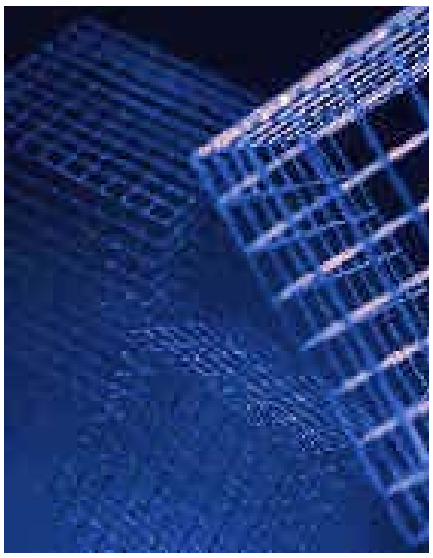
Evaluating System Tables: SAP DB



Version 7.3

Copyright

Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

Typographic Conventions

Type Style	Description
Example text	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths and options. Cross-references to other documentation.
Example text	Emphasized words or phrases in body text, titles of graphics and tables.
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example, SELECT and INCLUDE.
`Example text`	Screen output. This includes file and directory names and their paths, messages, source code, names of variables and parameters as well as names of installation, upgrade and database tools.
`EXAMPLE TEXT`	Keys on the keyboard, for example, function keys (such as `F2`) or the `ENTER` key.
`Example text`	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
`<Example text>`	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.

Evaluating System Tables: SAP DB 7.3

The SAP DB database system contains a series of system tables that contain information about the database objects and their connection to each other. A number of examples are given below to explain how these system tables can be evaluated.

- When you specify SELECT statements for the system tables, you should bear in mind some general information [Page 6].
- If you want to find out which system table contains information for a particular database term, consult the list of database terms [Page 7].
- If you want to find out which information a particular system table can provide, consult the list of system tables [Page 11].

You can find a complete definition of the system tables in the Reference Manual: SAP DB 7.3 [Extern] → System Tables [Extern].

You will find general information on the SAP DB database system in the User Manual: SAP DB [Extern].

General Information

If you want to evaluate system tables [Page 1], please bear in mind the following information:

- When system tables are evaluated, the system only outputs information for objects that the current user is the owner [Extern] of, or at least has a privilege [Extern] for (the user therefore knows the object). This authorization concept may mean that the table definition visible for the current user differs from the actual definition.
  The definition of a view table is only visible for the owner of the view table.
- When you query the system table(s), the you should enter conditions that describe the required object as precisely as possible. Entering the object owner considerably speeds up the search for the relevant information.
- When you specify search commands, you should specify equivalence conditions where possible. Specifying LIKE conditions is less effective.
- For performance reasons, when you query information from system tables, you should use not only the SQL statement SELECT * but also limit the number of output columns to those columns that you actually require.
  When you query statistical information from system tables, in particular, additional actions are performed to determine column values in the database system when certain output columns are requested. As a result, you should only have the system determine this column information if you really need it.
- Simple identifiers [Extern] are always created in the database instance in capital letters, regardless of how they were entered during definition of the data.
  If you use simple identifiers in a search condition, you must enter the single quotes typically used when specifying literals.
  For performance reasons, you should not wait until execution of the SQL statement to change the simple identifier to capital letters; you should enter the simple identifier directly in capital letters in the search condition.

```
CREATE TABLE mytab (…)
SELECT … FROM … WHERE … = 'MYTAB'
```

- Special identifiers [Extern] are always specified in double quotes in the data definition. In the database instance, these are stored as they were entered, meaning they are not converted to capital letters.
  If you use special identifiers in a search condition, you must enter the single quotes typical for specifying literals.

```
CREATE TABLE "this is mytab" (…)
SELECT … FROM … WHERE … = 'this is mytab'
```

Database Terms

In order to determine information about your SAP DB database system, its objects, structures, status information, and so on, you must evaluate the relevant system tables [Page 1].

A list of database terms and references to the system tables that can provide the information on the terms is provided below. The terms are listed in alphabetical order.

