09DBE                                                         !
!  (CLEFO             ,                                                         !
!   FOURNI            ,                                                         !
!   MATE              ,                                                         !
!   RELEA             ,                                                         !
!   LANGU             ,                                                         !
!   QTMAS             ,                                                         !
!   QTMAM             ,                                                         !
!   LIBFO             ,                                                         !
!   DATE              ,                                                         !
!   HEURE             ,                                                         !
!   FILLER            ,                                                         !
!   COMMEN            )                                                         !
!  AS SELECT                                                                    !
!  FOUR.CLEFO                                                                   !
! PLEASE ENTER TO CONTINUE                                                      !
! O: C1 CH: -GEN350                                                             !
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QVBLOC VAX SQL EXAMPLE                           !
!                                                                              !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                !
! TYPE       : V                                                               !
!              CATALOG UPDATE Y/N :                                            !
!                                                                              !
!  FOUR.FOURNI                                                                 !
!  FOUR.MATE                                                                   !
!  FOUR.RELEA                                                                  !
!  FOUR.LANGU                                                                  !
!  FOUR.QTMAS                                                                  !
!  FOUR.QTMAM                                                                  !
!  FOUR.LIBFO                                                                  !
!  FOUR.DATE                                                                   !
!  FOUR.HEURE                                                                  !
!  FOUR.FILLER                                                                 !
!  DODZ05.COCARA                                                               !
! FROM  FOUR                              ,                                    !
!       DODZ05                                                                 !
! ;                                                                            !
!                                                                              !
! *** END ***                                                                  !
! O: C1 CH:                                                                    !
--------------------------------------------------------------------------------
```

10.18. SYBASE

```
--------------------
!  SYBASE EXAMPLE  !
--------------------
```

The purpose of this subchapter is to show the specific screens of a SYBASE-type Block ('QYBLOC' code).

You will find, in the order:

- the Block description,
- the result of a Table generation, from line 100 of the Block description,
- the result of an Index generation, from line 210 of the Block description,
- the result of a View generation, from line 350 of the Block description.

The generation requests and the Segment descriptions from which generation was performed are shown in the 'Common Screens' subchapter in this chapter.

```
!                     ENGLISH LIBRARY                        *PDMB.D801.BMS.259!
! RELATIONAL BLOCK DESCRIP.   QYBLOC SYBASE EXAMPLE                              !
!                                                                                !
! A LIN : T EXTERNAL NAME               TABLE CODE     KEY GEN            LIBR.!
!       :                               VIEW           TY  CDE                 !
!   100 : T DODZ05                        DZ05               C              0067!
!   130 : V VUDZ05S3                      DZ05           3   C              0058!
!   200 : T DODZ10                        DZ10               C     +        0067!
!   210 : I INDZ10                        DZ10               C              0067!
!   300 : T                               FO10               C              0067!
!   350 : V VUDZ09DBE                     DZ09               C              0048!
!   360 : V VUDZ09S4                      DZ09           4   C              0219!
!   510 : A ADDTABLE                      DZ05               C                  !
!   700 : T EXTERNAL-PI00                 PI00               C                  !
!       :                                                                        !
!       :                                                                        !
!       :                                                                        !
!       :                                                                        !
!       :                                                                        !
!       :                                                                        !
! *** END ***                                                                    !
! O: C1 CH: BQYBLOC DR                                                           !
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QYBLOC SYBASE EXAMPLE                              !
!                                                                                !
! SEGMENT    : DZ05   EXTERNAL NAME : DODZ05                                     !
! TYPE       : T                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
! CREATE TABLE DODZ05                                                            !
!  (COCARA             CHAR        (00001)     NOT NULL,                         !
!   NUCOD              SMALLINT                NULL,                             !
!   FOURNI             CHAR        (00003)     NULL,                             !
!   NUCLIE             CHAR        (00008)     NULL,                             !
!  /*  CORESP FIELD LENGTH >         00255 NOT TAKEN INTO ACCOUNT     */         !
!   VILLE              VARCHAR     (00020)     NULL,                             !
!   REMISE             NUMERIC     (00006,02)  NULL,                             !
!   MATERIEL           VARCHAR     (00008)     NULL,                             !
!   DATED              DATETIME                NULL,                             !
!   HEURE              DATETIME                NULL,                             !
!   PRECIS             CHAR        (00026)     NULL)                             !
! ;                                                                              !
!                                                                                !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH: -GEN100                                                              !
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QYBLOC SYBASE EXAMPLE                              !
!                                                                                !
! SEGMENT    : DZ10   EXTERNAL NAME : INDZ10                                     !
! TYPE       : I                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
! CREATE INDEX INDZ10                                                            !
!  ON DODZ10                                                                     !
! (FOURNP                ,                                                       !
!  NUCOM                 ASC ,                                                   !
!  LIVRABLE                  )                                                   !
! ;                                                                              !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
!                                                                                !
! *** END ***                                                                    !
! O: C1 CH: -GEN210                                                              !
```

```
!                     ENGLISH LIBRARY                        *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QYBLOC SYBASE EXAMPLE                              !
!                                                                                !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                  !
! TYPE       : V                                                                 !
!              CATALOG UPDATE Y/N :                                              !
!                                                                                !
! CREATE VIEW VUDZ09DBE                                                          !
!  (CLEFO             ,                                                        !
!   FOURNI            ,                                                        !
!   MATE              ,                                                        !
!   RELEA             ,                                                        !
!   LANGU             ,                                                        !
!   QTMAS             ,                                                        !
!   QTMAM             ,                                                        !
!   LIBFO             ,                                                        !
!   DATE              ,                                                        !
!   HEURE             ,                                                        !
!   FILLER            ,                                                        !
!   COMMEN            )                                                        !
!  AS SELECT                                                                     !
!  FOUR.CLEFO                                                                    !
! PLEASE ENTER TO CONTINUE                                                       !
! O: C1 CH: -GEN350                                                              !
```

```
--------------------------------------------------------------------------------
!                     ENGLISH LIBRARY                      *PDMB.DDDD.BMS.198!
! SQL COMMANDS GENERATION     QYBLOC SYBASE EXAMPLE                             !
!                                                                               !
! SEGMENT    : DZ09   EXTERNAL NAME : VUDZ09DBE                                 !
! TYPE       : V                                                                !
!              CATALOG UPDATE Y/N :                                             !
!                                                                               !
!  FOUR.FOURNI                                                                  !
!  FOUR.MATE                                                                    !
!  FOUR.RELEA                                                                   !
!  FOUR.LANGU                                                                   !
!  FOUR.QTMAS                                                                   !
!  FOUR.QTMAM                                                                   !
!  FOUR.LIBFO                                                                   !
!  FOUR.DATE                                                                    !
!  FOUR.HEURE                                                                   !
!  FOUR.FILLER                                                                  !
!  DODZ05.COCARA                                                                !
! FROM  FOUR                              ,                                     !
!       DODZ05                                                                  !
! ;                                                                             !
!                                                                               !
! *** END ***                                                                   !
! O: C1 CH:                                                                     !
--------------------------------------------------------------------------------
```