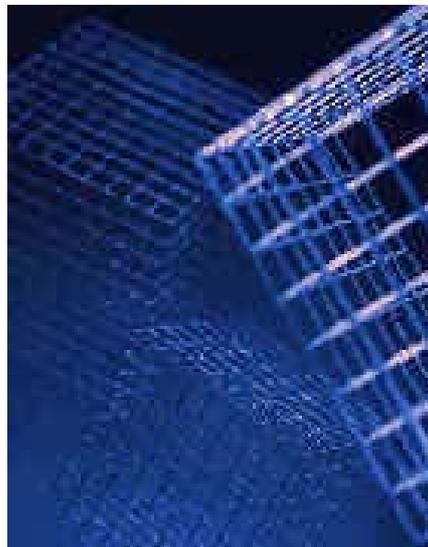


System Tables: SAP DB



Version 7.4



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Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

Typographic Conventions

Type Style	Description
<i>Example text</i>	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.

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System Tables: SAP DB 7.4

The SAP DB database system contains a series of system tables that contain information about the database objects and their connection to each other, statistics system tables, and monitor system tables.

The following examples show you how to evaluate the system tables.

- When you specify SELECT statements for the system tables, you have to bear in mind some [general information \[Page 7\]](#).
- If you want to find out which system table contains information for a particular database term, consult the [list of database terms \[Page 8\]](#).
- If you want to find out which information a particular system table can provide, see the section [Evaluating System Tables \[Page 12\]](#).

For a complete definition of the most important system tables, see [Definition of the System Tables \[Page 24\]](#).



For general information about the SAP DB database system, see the documentation [The SAP DB Database System \[See SAP DB Library\]](#), and also the following Internet address: www.sapdb.org.



General Information

If you want to evaluate [system tables \[Page 1\]](#), note the following information:

- When system tables are evaluated, the system only outputs information for objects of which the current user is the owner, or for which the user has at least a privilege (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), 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 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 leave the conversion of the simple identifier to capital letters to the database system at the execution of the SQL statement; you should enter the simple identifier directly in capital letters in the search condition.



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

- Special identifiers 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

To determine information about your SAP DB database system, its objects, structures, status information, and so on, you have to 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 \[Page 8\]](#) [D-H \[Page 9\]](#) [I-R \[Page 9\]](#) [S \[Page 10\]](#) [T \[Page 11\]](#) [U-Z \[Page 11\]](#)



A-C

[Database terms \[Page 8\]](#) from A-C

	Term	Explanation	System table
C	char set (character set)	MapChar set	MAPCHARSETS [Page 18]
	column	definition domain for definition default value inverted primary key privilege in referential constraint of a table in view definition	COLUMNS [Page 12] COLUMNS [Page 12] COLUMNS [Page 12] INDEXCOLUMNS [Page 17] COLUMNS [Page 12] COLUMNS [Page 12] FOREIGNKEYCOLUMNS [Page 16] VIEWCOLUMNS [Page 23]
	constraint	of a column or table of a domain referential NOT-NULL columns primary key UNIQUE	CONSTRAINTS [Page 14] DOMAINCONSTRAINTS [Page 15] FOREIGNKEYS [Page 16] COLUMNS [Page 12] COLUMNS [Page 12] INDEXES [Page 17]


D-H

[Database terms \[Page 8\]](#) 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 15] DBPROCPARAMS [Page 15]
	database session	own all active active roles in the current database session	CONNECTPARAMETERS [Page 14] CONNECTEDUSERS [Page 14] SESSION_ROLES [Page 20]
	default	of a column of a domain default role	COLUMNS [Page 12] DOMAINS [Page 16] ROLES [Page 19]
	domain	domain constraint of a domain during column definition	DOMAINS [Page 16] DOMAINCONSTRAINTS [Page 15] COLUMNS [Page 12]
F	foreign key (referential constraint)	referential constraint columns in the referential constraint	FOREIGNKEYS [Page 16] FOREIGNKEYCOLUMNS [Page 16]


I-R

[Database terms \[Page 8\]](#) from I-R

	Term	Explanation	System table
I	identification	internal identification of a table internal identification of a user	TABLES [Page 21] USERS [Page 22]
	index	indexes column UNIQUE	INDEXES [Page 17] INDEXCOLUMNS [Page 17] INDEXES [Page 17]
	isolation level	of the current database session	CONNECTPARAMETERS [Page 14]
K	key	primary key	COLUMNS [Page 12]

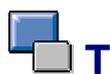
		secondary key foreign key (referential constraint)	FOREIGNKEYCOLUMNS [Page 16] FOREIGNKEYS [Page 16]
L	lock	currently held	LOCKS [Page 18]
M	MapChar set	MapChar set	MAPCHARSETS [Page 18]
O	Operating System	on which the current database instance is running	VERSIONS [Page 23]
P	parameter	of a database procedure	DBPROCPARAMS [Page 15]
	privilege	of a role of a column of a table	ROLEPRIVILEGES [Page 18] COLUMNS [Page 12] TABLES [Page 21] TABLEPRIVILEGES [Page 20]
R	referential constraint	referential constraint columns	FOREIGNKEYS [Page 16] FOREIGNKEYCOLUMNS [Page 16]
	release (version)	of the database software	VERSIONS [Page 23]
	result table	existence	TABLES [Page 21]
	role	role, default role role privilege active roles in the current database session	ROLES [Page 19] ROLEPRIVILEGES [Page 18] SESSION ROLES [Page 20]



[Database terms \[Page 8\]](#)

Term	Explanation	System table
sequence	current value	SEQUENCES [Page 19]
server node	server node used in the current database session	USERS [Page 22]
session (database session)	own all active active roles in the current database session	CONNECTPARAMETERS [Page 14] CONNECTEDUSERS [Page 14] SESSION ROLES [Page 20]
SQL mode	of the current database session	CONNECTPARAMETERS [Page 14]
statistics	time of last update-statistics run for a table sample values of the update-statistics run of a table	TABLES [Page 21]

synonym	synonyms existence	SYNONYMS [Page 20] TABLES [Page 21]
---------	-----------------------	--



[Database terms \[Page 8\]](#)

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 21] COLUMNS [Page 12] SYNONYMS [Page 20] TABLES [Page 21] , TABLEPRIVILEGES [Page 20] VIEWCOLUMNS [Page 23] CONSTRAINTS [Page 14] FOREIGNKEYS [Page 16] INDEXES [Page 17] VIEWS [Page 24] COLUMNS [Page 12] FOREIGNKEYCOLUMNS [Page 16] TRIGGERS [Page 22]
timeout	of the current database session	CONNECTPARAMETERS [Page 14]
trigger	trigger	TRIGGERS [Page 22]



[Database terms \[Page 8\]](#) from U-Z

	Term	Explanation	System table
U	UNIQUE	index	INDEXES [Page 17]
	user	defined currently active	USERS [Page 22] CONNECTEDUSERS [Page 14]
V	version	of the database software	VERSIONS [Page 23]
	view table	view tables definition text existence synonym underlying tables and columns	VIEWS [Page 24] VIEWDEFS [Page 24] TABLES [Page 21] SYNONYMS [Page 20] VIEWCOLUMNS [Page 23]



Evaluating System Tables

The following sections contain examples of how to evaluate information in the [system tables](#) [Page 1]:

[COLUMNS](#) [Page 12]

[CONNECTEDUSERS](#) [Page 14]

[CONNECTPARAMETERS](#) [Page 14]

[CONSTRAINTS](#) [Page 14]

[DBPROCEDURES](#) [Page 15]

[DBPROCPARAMS](#) [Page 15]

[DOMAINCONSTRAINTS](#) [Page 15]

[DOMAINS](#) [Page 16]

[FOREIGNKEYCOLUMNS](#) [Page 16]

[FOREIGNKEYS](#) [Page 16]

[INDEXCOLUMNS](#) [Page 17]

[INDEXES](#) [Page 17]

[LOCKS](#) [Page 18]

[MAPCHARSETS](#) [Page 18]

[ROLEPRIVILEGES](#) [Page 18]

[ROLES](#) [Page 19]

[SEQUENCES](#) [Page 19]

[SESSION ROLES](#) [Page 20]

[SYNONYMS](#) [Page 20]

[TABLEPRIVILEGES](#) [Page 20]

[TABLES](#) [Page 21]

[TRIGGERS](#) [Page 22]

[USERS](#) [Page 22]

[VERSIONS](#) [Page 23]

[VIEWCOLUMNS](#) [Page 23]

[VIEWDEFS](#) [Page 24]