A-C [Page 7] D-H [Page 8] I-R [Page 8] S [Page 9] T [Page 10] U-Z [Page 10]

A-C

Database terms [Page 7] from A-C

	Term	Explanation	System table
C	char set (character set)	MapChar set TermChar set (terminal character set)	MAPCHARSETS [Page 17] TERMCHARSETS [Page 21]
	column	definition domain for definition default value inverted primary key privilege in referential constraint of a table in view definition	COLUMNS [Page 11] COLUMNS [Page 11] COLUMNS [Page 11] INDEXCOLUMNS [Page 16] COLUMNS [Page 11] COLUMNS [Page 11] FOREIGNKEYCOLUMNS [Page 15] VIEWCOLUMNS [Page 22]
	constraint	of a column or table of a domain referential NOT-NULL columns primary key UNIQUE	CONSTRAINTS [Page 13] DOMAINCONSTRAINTS [Page 14] FOREIGNKEYS [Page 15] COLUMNS [Page 11] COLUMNS [Page 11] INDEXES [Page 16]

D-H

Database terms [Page 7] from D-H

	Term	Explanation	System table
D	database instance	in the current database session	USERS [Page 22]
	database procedure	database procedure parameter	DBPROCEDURES [Page 14] DBPROCPARAMS [Page 14]
	database session	own all active active roles in the current database session	CONNECTPARAMETERS [Page 13] CONNECTEDUSERS [Page 13] SESSION_ROLES [Page 19]
	default value	of a column of a value range default role	COLUMNS [Page 11] DOMAINS [Page 15] ROLES [Page 18]
	domain	domain constraint of a domain during column definition	DOMAINS [Page 15] DOMAINCONSTRAINTS [Page 14] COLUMNS [Page 11]
F	foreign key (referential constraint)	referential constraint columns in the referential constraint	FOREIGNKEYS [Page 15] FOREIGNKEYCOLUMNS [Page 15]

I-R

Database terms [Page 7] from I-R

	Term	Explanation	System table
I	identification	internal identification of a table internal identification of a user	TABLES [Page 20] USERS [Page 22]
	index	indices column UNIQUE	INDEXES [Page 16] INDEXCOLUMNS [Page 16] INDEXES [Page 16]
	isolation level	of the current database session	CONNECTPARAMETERS [Page 13]
K	key	primary key secondary key foreign key (referential constraint)	COLUMNS [Page 11] FOREIGNKEYCOLUMNS [Page 15] FOREIGNKEYS [Page 15]
L	lock	currently held	LOCKS [Page 17]
M	MapChar set	MapChar set	MAPCHARSETS [Page 17]

O	operating system	on which the current database instance is running	VERSIONS [Page 22]
P	parameter	of a database procedure	DBPROCPARAMS [Page 14]
	privilege	of a role of a column of a table	ROLEPRIVILEGES [Page 17] COLUMNS [Page 11] TABLES [Page 20] TABLEPRIVILEGES [Page 19]
R	referential constraint	referential constraint columns	FOREIGNKEYS [Page 15] FOREIGNKEYCOLUMNS [Page 15]
	release (version)	of the database software	VERSIONS [Page 22]
	result table	existence	TABLES [Page 20]
	role	role, default role role privilege active role in the current database session	ROLES [Page 18] ROLEPRIVILEGES [Page 17] SESSION_ROLES [Page 19]

S

Database terms [Page 7]

Term	Explanation	System table
sequence	current value	SEQUENCES [Page 18]
server node	server node used in the current database session	USERS [Page 22]
session	own all active active roles in the current database session	CONNECTPARAMETERS [Page 13] CONNECTEDUSERS [Page 13] SESSION_ROLES [Page 19]
SQL mode	of the current database session	CONNECTPARAMETERS [Page 13]
statistics	time of last update-statistics run for a table sample values of the update-statistics run of a table	TABLES [Page 20]
synonym	synonyms existence	SYNONYMS [Page 19] TABLES [Page 20]