[VIEWS](#) [Page 24]

COLUMNS

Using the system table [COLUMNS](#) [Page 27], you can determine the following database information, among other things:

- **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 tablename = 'ROOM' AND 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 tablename = 'RESERVATION' AND 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 tablename = 'RESERVATION' AND 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 \[Page 17\]](#)

Columns in the referential constraint: see [FOREIGNKEYCOLUMNS \[Page 16\]](#)

Primary table or view table columns in the view table: see [VIEWCOLUMNS \[Page 23\]](#)



CONNECTEDUSERS

Using the system table [CONNECTEDUSERS \[Page 28\]](#), you can determine the following database information, among other things:

- 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
\[Page 28\] cp
WHERE cu.session = cp.session
```



All defined users: see [USERS \[Page 22\]](#)



CONNECTPARAMETERS

Using the system table [CONNECTPARAMETERS \[Page 28\]](#), you can determine the following database information, among other things:

Parameters of your own database session

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



CONSTRAINTS

Using the system table [CONSTRAINTS \[Page 29\]](#), you can determine the following database information, among other things:

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 constraints are not found with this SELECT statement.



NOT-NULL columns: see [COLUMNS \[Page 12\]](#)

Primary keys: see COLUMNS

UNIQUE columns: see [INDEXES \[Page 17\]](#)

Referential constraint: see [FOREIGNKEYS \[Page 16\]](#)

Columns in a referential constraint: see [FOREIGNKEYCOLUMNS \[Page 16\]](#)

Constraint of a domain: see [DOMAINCONSTRAINTS \[Page 15\]](#)



DBPROCEDURES

Using the system table [DBPROCEDURES \[Page 30\]](#), you can determine the following database information, among other things:

All database procedures 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 \[Page 15\]](#)



DBPROCPARAMS

Using the system table [DBPROCPARAMS \[Page 30\]](#), you can determine the following database information, among other things:

- All input parameters of your own database procedure 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 \[Page 15\]](#)



DOMAINCONSTRAINTS

Using the system table [DOMAINCONSTRAINTS \[Page 31\]](#), you can determine the following database information, among other things:

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

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



All domains: see [DOMAINS \[Page 16\]](#)



DOMAINS

Using the system table [DOMAINS \[Page 32\]](#), you can determine the following database information, among other things:

- All domains 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 \[Page 15\]](#)

Domain for column definition: see [COLUMNS \[Page 12\]](#)



FOREIGNKEYCOLUMNS

Using the system table [FOREIGNKEYCOLUMNS \[Page 32\]](#), you can determine the following database information, among other things:

- All referential constraints 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 referencing column

```
SELECT fkeyname, rule
FROM DOMAIN.FOREIGNKEYCOLUMNS
  WHERE tablename = 'RESERVATION'
  AND columnname = 'HNO'
```
- All referential constraints in which the referencing columns come from table RESERVATION

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



All referential constraints: see [FOREIGNKEYS \[Page 16\]](#)



FOREIGNKEYS

Using the system table [FOREIGNKEYS \[Page 33\]](#), you can determine the following database information, among other things:

All referential constraints in which table CUSTOMER is the referenced table

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

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



Columns in referential constraints: see [FOREIGNKEYCOLUMNS \[Page 16\]](#)

INDEXCOLUMNS

Using the system table [INDEXCOLUMNS \[Page 34\]](#), you can determine the following database information, among other things:

- All inverted columns (those assigned an index) 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
```



All indexes: see [INDEXES \[Page 17\]](#)

INDEXES

Using the system table [INDEXES \[Page 34\]](#), you can determine the following database information, among other things:

- All indexes of the table ROOM and specification of which of the indexes currently has the status disabled


```
SELECT indexname, disabled
FROM DOMAIN.INDEXES
WHERE tablename = 'ROOM'
```
- All UNIQUE indexes (regardless of which of the possible SQL statements was used to generate these indexes: CREATE INDEX statement or UNIQUE definition)


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



Columns of an index: see [INDEXCOLUMNS \[Page 17\]](#)



LOCKS

Using the system table [LOCKS \[Page 39\]](#), you can determine the following database information, among other things:

- All locks 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 on table ROOM

```
SELECT lockmode, lockstate, rowidlength, rowidhex, rowid
FROM DOMAIN.LOCKS l DOMAIN.connectparameters \[Page 28\] 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, DBA or SYSDBA, 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 [MAPCHARSETS \[Page 40\]](#), you can determine the following database information, among other things:

- Name of all MapChar sets

```
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 [ROLEPRIVILEGES \[Page 54\]](#), you can determine the following database information, among other things:

- All privileges that have been given to role 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 \[Page 19\]](#)

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

All roles that are active in the current database session: see [SESSION ROLES \[Page 20\]](#) [\[Page 20\]](#)

ROLES

Using the system table [ROLES \[Page 55\]](#), you can determine the following database information, among other things:

- All roles 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 [SESSION ROLES \[Page 20\]](#) [\[Page 20\]](#)

Role privilege: see [ROLEPRIVILEGES \[Page 18\]](#)

SEQUENCES

Using the system table [SEQUENCES \[Page 55\]](#), you can determine the following database information, among other things:

- All sequences 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, at most, only 1000 free values remaining.

```
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 [SESSION_ROLES \[Page 57\]](#), you can determine the following database information, among other things:

All roles that are active in the current database session

```
SELECT role
FROM DOMAIN.SESSION_ROLES
```



All roles: see [ROLES \[Page 19\]](#)

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

Role privilege: see [ROLEPRIVILEGES \[Page 18\]](#)

SYNONYMS

Using the system table [SYNONYMS \[Page 57\]](#), you can determine the following database information, among other things:

- All tables (Basis tables, view tables) for which the PUBLIC synonym 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 \[Page 21\]](#)

TABLEPRIVILEGES

Using the system table [TABLEPRIVILEGES \[Page 58\]](#), you can determine the following database information, among other things:

- All tables for which the current user has been given a privilege. 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 \[Page 21\]](#)

Existence of a table: see TABLES

Table definition: see [COLUMNS \[Page 12\]](#)

Synonym for a table: see [SYNONYMS \[Page 20\]](#)

Table privilege: see TABLES

Table in a view definition: see [VIEWCOLUMNS \[Page 23\]](#)



TABLES

Using the system table [TABLES \[Page 59\]](#), you can determine the following database information, among other things:

- All tables, view tables and synonyms for which the current user can execute SELECT statements

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

- All result tables of the current user

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

- All the user's own tables for which the last update statistics 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 are 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 \[Page 18\]](#)).



Table definition: see [COLUMNS \[Page 12\]](#)

Primary key: COLUMNS

Synonym for a table: see [SYNONYMS \[Page 20\]](#)

Table privilege: see [TABLEPRIVILEGES \[Page 20\]](#)

Table in a view definition: see [VIEWCOLUMNS \[Page 23\]](#)

Constraint of a column or table: see [CONSTRAINTS \[Page 14\]](#)

Referential constraint: see [FOREIGNKEYS \[Page 16\]](#)

Index: see [INDEXES \[Page 17\]](#)

View table: [VIEWS \[Page 24\]](#)

Secondary key: see [FOREIGNKEYCOLUMNS \[Page 16\]](#)

Trigger: see [TRIGGERS \[Page 22\]](#)

TRIGGERS

Using the system table [TRIGGERS \[Page 63\]](#), you can determine the following database information, among other things:

- 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 [USERS \[Page 64\]](#), you can determine the following database information, among other things:

- All defined users with the database user class STANDARD

```
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 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 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 \[Page 14\]](#)

VERSIONS

Using the system table [VERSIONS \[Page 65\]](#), you can determine the following database information, among other things:

Version of the software with which the current database instance is running, and the operating system that the instance is running on

```
SELECT *
FROM DOMAIN.VERSIONS
```

VIEWCOLUMNS

Using the system table [VIEWCOLUMNS \[Page 66\]](#), you can determine the following database information, among other things:

- 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 \[Page 24\]](#)

Definition of a view: see [VIEWDEFS \[Page 24\]](#)

Existence of a view: see [TABLES \[Page 21\]](#)



VIEWDEFS

Using the system table [VIEWDEFS \[Page 66\]](#), you can determine the following database information, among other things:

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 of a view table can select the definition. No output is provided for any other users.



All view tables: see [VIEWS \[Page 24\]](#)

Existence of a view table: see [TABLES \[Page 21\]](#)

Tables and columns forming the basis for a view table: see [VIEWCOLUMNS \[Page 23\]](#)



VIEWS

Using the [system table \[Page 12\]](#) VIEWS, you can determine the following database information, among other things:

- All privileges 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


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



Definition text of a view table: see [VIEWDEFS \[Page 24\]](#)

Existence of a view table: see [TABLES \[Page 21\]](#)

Synonym for a view table: see [SYNONYMS \[Page 20\]](#)

Tables and columns forming the basis for a view table: see [VIEWCOLUMNS \[Page 23\]](#)



Definitions of the System Tables

System Tables with Information on Database Objects

The SAP DB database system contains a series of [system tables \[Page 1\]](#) that contain information about the database objects and their connection to each other. These system tables are available in every SQL mode. Their owner is the DOMAIN user. The owner has to be specified when accessing these tables in every SQL mode other than INTERNAL.

Definitions of the most important system tables:

COLUMNS [Page 27]	CONNECTEDUSERS [Page 28]	CONNECTPARAMETERS [Page 28]
CONSTRAINTS [Page 29]	DBPROCEDURES [Page 30]	DBPROCPARAMS [Page 30]
DOMAINCONSTRAINTS [Page 31]	DOMAINS [Page 32]	FOREIGNKEYCOLUMNS [Page 32]
FOREIGNKEYS [Page 33]	INDEXCOLUMNS [Page 34]	INDEXES [Page 34]
LOCKS [Page 39]	MAPCHARSETS [Page 40]	PACKAGES [Page 53]
ROLEPRIVILEGES [Page 54]	ROLES [Page 55]	SEQUENCES [Page 55]
SESSION ROLES [Page 57]	SYNONYMS [Page 57]	TABLEPRIVILEGES [Page 58]
TABLES [Page 59]	TRIGGERS [Page 63]	USERS [Page 64]
VERSIONS [Page 65]	VIEWCOLUMNS [Page 66]	VIEWDEFS [Page 66]
VIEWS [Page 67]		

Statistics System Tables

The SAP DB database system contains a number of system tables that you can use to select information about the configuration, structures, and sizes of database objects. The owner of these statistics system tables is the SYSDBA user. You do not need to specify the owner when accessing these tables.

Statistics System Tables

DBPARAMETERS [Page 29]	INDEXSTATISTICS [Page 35]	LOCKLISTSTATISTICS [Page 38]
OPTIMIZERSTATISTICS [Page 53]	SERVERDBSTATISTICS [Page 56]	TABLESTATISTICS [Page 60]
TRANSACTIONS [Page 62]	USERSTATISTICS [Page 65]	

Monitor System Tables

The SAP DB database system contains a number of system tables that you can use to access monitor information. The owner of these monitor system tables is the SYSDBA user. You do not need to specify the owner when accessing these tables.

The monitor system tables return results for the SYSDBA user and for all users of the database user class DBA. Non-authorized users receive the error message 100 - Row not found.

The monitor system tables have the following structure:

DESCRIPTION	CHAR(40)
VALUE	FIXED(20)

Each row contains a counter value. The meaning of this value is in the DESCRIPTION column.

Monitor System Tables

MONITOR [Page 41]	MONITOR_CACHES [Page 41]	MONITOR_LOAD [Page 43]
-----------------------------------	--	--

MONITOR_LOCK [Page 47]	MONITOR_LOG [Page 47]	MONITOR_LONG [Page 48]
MONITOR_PAGES [Page 48]	MONITOR_ROW [Page 51]	MONITOR_TRANS [Page 53]



ACTIVECONFIGURATION

Diese Systemtabelle enthält die Namen und Werte der aktuelle gültigen Datenbankparameter.

ACTIVECONFIGURATION

PARAMETERNAME	CHAR(32)	Name des Datenbankparameters
VALUE	CHAR UNICODE(256)	Wert des Datenbankparameters



CACHESTATISTICS

Diese Systemtabelle CACHSTATISTICS enthält Angaben über Zugriffe auf Caches seit dem letzten Start der Datenbankinstanz.

CACHESTATISTICS

NAME	CHAR(20)	Name des Cache
ACCESSCOUNT	FIXED(20)	Anzahl der Zugriffe auf den Cache
SUCCESSFULACCESSCOUNT	FIXED(20)	Anzahl erfolgreicher Zugriffe auf den Cache
UNSUCCESSFULACCESSCOUNT	FIXED(20)	Anzahl erfolgloser Zugriffe auf den Cache
HITRATE	FIXED(3)	Trefferrate (Prozentsatz erfolgreicher Zugriffe) auf den Cache



CACHESTATISTICSRESET

Die Systemtabelle CACHESTATISTICSRESET enthält Angaben über Zugriffe auf Caches seit dem letzten RESET ALL STATISTICS bzw. RESET CACHESTATISTICS.

CACHESTATISTICSRESET

NAME	CHAR(20)	Name des Cache
ACCESSCOUNT	FIXED(20)	Anzahl der Zugriffe auf den Cache
SUCCESSFULACCESSCOUNT	FIXED(20)	Anzahl erfolgreicher Zugriffe auf den Cache
UNSUCCESSFULACCESSCOUNT	FIXED(20)	Anzahl erfolgloser Zugriffe auf den Cache
HITRATE	FIXED(3)	Trefferrate (Prozentsatz erfolgreicher

	Zugriffe) auf dem Cache
--	-------------------------



COLUMNS

This system table contains the columns of all the tables, views, synonyms, and event tables for which the current user has privileges.

COLUMNS

OWNER	CHAR(32)	Name of owner of database object
TABLENAME	CHAR(32)	Name of database object
COLUMNNAME	CHAR(32)	Name of column
MODE	CHAR(3)	Type of column (KEY MAN OPT)
DATATYPE	CHAR(10)	Data type of column (BOOLEAN CHAR DATE FIXED FLOAT INTEGER LONG SMALLINT TIME TIMESTAMP)
CODETYPE	CHAR(8)	Code attribute of column (ASCII EBCDIC BYTE UNICODE)
LEN	FIXED(4)	Length or precision of column
DEC	FIXED(3)	Number of places after the comma for columns of data type FIXED
NULLABLE	CHAR(3)	Column can accept null values (YES/NO)
COLUMNPRIVILEGES	CHAR(8)	Privileges of current user for column
DEFAULT	CHAR(254)	Default value (DEFAULT) for column
DOMAINOWNER	CHAR(32)	Name of domain owner
DOMAINNAME	CHAR(32)	Name of domain
POS	FIXED(4)	Original position of column in table
KEYPOS	FIXED(4)	Original position of key column in table

CREATEDATE	DATE(10)	Creation date of column
CREATETIME	TIME(8)	Creation time of column
ALTERDATE	DATE(10)	Change date of column
ALERTIME	TIME(8)	Change time of column
TABLETYPE	CHAR(8)	Type of table (SYSTEMS TABLES)
COMMENT	LONG	Comment about column

See also:

Evaluating System Tables → [COLUMNS \[Page 12\]](#)

**CONNECTEDUSERS**

This system table contains all the users that have logged on.

CONNECTEDUSERS

USERNAME	CHAR(32)	Name of user
TERMINID	CHAR(18)	Terminal identification
SESSION	FIXED(10)	Session
CATALOG_CACHE_SIZE	FIXED(10)	Size of cache for catalog information of this database session

See also:

Evaluating System Tables → [CONNECTEDUSERS \[Page 14\]](#)

**CONNECTPARAMETERS**

This system table contains information about session-specific parameters.

CONNECTPARAMETERS

SQLMODE	CHAR(8)	SQL mode
---------	---------	----------

ISOLEVEL	FIXED(10)	Isolation level
TIMEOUT	FIXED(10)	Value for session timeout
SESSION	FIXED(10)	Session

See also:

Evaluating System Tables → [CONNECTPARAMETERS \[Page 14\]](#)



CONSTRAINTS

This system table contains the CONSTRAINT definitions for all the tables for which the current user has privileges.

CONSTRAINTS

OWNER	CHAR(32))	Name of table owner
TABLERNAME	CHAR(32))	Name of table with CONSTRAINT definition
CONSTRAINTNAME	CHAR(32))	Name of CONSTRAINT definition
DEFINITION	LONG	Text of CONSTRAINT definition

See also:

Evaluating System Tables → [CONSTRAINTS \[Page 14\]](#)



DBPARAMETERS

This statistics system table contains the parameters that were defined for the database instance by using the Database Manager tool.

DBPARAMETERS

DESCRIPTION	CHAR(18)	Description of how to interpret the VALUE column
VALUE	CHAR(256)	Value



DBPROCEDURES

This system table contains all the database procedures for which the current user has privileges.