T

Database terms [Page 7]

Term	Explanation	System table
table	tables, existence table definition synonym privilege in view definition constraint referential constraint index view table primary key secondary key trigger	TABLES [Page 20] COLUMNS [Page 11] SYNONYMS [Page 19] TABLES [Page 20], TABLEPRIVILEGES [Page 19] VIEWCOLUMNS [Page 22] CONSTRAINTS [Page 13] FOREIGNKEYS [Page 15] INDEXES [Page 16] VIEWS [Page 23] COLUMNS [Page 11] FOREIGNKEYCOLUMNS [Page 15] TRIGGERS [Page 21]
TermChar set	terminal character set of the current database session	TERMCHARSETS [Page 21] CONNECTPARAMETERS [Page 13]
timeout	of the current database session	CONNECTPARAMETERS [Page 13]
trigger	trigger	TRIGGERS [Page 21]

U-Z

Database terms [Page 7] from U-Z

	Term	Explanation	System table
U	UNIQUE	index	INDEXES [Page 16]
	user	defined currently active	USERS [Page 22] CONNECTEDUSERS [Page 13]
V	version	of the database software	VERSIONS [Page 22]
	view table	view tables definition text existence synonym underlying tables and columns	VIEWS [Page 23] VIEWDEFS [Page 23] TABLES [Page 20] SYNONYMS [Page 19] VIEWCOLUMNS [Page 22]

System Tables

You can find a complete definition of the system tables in the *Reference Manual: SAP DB 7.3* → System Tables [Extern].

You can find information about how you evaluate the information in the system tables [Page 1] in the following sections:

COLUMNS

Using the system table [Page 11] COLUMNS [Extern], you can determine the following database information:

- Columns of table RESERVATION in the sequence in which they were defined, together with the relevant comments

```
SELECT columnname, comment
  FROM DOMAIN.COLUMNS
    WHERE tablename = 'RESERVATION' ORDER BY pos
```

- Data types of all columns of table CUSTOMER

```
SELECT columnname, datatype, len, dec, codetype
  FROM DOMAIN.COLUMNS
    WHERE tablename = 'CUSTOMER'
```

- All columns of your own Basis tables that have the data type DATE

```
SELECT tablename,columnname
  FROM DOMAIN.COLUMNS
    WHERE owner = user
      AND tabletype = 'TABLE'
      AND datatype = 'DATE'
```

- All columns of your own table HOTEL for which a default value was defined, plus this default value

```
SELECT columnname, default
  FROM DOMAIN.COLUMNS
    WHERE owner = user
      AND tablename = 'HOTEL'
      AND default IS NOT NULL
```

- All primary table columns of table ROOM, sorted according to their sequence in the primary key

```
SELECT columnname
  FROM DOMAIN.COLUMNS
    WHERE mode = 'KEY' ORDER BY keypos
```

- All columns defined with NOT NULL of table CUSTOMER

```
SELECT columnname
  FROM DOMAIN.COLUMNS
    WHERE tablename = 'CUSTOMER' AND mode = 'MAN'
```

- All columns of table RESERVATION that can be changed by the current user

```
SELECT columnname
  FROM DOMAIN.COLUMNS
    WHERE columnprivileges LIKE '*UPD*'
```

- All columns of table RESERVATION that can be changed by the current user and for which the user can pass on this privilege

```
SELECT columnname
  FROM DOMAIN.COLUMNS
    WHERE columnprivileges LIKE '*UPD+*'
```

- All table columns that were specified as MYDOMAIN during definition of the domain

```
SELECT owner, tablename, columnname
  FROM DOMAIN.COLUMNS
    WHERE domainname = 'MYDOMAIN'
```

Columns in the index: see INDEXCOLUMNS [Page 16]

Columns in the referential constraint: see FOREIGNKEYCOLUMNS [Page 15]

Primary table or view table columns in the view table: see VIEWCOLUMNS [Page 22]

CONNECTEDUSERS

Using the system table [Page 11] CONNECTEDUSERS [Extern], you can determine the following database information:

- All currently logged-on users and the terminal used by the user in question

```
SELECT username, termid
  FROM DOMAIN.CONNECTEDUSERS
```

- Name of the terminal that the user logged on to

```
SELECT termid
  FROM DOMAIN.CONNECTEDUSERS cu, DOMAIN.CONNECTPARAMETERS [Extern]
cp
    WHERE cu.session = cp.session
```

All defined users: see USERS [Page 22]

CONNECTPARAMETERS

Using the system table [Page 11] CONNECTPARAMETERS [Extern], you can determine the following database information:

Parameters of your own database session [Extern]

```
SELECT sqlmode, isolevel, timeout, termcharsetname, session
  FROM DOMAIN.CONNECTPARAMETERS
```

CONSTRAINTS

Using the system table [Page 11] CONSTRAINTS [Extern], you can determine the following database information:

All conditions of the columns of table CUSTOMER that represent explicit value checks

```
SELECT definition
  FROM DOMAIN.CONSTRAINTS
    WHERE tablename = 'CUSTOMER'
```

Constraints (integrity conditions) that relate to NOT NULL definitions, primary keys, UNIQUE definitions or referential constrains are not found with this SELECT statement.

NOT-NULL columns: see COLUMNS [Page 11]

Primary keys: see COLUMNS

UNIQUE columns: see INDEXES [Page 16]

Referential constraint: see FOREIGNKEYS [Page 15]

Columns in a referential constraint: see FOREIGNKEYCOLUMNS [Page 15]

Constraint of a domain: see DOMAINCONSTRAINTS [Page 14]

DBPROCEDURES

Using the system table [Page 11] DBPROCEDURES [Extern], you can determine the following database information:

All database procedures [Extern] and their comments generated in the last 10 days

```
SELECT owner, dbprocname, comment
  FROM DOMAIN.DBPROCEDURES
    WHERE createdate >= subdate(date,10)
```

Parameters of a database procedure: see DBPROCPARAMS [Page 14]

DBPROCPARAMS

Using the system table [Page 11] DBPROCPARAMS [Extern], you can determine the following database information:

- All input parameters of your own database procedure [Extern] MYPROC and the following parameter information: data type, length and specification of which number in the sequence the parameter has within the database procedure

```
SELECT parametername, datatype, len, dec, pos
  FROM DOMAIN.DBPROCPARAMS
    WHERE owner = user
      AND dbprocname = 'MYPROC'
      AND "IN/OUT-TYPE" = 'IN'
```

- Total number of parameters in your own database procedure MYPROC

```
SELECT COUNT(*)
  FROM DOMAIN.DBPROCPARAMS
    WHERE owner = user
      AND dbprocname = 'MYPROC'
```

Database procedures: see DBPROCEDURES [Page 14]

DOMAINCONSTRAINTS

Using the system table [Page 11] CONNECTPARAMETERS [Extern], you can determine the following database information:

All domains [Extern] for which a restriction of the permitted values was defined, and this definition

```
SELECT domainname, definition
  FROM DOMAIN.DOMAINCONSTRAINTS
```

All domains: see DOMAINS [Page 15]

DOMAINS

Using the system table [Page 11] DOMAINS [Extern], you can determine the following database information:

- All domains [Extern] and their comments defined for data type DATE

```
SELECT owner, domainname, comment
  FROM DOMAIN.DOMAINS
    datatype = 'DATE'
```

- All your own domains in which a default value was agreed

```
SELECT domainname, datatype, len, dec, default
  FROM DOMAIN.DOMAINS
    WHERE owner = user
      AND default IS NOT NULL
```

Constraint of a domain: see DOMAINCONSTRAINTS [Page 14]

Domain for column definition: see COLUMNS [Page 11]

FOREIGNKEYCOLUMNS

Using the system table [Page 11] FOREIGNKEYCOLUMNS [Extern], you can determine the following database information:

- All referential constraints [Extern] in which the column CNO of table CUSTOMER is the referenced column

```
SELECT owner, tablename, columnname, fkeyname, rule
  FROM DOMAIN.FOREIGNKEYCOLUMNS
    WHERE reftablename = 'CUSTOMER'
      AND refcolumnname = 'CNO'
```

- All referential constraints in which the column HNO of table RESERVATION is the referenced column

```
SELECT fkeyname, rule
  FROM DOMAIN.FOREIGNKEYCOLUMNS
    WHERE tablename = 'RESERVATION'
      AND columnname = 'HNO'
```

- All referential constraints in which the referenced columns come from table RESERVATION

```
SELECT DISTINCT fkeyname, rule, refowner, reftablename
  FROM DOMAIN.FOREIGNKEYCOLUMNS
    WHERE tablename = 'RESERVATION'
```

All referential constraints: see FOREIGNKEYS [Page 15]

FOREIGNKEYS

Using the system table [Page 11] FOREIGNKEYS [Extern], you can determine the following database information:

All referential constraints [Extern] in which table CUSTOMER is the referenced table

```
SELECT columnname, fkeyname, rule
```

```
FROM DOMAIN.FOREIGNKEYS
  WHERE tablename = 'CUSTOMER'
```

Columns in referential constraints: see FOREIGNKEYCOLUMNS [Page 15]

INDEXCOLUMNS

Using the system table [Page 11] INDEXCOLUMNS [Extern], you can determine the following database information:

- All inverted columns (those assigned an index [Extern]) of table HOTEL

```
SELECT DISTINCT columnname
  FROM DOMAIN.INDEXCOLUMNS
    WHERE tablename = 'HOTEL'
```

- All inversions for table RESERVATION, sorted by index, and then by the column sequence specified during index definition

```
SELECT indexname, type, columnname, sort
  FROM DOMAIN.INDEXCOLUMNS
    WHERE tablename = 'RESERVATION' ORDER BY indexname, columnno
```

- Information about the columns that make up the index MYINDEX of your own table MYTABLE

```
SELECT columnname, sort, datatype, len
  FROM DOMAIN.INDEXCOLUMNS
    WHERE tablename = 'MYTAB'
      AND indexname ='MYINDEX' ORDER BY columnno
```

Table INDEXCOLUMNS also contains statistical information (distinctvalues, pagecount, avglistlength). You should stop using this information, as it will no longer be available in one of the upcoming SAP DB versions.

All indices: see INDEXES [Page 16]

INDEXES

Using the system table [Page 11] INDEXES [Extern], you can determine the following database information:

- All indices [Extern] of the table ROOM and specification of which of the indices currently has the status disabled

```
SELECT indexname, disabled
  FROM DOMAIN.INDEXES
    WHERE tablename = 'ROOM'
```

- All UNIQUE indices (regardless of which of the possible SQL statements was used to generate these indices: CREATE INDEX statement [Extern] or UNIQUE definition [Extern])

```
SELECT owner, tablename, indexname
  FROM DOMAIN.INDEXES
    WHERE type = 'UNIQUE'
```

Columns of an index: see INDEXCOLUMNS [Page 16]

LOCKS

Using the system table [Page 11] LOCKS [Extern], you can determine the following database information:

- All locks [Extern] that are currently held on the table ROOM

```
SELECT lockmode, lockstate, rowidlength, rowidhex, rowid
  FROM DOMAIN.LOCKS
    WHERE tablename = 'ROOM'
```

- All locks that the current user is holding in the database session [Extern] on table ROOM

```
SELECT lockmode, lockstate, rowidlength, rowidhex, rowid
  FROM DOMAIN.LOCKS l DOMAIN.CONNECTPARAMETERS [Extern] cp
    WHERE tablename = 'ROOM'
      AND l.session = cp.session
```

- All locks that are currently being held on the table with the hexadecimal internal identification 0000000000D34BA8

```
SELECT lockmode, lockstate, rowidlength, rowidhex, rowid
  FROM DOMAIN.LOCKS
    WHERE tableid = X'0000000000D34BA8'
```

If the current user belongs to database user class [Extern] DBA [Extern] or SYSDBA [Extern], all locks that are held are displayed.