DBPROCEDURES

OWNER	CHAR(32)	Name of owner of database procedure
DBPROCNAME	CHAR(32)	Name of database procedure
PACKAGE	CHAR(32)	Package that contains the database procedure
PARAMETER	FIXED(4)	Number of parameters of database procedure
CREATEDATE	DATE(10)	Creation date of database procedure
CREATETIME	TIME(8)	Creation time of database procedure
EXCECUTION_KIND	CHAR(6)	Execution location of database procedure (INPROC / LOCAL / REMOTE)
SQL_SUPPORT	CHAR(3)	Database procedure may contain SQL statements (YES/NO)
WAIT_FOR_CHKPT	CHAR(3)	Database procedure waits for a checkpoint (NO/YES)
REMOTE_LOCATION	CHAR(13 2)	Execution location
DEFINITION	LONG	SQL statement for defining the database procedure
COMMENT	LONG	Comment about database procedure

See also:

Evaluating System Tables → [DBPROCEDURES \[Page 15\]](#)



DBPROCPARAMS

This system table contains all the parameters of a database procedure for which the current user has privileges.

DBPROCPARAMS

OWNER	CHAR(32)	Name of owner of database procedure
DBPROCNAME	CHAR(32)	Name of database procedure

PARAMETERNAME	CHAR(32)	Name of parameter
POS	FIXED(4)	Original position of parameter in database procedure
IN/OUT-TYPE	CHAR(6)	Type of parameter (in/out)
DATATYPE	CHAR(10)	Datatype of parameter (BOOLEAN CHAR DATE FIXED FLOAT TIME TIMESTAMP)
CODETYPE	CHAR(8)	Code attribute of column (ASCII EBCDIC BYTE UNICODE)
LEN	FIXED(4)	Length or precision of parameter
DEC	FIXED(3)	Number of places after the comma for the parameter of data type FIXED
CREATEDATE	DATE(10)	Creation date of database procedure
CREATETIME	TIME(8)	Creation time of database procedure

See also:

Evaluating System Tables → [DBPROCPARAMS \[Page 15\]](#)



DOMAINCONSTRAINTS

This system table contains the CONSTRAINT definition of a domain.

DOMAINCONSTRAINTS

OWNER	CHAR(3 2)	Name of domain owner
DOMAINNAME	CHAR(3 2)	Name of domain
CONSTRAINTNAME	CHAR(3 2)	Name of CONSTRAINT definition
DEFINITION	LONG	Text of CONSTRAINT definition

See also:

Evaluating System Tables → [DOMAINCONSTRAINTS \[Page 15\]](#)



DOMAINS

This system table contains all domains.

DOMAINS

OWNER	CHAR(32)	Name of domain owner
DOMAINNAME	CHAR(32)	Name of domain
DATATYPE	CHAR(10)	Datatype of domain (BOOLEAN CHAR DATE FIXED FLOAT INTEGER LONG SMALLINT TIME TIMESTAMP)
CODETYPE	CHAR(8)	Code attribute of domain (ASCII EBCDIC BYTE UNICODE)
LEN	FIXED(4)	Length or precision of domain
DEC	FIXED(3)	Number of places after the comma for domains of data type FIXED
DEFAULT	CHAR(254)	Default value for domain
DEFINITION	LONG	Text of domain definition
CREATEDATE	DATE(10)	Creation date of domain
CREATETIME	TIME(8)	Creation time of domain
COMMENT	LONG	Comment about domain

See also:

Evaluating System Tables → [DOMAINS \[Page 16\]](#)



FOREIGNKEYCOLUMNS

This system table contains the columns of all the referential CONSTRAINT definitions for which the current user has privileges.

FOREIGNKEYCOLUMNS

OWNER	CHAR(32)	Name of table owner
TABLENAME	CHAR(32)	Name of table
COLUMNNAME	CHAR(32)	Name of column

FKEYNAME	CHAR(32)	Name of referential CONSTRAINT definition
REFOwner	CHAR(32)	Name of owner of referenced table
REFTABLENAME	CHAR(32)	Name of referenced table
REFCOLUMNNAME	CHAR(32)	Name of column of referenced table
RULE	CHAR(18)	Rules for deleting the table
CREATEDATE	DATE(10)	Creation date of referential CONSTRAINT definition
CREATETIME	TIME(8)	Creation time of referential CONSTRAINT definition
COMMENT	LONG	Comment about referential CONSTRAINT definition

See also:

Evaluating System Tables → [FOREIGNKEYCOLUMNS \[Page 16\]](#)



FOREIGNKEYS

This system table contains all the referential CONSTRAINT definitions for which the current user has privileges.

FOREIGNKEYS

OWNER	CHAR(32)	Name of table owner
TABLENAME	CHAR(32)	Name of table
FKEYNAME	CHAR(32)	Name of referential CONSTRAINT definition
RULE	CHAR(18)	Rules for deleting the table
CREATEDATE	DATE(10)	Creation date of referential CONSTRAINT definition
CREATETIME	TIME(8)	Creation time of referential CONSTRAINT definition

See also:

Evaluating System Tables → [FOREIGNKEYS \[Page 16\]](#)



INDEXCOLUMNS

This system table contains detailed information about the indexes for which the current user has privileges.

INDEXCOLUMNS

OWNER	CHAR(32)	Name of index owner
TABLENAME	CHAR(32)	Name of table
INDEXNAME	CHAR(32)	Name of index
TYPE	CHAR(6)	Type of index (UNIQUE NULL)
COLUMNNAME	CHAR(32)	Name of column
SORT	CHAR(4)	Sort sequence for column (ASC DESC)
COLUMNNO	FIXED(4)	Number of column in index
DATATYPE	CHAR(10)	Data type of domain (BOOLEAN CHAR DATE FIXED FLOAT INTEGER LONG SMALLINT TIME TIMESTAMP)
LEN	FIXED(4)	Length or precision of column definition
CREATEDATE	DATE(10)	Creation date of index
CREATETIME	TIME(8)	Creation time of index
INDEX_USED	FIXED(10)	Usage frequency of index for searches
DISABLED	CHAR(3)	Index not activated for searches (YES NO)
COMMENT	LONG	Comment about index

See also:

Evaluating System Tables → [INDEXCOLUMNS \[Page 17\]](#)



INDEXES

This system table contains all the indexes for which the current user has privileges.

INDEXES

OWNER	CHAR(32)	Name of index owner
-------	----------	---------------------

TABLENAME	CHAR(32)	Name of table
INDEXNAME	CHAR(32)	Name of index
TYPE	CHAR(6)	Type of index (UNIQUE NULL)
CREATEDATE	DATE(10)	Creation date of index
CREATETIME	TIME(8)	Creation time of index
INDEX_USED	FIXED(10)	Usage frequency of index for searches
DISABLED	CHAR(3)	Index not activated for searches (YES NO)
COMMENT	LONG	Comment about index

See also:

Evaluating System Tables → [INDEXES \[Page 17\]](#)



INDEXSTATISTICS

This statistics system table contains information about the structure and sizes of indexes.

INDEXSTATISTICS

OWNER	CHAR(32)	Table owner
TABLENAME	CHAR(32)	Table name
INDEXNAME	CHAR(32)	Index name (NULL for unknown indexes)
COLUMNNAME	CHAR(32)	Name of an inverted column
DESCRIPTION	CHAR(40)	Description (see table <i>Column DESCRIPTION</i>) of how to interpret following columns
CHAR_VALUE	CHAR(12)	Alphanumeric value
NUMERIC_VALUE	FIXED(10)	Numeric value

Column DESCRIPTION

Value	Explanation
Root_pno	NUMERIC_VALUE contains the page number of

	the root of the B* tree
Filetype	CHAR_VALUE contains the type of the B* tree
Used pages	NUMERIC_VALUE indicates how many pages are used by the index
Index pages	NUMERIC_VALUE indicates how many pages are used by the index in the B* tree index
Leaf pages	NUMERIC_VALUE indicates how many leaf pages are used by the index
Index levels	NUMERIC_VALUE contains the number of index levels in the B* tree
Space used in all pages(%)	NUMERIC_VALUE contains the used space of all pages in the B* tree (as a percentage)
Space used in root page(%)	NUMERIC_VALUE contains the used space of the root page in the B* tree (as a percentage)
Space used in index pages(%)	NUMERIC_VALUE contains the used space of the index pages in the B* tree (as a percentage)
Space used in index pages(%) min	NUMERIC_VALUE contains the minimum used space of the index pages in the B* tree (as a percentage)
Space used in index pages(%) max	NUMERIC_VALUE contains the maximum used space of the index pages in the B* tree (as a percentage)
Space used in leaf pages(%)	NUMERIC_VALUE contains the used space of the leaf pages in the B* tree (as a percentage)
Space used in leaf pages(%) min	NUMERIC_VALUE contains the minimum used space of the leaf pages in the B* tree (as a percentage)
Space used in leaf pages(%) max	NUMERIC_VALUE contains the maximum used space of the leaf pages in the B* tree (as a percentage)
Secondary keys (index lists)	NUMERIC_VALUE contains the number of different values of the indexed columns
Avg secondary key length	NUMERIC_VALUE contains the average length of

	an index value
Min secondary key length	NUMERIC_VALUE contains the minimum length of an index value
Max secondary key length	NUMERIC_VALUE contains the maximum length of an index value
Avg separator length	NUMERIC_VALUE contains the average length of a separator in the B* tree
Min separator length	NUMERIC_VALUE contains the minimum length of a separator
Max separator length	NUMERIC_VALUE contains the maximum length of a separator
Primary keys	NUMERIC_VALUE contains the number of rows in the table identified by OWNER and TABLENAME
Avg primary keys per list	NUMERIC_VALUE contains the average number of keys for each invert list
Min primary keys per list	NUMERIC_VALUE contains the minimum number of keys for each invert list
Max primary keys per list	NUMERIC_VALUE contains the maximum number of keys for each invert list
Values with selectivity <= 1%	NUMERIC_VALUE contains the number of invert lists with a selectivity <= 1%
Values with selectivity <= 5%	NUMERIC_VALUE contains the number of invert lists with a selectivity between 1% and 5%
Values with selectivity <= 10%	NUMERIC_VALUE contains the number of invert lists with a selectivity between 5% and 10%
Values with selectivity <= 25%	NUMERIC_VALUE contains the number of invert lists with a selectivity between 10% and 25%
Values with selectivity > 25%	NUMERIC_VALUE contains the number of invert lists with a selectivity > 25%



LOCKLISTSTATISTICS

This statistics system table contains information about the used space in the lock list.

LOCKLISTSTATISTICS

DESCRIPTION	CHAR(40)	Description (see table <i>Column DESCRIPTION</i>) of how to interpret the content of the VALUE column
VALUE	CHAR(12)	Value

Column DESCRIPTION

Value	Explanation
MAX LOCKS	VALUE contains the number of available locks in the lock list
TRANS LIST REGIONS	VALUE contains the number of semaphores for transactions
TABLE LIST REGIONS	VALUE contains the number of semaphores for tables
ROW LIST REGIONS	VALUE contains the number of semaphores for rows
ENTRIES	VALUE contains an internal database measure (entries) for the size of the lock list
USED ENTRIES	VALUE contains the number of currently used entries for set and requested locks
USED ENTRIES (%)	VALUE contains the number of currently used entries for set and requested locks (as a percentage)
AVG USED ENTRIES	VALUE contains the average number of entries for set and requested locks
AVG USED ENTRIES (%)	VALUE contains the average number of entries for set and requested locks (as a percentage)
MAX USED ENTRIES	VALUE contains the maximum number of entries for set and requested locks
MAX USED ENTRIES (%)	VALUE contains the maximum number of entries for set and requested locks (as a percentage)

LOCK ESCALATION VALUE	VALUE contains the number of table rows from which point row locks are converted into a table lock (lock escalation)
LOCK ESCALATIONS	VALUE contains the number of lock escalations
LOCK COLLISIONS	VALUE contains the number of lock requests that could not be granted (immediately)
DEADLOCKS	VALUE contains the number of situations where at least two transactions collided with each other due to held and requested locks in such a way that this collision can be resolved only by implicitly ending a transaction
SQL REQUEST TIMEOUTS	VALUE contains the number of lock requests that could not be set because they exceeded the maximum waiting time
TRANSACTIONS HOLDING LOCKS	VALUE contains the number of transactions that have locks assigned to them
TRANSACTIONS REQUESTING LOCKS	VALUE contains the number of transactions that request locks
CHECKPOINT WANTED	If the VALUE column contains the value TRUE, the lock list is closed. This means that a transaction that does not yet have an exclusive lock cannot be assigned an exclusive lock because a checkpoint has been requested.
SHUTDOWN WANTED	If the VALUE column contains the value TRUE, the lock list is closed because a shutdown has been requested.



LOCKS

This system table contains information about the set locks.

LOCKS

SESSION	FIXED(10)	ID of the database session
TRANSCOUNT	CHAR(20)	ID of the transaction in the database session
PROCESS	FIXED(10)	ID of the process in the database instance

USERNAME	CHAR(32)	Name of user
DATE	DATE(10)	Creation date of the lock
TIME	TIME(8)	Creation time of the lock
TERMID	CHAR(18)	ID of the user terminal
LASTWRITE	CHAR(10)	Time that has elapsed since the last SQL statement for data manipulation
LOCKMODE	CHAR(14)	Type of lock
LOCKSTATE	CHAR(10)	Status of lock
APPLPROCESS	FIXED(10)	ID of the process on the client hardware
APPLNODE	CHAR(64)	ID of the client hardware
OWNER	CHAR(32)	Table owner
TABlename	CHAR(32)	Name of table
TABLEID	CHAR BYTE(8)	Table ID
ROWIDLENGTH	FIXED(4)	Length of the key of the locked row
ROWIDHEX	CHAR BYTE(64)	Start of the key of the locked row in hexadecimal format
ROWID	CHAR(128)	Start of the key of the locked row

See also:

Evaluating System Tables → [LOCKS \[Page 18\]](#)



MAPCHARSETS

This system table contains all the MapChar sets.

MAPCHARSETS

MAPCHARSETNAME	CHAR(32)	Name of the MapChar set
CODE	CHAR(8)	Code attribute for which the MapChar set was defined (ASCII EBCDIC)

INTERN	CHAR BYTE(1)	Original form in hexadecimal format
MAP_CODE	CHAR BYTE(2)	Target form in hexadecimal format
MAP_CHARACTER	CHAR(2)	Target form in plain text format

See also:

Evaluating System Tables → [MAPCHARSETS \[Page 18\]](#)

**MONITOR**

This table combines the following monitor system tables: [MONITOR_CACHES \[Page 41\]](#) [MONITOR_LOAD \[Page 43\]](#) [MONITOR_LOCK \[Page 47\]](#) [MONITOR_LOG \[Page 47\]](#) [MONITOR_LONG \[Page 48\]](#) [MONITOR_PAGES \[Page 48\]](#) [MONITOR_ROW \[Page 51\]](#) [MONITOR_TRANS \[Page 53\]](#)

MONITOR

TYPE	CHAR(8)
DESCRIPTION	CHAR(40)
VALUE	FIXED(20)

**MONITOR_CACHES**

This monitor system table contains information about operations on the various caches.

Column DESCRIPTION

Value	Explanation
Data cache accesses	Number of accesses to pages in the data cache (number of accesses to data pages and pages with rollback information)
Data cache accesses successful	Number of successful accesses to pages in the data cache
Data cache accesses unsuccessful	Number of unsuccessful accesses to pages in the data cache
Data cache hit rate (%)	Percentage of successful accesses to pages in the data cache

Catalog cache accesses	Number of accesses to the session-specific catalog cache
Catalog cache accesses successful	Number of successful accesses to the session-specific catalog cache
Catalog cache accesses unsuccessful	Number of unsuccessful accesses to the session-specific catalog cache
Catalog cache hit rate (%)	Percentage of successful accesses to the session-specific catalog cache
Sequence cache accesses	Number of accesses to the sequence cache
Sequence cache accesses successful	Number of successful accesses to the sequence cache
Sequence cache accesses unsuccessful	Number of unsuccessful accesses to the sequence cache
Sequence cache hit rate (%)	Percentage of successful accesses to the sequence cache
Data cache sqlpage accesses	Number of accesses to data pages in the data cache
Data cache sqlpage accesses successful	Number of successful accesses to data pages in the data cache
Data cache sqlpage accesses unsuccessful	Number of unsuccessful accesses to data pages in the data cache
Data cache sqlpage hit rate(%)	Percentage of successful accesses to pages in the data cache
Data history/undo accesses	Number of accesses to pages with rollback information in the data cache
Data history/undo accesses successful	Number of successful accesses to pages with rollback information in the data cache
Data history/undo accesses unsuccessful	Number of unsuccessful accesses to pages with rollback information in the data cache
Data history/undo hit rate (%)	Percentage of successful accesses to pages with rollback information in the data cache

If you run the operating system Windows NT/2000 with the Intel memory extension PSE36, the table contains the following additional information:

Column DESCRIPTION

Value	Explanation
PSE36 data cache accesses	Number of accesses to the PSE36 data cache
PSE36 data cache accesses successful	Number of successful accesses to the PSE36 data cache
PSE36 data cache accesses unsuccessful	Number of unsuccessful accesses to the PSE36 data cache
PSE36 data cache hit rate (%)	Percentage of successful accesses to the PSE36 data cache



MONITOR_LOAD

This monitor system table contains information about executed SQL statements and access methods.