Users that belong to other user class only see the locks held by that one user.

MAPCHARSETS

Using the system table [Page 11] MAPCHARSETS [Extern], you can determine the following database information:

- Name of all MapChar sets [Extern]

```
SELECT DISTINCT mapcharsetname
  FROM DOMAIN.MAPCHARSETS
```

- Conversion of hexadecimal value D6 in MapChar set DEFAULTMAP

```
SELECT map_code, map_character
  FROM DOMAIN.MAPCHARSETS
    WHERE mapcharsetname = 'DEFAULTMAP'
      AND intern = X'D6'
```

ROLEPRIVILEGES

Using the system table [Page 11] ROLEPRIVILEGES [Extern], you can determine the following database information:

- All privileges [Extern] that have been granted to role [Extern] NEW_ROLE directly for your own table MYTABLE. Privileges granted indirectly, that is, granted for table MYTABLE via a different role, are not displayed.

```
SELECT privileges
  FROM DOMAIN.ROLEPRIVILEGES
    WHERE grantee = 'NEW_ROLE'
      AND owner = user
      AND tablename = 'MYTABLE'
```

- All roles that were granted to role NEW_ROLE. Specification of who granted the role.

```
SELECT role, grantor
  FROM DOMAIN.ROLEPRIVILEGES
    WHERE grantee = 'NEW_ROLE'
      AND role IS NOT NULL
```

All roles: see ROLES [Page 18]

All roles that are used as a default value: see ROLES

All roles that are active in the current database session: see ROLES [Page 19]

ROLES

Using the system table [Page 11] ROLES [Extern], you can determine the following database information:

- All role [Extern] that require a password to be specified before they can be activated

```
SELECT owner, role
  FROM DOMAIN.ROLES
    WHERE password_required = 'YES'
```

- All roles that the current user uses as a default value

```
SELECT role
  FROM DOMAIN.ROLES
    WHERE defaultrole = 'YES'
```

All roles that are active in the current database session: see ROLES [Page 19]

Role privilege: see ROLEPRIVILEGES [Page 17]

SEQUENCES

Using the system table [Page 11] SEQUENCES [Extern], you can determine the following database information:

- All sequences [Extern] with an incremental value that is not +1 and the value limits of the sequences

```
SELECT owner, sequence_name, increment_by, min_value, max_value
  FROM DOMAIN.SEQUENCES
    WHERE increment_by <> 1
```

- All sequences with a positive, incremental value. The values are not assigned cyclically, and there are only 1000 free values.

```
SELECT owner, sequence_name, last_number, max_value
  FROM DOMAIN.SEQUENCES
    WHERE increment_by > 0
      AND cycle_flag = 'N'
      AND max_value - last_number <= 1000
```

- Current value of your own sequence MYSEQ

```
SELECT last_number
  FROM DOMAIN.SEQUENCES
    WHERE owner = user
      AND sequence_name = 'MYSEQ'
```

- Last value assigned by the current database session to the own sequence MYSEQ
```
SELECT user.myseq.currval
FROM DUAL
```

SESSION_ROLES

Using the system table [Page 11] SESSION_ROLES [Extern], you can determine the following database information:

All roles [Extern] that are active in the current database session [Extern]
```
SELECT role
FROM DOMAIN.SESSION_ROLES
```

All roles: see ROLES [Page 18]

All roles that are used as a default value: see ROLES

Role privilege: see ROLEPRIVILEGES [Page 17]

SYNONYMS

Using the system table [Page 11] SYNONYMS [Extern], you can determine the following database information:

- All tables (Basis tables, view tables) for which the PUBLIC synonym [Extern] SHORT-TAB was defined
```
SELECT tableowner, tablename
  FROM DOMAIN.SYNONYMS
    WHERE public = 'YES'
      AND synonymname = 'SHORT_TAB'
```
- Private synonym for table HIS_TAB of user USER2
```
SELECT synonymname
  FROM DOMAIN.SYNONYMS
    WHERE owner = user
      AND tableowner = 'USER2'
      AND tablename = 'HIS_TAB'
```