Column DESCRIPTION

Value	Explanation
SQL commands	Number of executed SQL statements
PREPAREs	Number of parsed SQL statements
PREPAREs repeated	Number of SQL statements that were parsed again after metadata was changed
EXECUTEs	Number of executions of SQL statements that have already been parsed
COMMITs	Number of executed COMMIT statements
ROLLBACKs	Number of executed ROLLBACK statements
LOCKs and UNLOCKs	Number of executed LOCK statements and UNLOCK statements
SUBTRANS BEGINs	Number of SQL statements for opening a subtransaction

SUBTRANS ENDS	Number of SQL statements for closing a subtransaction
SUBTRANS ROLLBACKs	Number of SQL statements for resetting a subtransaction
CREATEs	Number of SQL statements for creating database objects
ALTERs	Number of executed SQL statements for changing database objects
DROPs	Number of executed SQL statements for deleting database objects
SELECTs and FETCHes	Number of executed SQL statements for accessing data
SELECTs and FETCHes, rows read	Number of rows that were read when accessing data
SELECTs and FETCHes, rows qual	Number of rows that were read when accessing data and that fulfilled the conditions
INSERTs	Number of executed SQL statements for inserting rows
INSERTs, rows inserted	Number of inserted rows
UPDATEs	Number of executed SQL statements for changing rows
UPDATEs, rows read	Number of rows that were read when changing data
UPDATEs, rows updated	Number of changed rows
DELETEs	Number of executed SQL statements for deleting rows
DELETEs, rows read	Number of rows that were read when deleting data
DELETEs, rows deleted	Number of deleted rows
Internal DBPROC calls	Number of executions of database procedures

Internal trigger calls	Number of trigger executions
Primary key accesses	Number of searches with direct access by the key
Primary key accesses, rows read	Number of rows that were read by the direct key access
Primary key accesses, rows qual	Number of rows that were read by the direct key access and that fulfilled the conditions
Primary key range accesses	Number of searches with accesses within a key range
Primary key range accesses, rows read	Number of rows read within a key range
Primary key range accesses, rows qual	Number of rows read within a key range that fulfilled the condition
Index accesses	Number of searches with accesses to an index
Index accesses, rows read	Number of rows that were accessed indirectly by an index
Index accesses, rows qual	Number of rows that were accessed indirectly by an index and that fulfilled the condition
Index range accesses	Number of searches using an index range
Index range accesses, rows read	Number of rows that were accessed indirectly by an index using an index range
Index range accesses, rows qual	Number of rows that were accessed indirectly by an index using an index range and that fulfilled the condition
Isolated index accesses	Number of searches that could be successfully performed by an index either partly or completely and without accessing the rows of the base table
Isolated index accesses, rows read	Number of keys that were accessed in the searches described in ISOLATED INDEX ACCESSES
Isolated index accesses, rows qual	Number of keys that were accessed in the searches described in ISOLATED INDEX ACCESSES and that fulfilled the condition

qual	searches described in ISOLATED INDEX ACCESSES, and that fulfilled the condition
Isolated index range accesses	Number of searches in which a part of an index was used with values within a range without accessing the rows of the base table
Isolated index range accesses, rows read	Number of primary/secondary keys that were accessed in the searches described in ISOLATED INDEX RANGE ACCESSES
Isolated index range accesses, rows qual	Number of primary/secondary keys that were accessed in the searches described in ISOLATED INDEX RANGE ACCESSES, and that fulfilled the condition
Table scans	Number of searches in the whole base table
Table scans, rows read	Number of rows that were accessed in searches in the whole base table
Table scans, rows qual	Number of rows that were accessed in searches in the whole base table, and that fulfilled the condition
Isolated index scans	Number of searches in which a complete index was accessed without accessing rows in the base table
Isolated index scans, rows read	Number of index rows that were accessed in the searches described in ISOLATED INDEX SCANS
Isolated index scans, rows qual	Number of index rows that were accessed in the searches described in ISOLATED INDEX SCANS, and that fulfilled the condition
Memory sorts / sort&merge	Number of sort transactions in the main memory for creating temporary inversions
Memory sorts / sort&merge, rows read	Number of rows read for creating temporary inversions
Sorts by insertion	Number of sort transactions by inserting
Sorts by insertion, rows inserted	Number of rows that were inserted during the sort transaction



MONITOR_LOCK

This monitor system table contains information about operations by the lock management of the database system.

Column DESCRIPTION

Value	Explanation
Lock list avg used entries	Average number of entries in the lock list
Lock list max used entries	Maximum number of entries in the lock list
Lock list collisions	Number of lock collisions
Lock list escalations	Number of lock escalations
Lock list inserted row entries	Number of inserted row locks
Lock list inserted table entries	Number of inserted table locks
Detected deadlocks	Number of situations where at least two transactions collided with each other due to held and requested locks in such a way that this collision can be resolved only by implicitly ending a transaction
Request timeouts	Number of lock requests that could not be set because they exceeded the maximum waiting time



MONITOR_LOG

This monitor system table contains information about operations by the logging function (writing log information) of the database system.

Column DESCRIPTION

Value	Explanation
Log page physical reads	Number of physically read log pages
Log page physical writes	Number of physically read log pages
Log queue pages	Size of the log queue in pages

Log queue max used pages	Maximum number of pages used by log queue
Log queue inserts	Number of insert operations in the log queue
Log queue overflows	Number of overflows in the log queue
Log queue group commits	Number of group COMMITs
Log queue waits for log page write	Number of wait statuses for write operations to the log
Log queue max waits per log page	Maximum number of wait statuses for each log page
Log queue avg waits per log page	Average number of wait statuses for each log page



MONITOR_LONG

This monitor system table contains information about read and write transactions for LONG columns.

Column DESCRIPTION

Value	Explanation
BD read long	Number of read transactions for LONG columns
BD write long	Number of write transactions for LONG columns



MONITOR_PAGES

This monitor system table contains information about accesses to the pages.

Column DESCRIPTION

Value	Explanation
Virtual reads	Number of virtual read operations

Virtual writes	Number of virtual write operations
Physical reads	Number of physical read operations
Physical writes	Number of physical write operations
Catalog virtual read	Number of virtual catalog read operations
Catalog virtual writes	Number of virtual catalog write operations
Catalog physical reads	Number of physical catalog read operations
Catalog physical writes	Number of physical catalog write operations
Converter page physical reads	Number of physically read converter pages
Converter page physical writes	Number of physically written converter pages
Perm page virtual reads	Number of virtually read permanent pages
Perm page virtual writes	Number of virtually written permanent pages
Perm page physical reads	Number of physically read permanent pages
Perm page physical writes	Number of physically written permanent pages
Temp page virtual reads	Number of virtually read temporary pages
Temp page virtual writes	Number of virtually written temporary pages
Temp page physical reads	Number of physically read temporary pages
Temp page physical writes	Number of physically written temporary pages
LONG page virtual reads	Number of virtually read pages for LONG columns
LONG page virtual writes	Number of virtually written pages for LONG columns
LONG page physical reads	Number of physically read pages for LONG columns
LONG page physical writes	Number of physically written pages for LONG columns

	columns
Leaf page virtual reads	Number of virtually read leaf pages
Leaf page virtual writes	Number of virtually written leaf pages
Leaf page physical reads	Number of physically read leaf pages
Leaf page physical writes	Number of physically written leaf pages
Level1 page virtual reads	Number of virtually read index pages at level 1
Level1 page virtual writes	Number of virtually written index pages at level 1
Level1 page physical reads	Number of physically read index pages at level 1
Level1 page physical writes	Number of physically written index pages at level 1
Level2 page virtual reads	Number of virtually read index pages at level 2
Level2 page virtual writes	Number of virtually written index pages at level 2
Level2 page physical reads	Number of physically read index pages at level 2
Level2 page physical writes	Number of physically written index pages at level 2
Level3 page virtual reads	Number of virtually read index pages at level 3
Level3 page virtual writes	Number of virtually written index pages at level 3
Level3 page physical reads	Number of physically read index pages at level 3
Level3 page physical writes	Number of physically written index pages at level 3
Level4 page virtual reads	Number of virtually read index pages at level 4

Level4 page virtual writes	Number of virtually written index pages at level 4
Level4 page physical reads	Number of physically read index pages at level 4
Level4 page physical writes	Number of physically written index pages at level 4
Level5 page virtual reads	Number of virtually read index pages at level 5
Level5 page virtual writes	Number of virtually written index pages at level 5
Level5 page physical reads	Number of physically read index pages at level 5
Level5 page physical writes	Number of physically written index pages at level 5
Converter page virtual reads	Number of virtually read converter pages
Converter page virtual writes	Number of virtually written converter pages
Converter page physical reads	Number of physically read converter pages
Converter page physical writes	Number of physically written converter pages



MONITOR_ROW

This monitor system table contains information about operations at row level.