Existence of a synonym: see TABLES [Page 20]

TABLEPRIVILEGES

Using the system table [Page 11] TABLEPRIVILEGES [Extern] you can determine the following database information:

- All tables for which the current user has been given a privilege [Extern]. Own tables are not output.
```
SELECT owner, tablename, privileges
  FROM DOMAIN.TABLEPRIVILEGES
    WHERE grantee = user
```

- All tables for which the current user has been given the SELECT privilege and is allowed to pass this on. Own tables are not output.

```
SELECT owner, tablename
  FROM DOMAIN.TABLEPRIVILEGES
    WHERE grantee = user
      AND privileges LIKE '*SEL*'
      AND is_grantable = 'YES'
```

- All privileges that the current user has passed on to user USER2

```
SELECT owner, tablename, privileges
  FROM DOMAIN.TABLEPRIVILEGES
    WHERE grantor = user
      AND grantee = 'USER2'
```

All tables: see TABLES [Page 20]

Existence of a table: see TABLES

Table definition: see COLUMNS [Page 11]

Synonym for a table: see SYNONYMS [Page 19]

Table privilege: see TABLES

Table in a view definition: see VIEWCOLUMNS [Page 22]

TABLES

Using the system table [Page 11] TABLES [Extern], you can determine the following database information:

- All tables [Extern], view tables and synonyms [Extern] that the current user can select

```
SELECT owner, tablename
  FROM DOMAIN.TABLES
    WHERE privileges LIKE '*SEL*'
```

- All results tables of the current user

```
SELECT tablename
  FROM DOMAIN.TABLES
    WHERE type = 'RESULT'
```

- All the user's own tables for which the last update-statistic run is more than 30 days in the past

```
SELECT tablename, updstatdate
  FROM DOMAIN.TABLES
    WHERE updstatdate <= subdate (DATE,30)
```

- Information on which sample values were used to carry out an update-statistics run on table CUSTOMER

```
SELECT sample_percent, sample_rows
  FROM DOMAIN.TABLES
    WHERE tablename = 'CUSTOMER'
```

- Internal identification of table HOTEL

```
SELECT tableid
  FROM DOMAIN.TABLES
    WHERE tablename = 'HOTEL'
```

If this relates to a Basis table, the internal identification of a table can be used, for example, during the lock query (see LOCKS [Page 17]).

Table definition: see COLUMNS [Page 11]

Primary key: COLUMNS

Synonym for a table: see SYNONYMS [Page 19]

Table privilege: see TABLEPRIVILEGES [Page 19]

Table in a view definition: see VIEWCOLUMNS [Page 22]

Constraint of a column or table: see CONSTRAINTS [Page 13]

Referential constraint: see FOREIGNKEYS [Page 15]

Index: see INDEXES [Page 16]

View table: VIEWS [Page 23]

Secondary key: see FOREIGNKEYCOLUMNS [Page 15]

Trigger: see TRIGGERS [Page 21]

TERMCHARSETS

Using the system table [Page 11] TERMCHARSETS [Extern], you can determine the following database information:

- All names of the defined TermChar sets [Extern]

```
SELECT termcharsetname
  FROM DOMAIN.TERMCHARSETS
```

- All names of the TermChar sets that can be currently used

```
SELECT termcharsetname
  FROM DOMAIN.TERMCHARSETS
    WHERE state = 'ENABLED'
```

- Definition of the TermChar set that is used in the current database session [Extern]

```
SELECT intern, extern
  FROM DOMAIN.TERMCHARSETS tcs, DOMAIN.CONNECTPARAMETERS [Extern]
cp
    WHERE tcs.termcharsetname = cp.termcharsetname
```

TRIGGERS

Using the system table [Page 11] TRIGGERS [Extern] , you can determine the following database information:

- Insert trigger for the table HOTEL

```
SELECT triggername, definition
  FROM DOMAIN.TRIGGERS
    WHERE tablename = 'HOTEL'
      AND INSERT = 'YES'
```

- Table and action for which the trigger MYTRIGGER was defined

```
SELECT owner, triggername, insert, update, delete
  FROM DOMAIN.TRIGGERS
    WHERE triggername = 'MYTRIGGER'
```

USERS

Using the system table [Page 11] USERS [Extern], you can determine the following database information:

- All defined users with the database user class [Extern] STANDARD [Extern]
```
SELECT username, groupname
  FROM DOMAIN.USERS
    WHERE usermode = 'STANDARD'
```
- All users who have not changed their password for over six months
```
SELECT username, pwcreatedate, pwcreatetime
  FROM DOMAIN.USERS
    WHERE pwcreatedate <= subdate (date,183)
```
- All users who are members of a user group and are allowed to log on to the database instance [Extern] several times simultaneously
```
SELECT groupname, username, usermode
  FROMDOMAIN.USERS
    WHERE groupname <> username
      AND connectmode = 'MULTIPLE'
```
- Name of the database instance on which the current database session [Extern] was opened. Name of the server on which this database instance is running.
```
SELECT DISTINCT serverdb, servernode
  FROM DOMAIN.USERS
```

Currently active user: see CONNECTEDUSERES [Page 13]

VERSIONS

Using the system table [Page 11] VERSIONS [Extern], you can determine the following database information:

Version of the software running on the current database system [Extern] and the operating system that the instance is running on
```
SELECT *
  FROM DOMAIN.VERSIONS
```

VIEWCOLUMNS

Using the system table [Page 11] VIEWCOLUMNS [Extern], you can determine the following database information:

- All tables or view tables that form the basis for your own view table MYVIEW
```
SELECT tableowner, tablename
  FROM DOMAIN.VIEWCOLUMNS
    WHERE owner = user
      AND viewname = 'MYVIEW'
```
- Column of the table or view table that forms the basis for column V_COL of your own view table
```
SELECT tableowner, tablename, columnname
  FROM DOMAIN.VIEWCOLUMNS
    WHERE owner = user
```

```
        AND viewname = 'MYVIEW'
        AND viewcolumnname = 'V_COL'
```

- Determine whether the column TITLE of table CUSTOMER forms the basis of a view table

```
SELECT owner, viewname, viewcolumnname
  FROM DOMAIN.VIEWCOLUMNS
    WHERE tablename = 'CUSTOMER'
      AND columnname = 'TITLE'
```

All views: see VIEWS [Page 23]

Definition of a view: see VIEWDEFS [Page 23]

Existence of a view: see TABLES [Page 20]

VIEWDEFS

Using the system table [Page 11] VIEWDEFS [Extern], you can determine the following database information:

Text that was entered for the definition of your own view table MYVIEW

```
SELECT definition
  FROM DOMAIN.VIEWDEFS
    WHERE owner = user
      AND viewname = 'MYVIEW'
```

Only the owner [Extern] of a view table can select the definition. No output is provided for any other users.

All view tables: see VIEWS [Page 23]

Existence of a view table: see TABLES [Page 20]

Tables and columns forming the basis for a view table: see VIEWCOLUMNS [Page 22]

VIEWS

Using the system table [Page 11] VIEWS [Extern], you can determine the following database information:

- All privileges [Extern] of your own view table MYVIEW

```
SELECT privileges
  FROM DOMAIN.VIEWS
    WHERE owner = user
      AND viewname = 'MYVIEW'
```

- All view tables and their comments that the current user can see without being the owner [Extern]

```
SELECT owner, viewname, comment
  FROM DOMAIN.VIEWS
    WHERE owner <> user
```

Definition text of a view table: see VIEWDEFS [Page 23]

Existence of a view table: see TABLES [Page 20]

Synonym for a view table: see SYNONYMS [Page 19]

Tables and columns forming the basis for a view table: see VIEWCOLUMNS [Page 22]