Column DESCRIPTION

Value	Explanation
BD add record perm	Number of inserted rows in permanent tables
BD add record temp	Number of inserted rows in temporary tables
BD repl record perm	Number of changed rows in permanent tables
BD repl record temp	Number of changed rows in temporary tables

BD del record perm	Number of deleted rows in permanent tables
BD del record temp	Number of deleted rows in temporary tables
BD get record perm	Number of rows read in permanent tables by using a key
BD get record temp	Number of rows read in temporary tables by using a key
BD next record perm	Number of rows read in permanent tables by using the predecessor key
BD next record temp	Number of rows read in temporary tables by using the predecessor key
BD prev record perm	Number of rows read in permanent tables by using the successor key
BD prev record temp	Number of rows read in temporary tables by using the successor key
BD select direct record	Number of selected rows with key
BD select next record	Number of selected rows with predecessor key
BD select prev record	Number of selected rows with successor key
BD add to index list perm	Number of insert operations in permanent indexes
BD add to index list temp	Number of insert operations in temporary indexes
BD del from index list perm	Number of delete operations in permanent indexes
BD del from index list temp	Number of delete operations in temporary indexes
BD get index list perm	Number of accesses to permanent indexes
BD get index list temp	Number of accesses to temporary indexes



MONITOR_TRANS

This monitor system table contains information about transactions.

Column DESCRIPTION

Value	Explanation
SQL commands	Number of SQL statements
Write transactions	Number of transactions with change operations
KB calls	Number of calls using the internal communication base interface



OPTIMIZERSTATISTICS

The statistics that are stored in the database catalog can be queried by selecting the system table OPTIMIZERSTATISTICS. Each row in the table describes statistics about indexes, columns, or the size of a table.

OPTIMIZERSTATISTICS

OWNER	CHAR(32)	Owner of a table for which statistics exist
TABLENAME	CHAR(32)	Table name of a table for which statistics exist
INDEXNAME	CHAR(32)	Index name of an index for which statistics exist
COLUMNNAME	CHAR(32)	Name of a column for which statistics exist
DISTINCTVALUES	FIXED(10)	Number of different values if the current row describes a column or an index with one column; otherwise the number of rows in a table
PAGECOUNT	FIXED(10)	Number of pages used by an index if the current row describes an index; number of pages of a base table if the current row describes a table; otherwise NULL
AVGLISTLENGTH	FIXED(10)	Average number of keys for an inversion list if the current row describes an index; otherwise NULL

See also:

UPDATE STATISTICS Statement (update_statistics_statement)



PACKAGES

This system table describes all the packages for which the current user has privileges.

PACKAGES

OWNER	CHAR(32)	Name of package owner
PACKAGE	CHAR(32)	Name of package
CREATEDATE	DATE	Creation date of package
CREATETIME	TIME	Creation time of package
EXCECUTION_KI ND	CHAR(6)	Execution location of database procedure (INPROC/LOCAL/REMOTE)
SQL_SUPPORT	CHAR(3)	Database procedure may contain SQL statements (YES/NO)
REMOTE_LOCATI ON	CHAR(13 2)	Execution location
COMMENT	LONG	Comment about package

**ROLEPRIVILEGES**

This system table describes the privileges and roles that are granted to roles for which the current user has privileges.

ROLEPRIVILEGES

OWNER	CHAR(32)	Name of the owner of the object that was granted for the role
TABLENAME	CHAR(32)	Name of the table for which privileges were granted for the role
ROLE	CHAR(32)	Name of the role that was granted
GRANTEE	CHAR(32)	Name of the role to which has been granted
PRIVILEGES	CHAR(30)	Privileges that were granted
GRANTOR	CHAR(32)	Name of the user who granted the privileges or the role
CREATEDATE	DATE(10)	Date when the privileges were granted
CREATETIME	TIME(8)	Time when the privileges were granted

See also:

Evaluating System Tables → [ROLEPRIVILEGES \[Page 18\]](#)



ROLES

This system table describes the roles for which the current user has privileges.

ROLES

OWNER	CHAR(32)	Name of role owner
ROLE	CHAR(32)	Name of role
PASSWORD_REQUIRED	CHAR(3)	Password required for activating the role (YES/NO)
GRANTED	CHAR(3)	Role was granted for the current user (YES/NO)
DEFAULTROLE	CHAR(3)	Role is the default role for the current user (YES/NO)
CREATEDATE	DATE(10)	Creation date of the role
CREATETIM	TIME(8)	Creation time of the role

See also:

Evaluating System Tables → [ROLES \[Page 19\]](#)



SEQUENCES

This system table contains all the sequences for which the current user has privileges.

SEQUENCES

OWNER	CHAR(32)	Name of sequence owner
SEQUENCE_NAME	CHAR(32)	Name of the sequence
MIN_VALUE	FIXED(38)	Minimum value of the sequence
MAX_VALUE	FIXED(38)	Maximum value of the sequence
INCREMENT_BY	FIXED(38)	Value by which the sequence is increased
CYCLE_FLAG	CHAR(1)	Does the sequence begin again with the minimum value once the maximum value has been reached?

ORDER_FLAG	CHAR(1)	Are the sequence values granted in the order of the request?
CACHE_SIZE	FIXED(38)	Number of sequence values that are loaded into the cache simultaneously
LAST_NUMBER	FIXED(38)	Last sequence value that was saved
CREATEDATE	DATE(10)	Creation date of the sequence
CREATETIME	TIME(8)	Creation time of the sequence
COMMENT	LONG	Comment about the sequence

See also:

Evaluating System Tables → [SEQUENCES \[Page 19\]](#)



SERVERDBSTATISTICS

This statistics system table contains information about the used space in the database instance.

SERVERDBSTATISTICS

SERVERDBSIZE	FIXED(10)	Size of the database instance in pages
MAXDATAPAGENO	FIXED(10)	Highest page number of the database instance
MAXPERM	FIXED(10)	Number of pages of the database instance that can be used for non-temporary objects
MAXUSEDPERM	FIXED(10)	Maximum value of USEDPERM since the last restart
USEDPERM	FIXED(10)	Number of pages of the database instance that are used for non-temporary objects
PCTUSEDPERM	FIXED(10)	Percentage of pages for non-temporary objects
USEDTMP	FIXED(10)	Number of pages of the database instance that are used for temporary objects
PCTUSEDTMP	FIXED(10)	Percentage of pages for temporary objects
UNUSED	FIXED(10)	Number of unused pages
PCTUNUSED	FIXED(10)	Percentage of unused pages

UPDATEDPERM	FIXED(10)	Number of changed pages for permanent objects
SERVERDBFULL	CHAR(3)	YES: maximum fill level of the database instance has been reached NO: maximum fill level of the database instance has not been reached
USEDBLOCKS	FIXED(10)	Number of blocks on data volumes that are used by pages
LOGSIZE	FIXED(10)	Size of the log range in pages
USEDLOG	FIXED(10)	Number of used log pages
PCTUSEDLOG	FIXED(10)	Percentage of used log pages
LOGNOTSAVED	FIXED(10)	Number of unsaved log pages
PCTLOGNOTSAVED	FIXED(10)	Percentage of unsaved log pages
LOGSINCEBACKUP	FIXED(10)	Number of written log pages since the last complete or incremental data backup
LOGSEGMENTSIZ	FIXED(10)	Size of a log segment in pages
SAVEPOINTS	FIXED(10)	Number of executed savepoints



SESSION_ROLES

This system table contains the roles that are active in the current database session.

SESSION_ROLES

ROLE	CHAR(32)	Name of role
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See also:

Evaluating System Tables → [SESSION_ROLES \[Page 20\]](#)



SYNONYMS

This system table contains all the synonyms for which the current user has privileges.

SYNONYMS

OWNER	CHAR(32)	Name of synonym owner
SYNONYMNAME	CHAR(32)	Name of synonym
PUBLIC	CHAR(3)	Synonym is PUBLIC (YES NO)
TABLEOWNER	CHAR(32)	Name of table owner
TABLENAME	CHAR(32)	Name of table
CREATEDATE	DATE(10)	Creation date of the synonym
CREATETIME	TIME(8)	Creation time of the synonym
COMMENT	LONG	Comment about synonym

See also:

Evaluating System Tables → [SYNONYMS \[Page 20\]](#)

**TABLEPRIVILEGES**

This system table describes the privileges that the current user has for tables.

TABLEPRIVILEGES

OWNER	CHAR(32)	Name of table owner
TABLENAME	CHAR(32)	Name of table
GRANTOR	CHAR(32)	Name of the user who granted the privileges
GRANTEE	CHAR(32)	Name of the user or the role that was granted the privilege
PRIVILEGES	CHAR(30)	Privileges that were granted
IS_GRANTABLE	CHAR(3)	Privilege to grant the received privilege to another user/role (YES/NO)

See also:

Evaluating System Tables → [TABLEPRIVILEGES \[Page 20\]](#)



TABLES

This system table contains all the tables (base tables, view tables, synonyms, and event tables) for which the current user has privileges.

TABLES

OWNER	CHAR(32)	Name of table owner
TABLENAME	CHAR(32)	Name of table
PRIVILEGES	CHAR(30)	Privileges of current user for the table
TYPE	CHAR(8)	Type of table (SYSTEMS TABLES)
TABLETYPE	CHAR(8)	Table type (TABLE VIEW SYNONYM RESULT)
CREATEDATE	DATE(10)	Creation date of the table
CREATETIME	TIME(8)	Creation time of the table
UPDSTATDATE	DATE(10)	Date of the last UPDATE STATISTICS statement for the table
UPDSTATTIME	TIME(8)	Time of the last UPDATE STATISTICS statement for the table
ALTERDATE	DATE(10)	Change date of the table
ALERTIME	TIME(8)	Change time of the table
UNLOADED	CHAR(3)	Table is unloaded (YES NO)
SAMPLE_PERCENT	FIXED(3)	Percentage of the table that is updated when updating statistics
SAMPLE_ROWS	FIXED(10)	Number of rows in the table that are updated when updating statistics
COMMENT	LONG	Comment about the table
TABLEID	CHAR(8) BYTE	Table ID in hexadecimal format

See also:

Evaluating System Tables → [TABLES \[Page 21\]](#)



TABLESTATISTICS

This statistics system table contains information about the structure and sizes of base tables.

TABLESTATISTICS

OWNER	CHAR(32)	Table owner
TABLERNAME	CHAR(32)	Table name
DESCRIPTION	CHAR(40)	Description (see table <i>Column DESCRIPTION</i>) of how to interpret following columns
CHAR_VALUE	CHAR(12)	Alphanumeric value
NUMERIC_VALUE	FIXED(10)	Numeric value

Column DESCRIPTION

Value	Explanation
Root pno	NUMERIC_VALUE contains the page number of the root of the B* tree
Filetype	CHAR_VALUE contains the type of the B* tree
Used pages	NUMERIC_VALUE indicates how many pages are used by the table
Index pages	NUMERIC_VALUE indicates how many pages are used by the table in the B* tree index
Leaf pages	NUMERIC_VALUE indicates how many leaf pages are used by the table
Index levels	NUMERIC_VALUE contains the number of index levels of the B* tree
Space used in all pages (%)	NUMERIC_VALUE contains the used space of all pages in the B* tree (as a percentage)
Space used in root page (%)	NUMERIC_VALUE contains the used space of the root page in the B* tree (as a percentage)
Space used in index pages (%)	NUMERIC_VALUE contains the used space of the index pages in the B* tree (as a percentage)

Space used in index pages (%) min	NUMERIC_VALUE contains the minimum used space of the index pages in the B* tree (as a percentage)
Space used in index pages (%) max	NUMERIC_VALUE contains the maximum used space of the index pages in the B* tree (as a percentage)
Space used in leaf pages (%)	NUMERIC_VALUE contains the used space of the leaf pages in the B* tree (as a percentage)
Space used in leaf pages (%) min	NUMERIC_VALUE contains the minimum used space of the leaf pages in the B* tree (as a percentage)
Space used in leaf pages (%) max	NUMERIC_VALUE contains the maximum used space of the leaf pages in the B* tree (as a percentage)
Rows	NUMERIC_VALUE contains the number of rows in the table
Avg rows per page	NUMERIC_VALUE contains the average number of rows for each page
Min rows per page	NUMERIC_VALUE contains the minimum number of rows for each page
Max rows per page	NUMERIC_VALUE contains the maximum number of rows for each page
Avg row length	NUMERIC_VALUE contains the average length of a row
Min row length	NUMERIC_VALUE contains the minimum length of a row
Max row length	NUMERIC_VALUE contains the maximum length of a row
Avg key length	NUMERIC_VALUE contains the average length of a key
Min key length	NUMERIC_VALUE contains the minimum length of a key
Max key length	NUMERIC_VALUE contains the maximum length of a key

Avg separator length	NUMERIC_VALUE contains the average length of a separator
Min separator length	NUMERIC_VALUE contains the minimum length of a separator
Max separator length	NUMERIC_VALUE contains the maximum length of a separator
Defined LONG columns	NUMERIC_VALUE contains the number of defined LONG columns
Avg LONG column length	NUMERIC_VALUE contains the average length of a LONG column
Min LONG column length	NUMERIC_VALUE contains the minimum length of a LONG column
Max LONG column length	NUMERIC_VALUE contains the maximum length of a LONG column
LONG column pages	NUMERIC_VALUE contains the number of pages of all the LONG columns in the table
Avg pages per LONG column	NUMERIC_VALUE contains the average number of pages in the table for each LONG column
Min pages per LONG column	NUMERIC_VALUE contains the smallest LONG column in the table (in pages)
Max pages per LONG column	NUMERIC_VALUE contains the largest LONG column in the table (in pages)



TRANSACTIONS

This statistics system table contains information about active transactions of a database instance.

TRANSACTIONS

SESSION	FIXED(10)	ID of the database session
TRANSCOUNT	CHAR(20)	Transaction ID

SUB_TRANS	FIXED(10)	Number of the current subtransaction
WRITE_TRANS	CHAR BYTE(6)	ID of the current write transaction if the transaction has made changes
PROCESS	FIXED(10)	ID of the user process
USERNAME	CHAR(32)	User name
CONNECTDATE	DATE	Date when the session started
CONNECTTIME	TIME	Time when the session started
TERMINID	CHAR(18)	Terminal ID
REQTIMEOUT	CHAR(10)	Remaining time until REQUEST_TIMEOUT in seconds
LASTWRITE	CHAR(10)	Time elapsed since the last write request in timeout intervals
LOCKMODE	CHAR(14)	Type of lock
LOCKSTATE	CHAR(10)	Status of lock
REQMODE	CHAR(14)	Type of lock request
REQSTATE	CHAR(10)	Status of the lock request
CONSISTENTVIEW	CHAR(6)	For future use
APPLPROCESS	FIXED(10)	ID of the application process
APPLNODEID	CHAR(64)	ID of the client host of the application process



TRIGGERS

This system table contains all the triggers for which the current user has privileges.

TRIGGERS

OWNER	CHAR(32)	Name of table owner
TABLENAME	CHAR(32)	Name of the table for which the trigger was defined

TRIGGERNAME	CHAR(32)	Name of the trigger
INSERT	CHAR(3)	Type of trigger
UPDATE	CHAR(3)	Type of trigger
DELETE	CHAR(3)	Type of trigger
CREATEDATE	DATE(10)	Creation date of the trigger
CREATETIME	TIME(8)	Creation time of the trigger
DEFINITION	LONG	Text of the trigger definition
COMMENT	LONG	Comment about the trigger

See also:

Evaluating System Tables → [TRIGGERS \[Page 22\]](#)

**USERS**

This system table contains all users.

USERS

OWNER	CHAR(32)	Name of user owner
GROUPNAME	CHAR(32)	Name of the group
USERNAME	CHAR(32)	Name of user
USERMODE	CHAR(8)	Class of the user (SYSDBA DBA RESOURCE STANDARD)
CONNECTMODE	CHAR(8)	Type of connection (MULTIPLE SINGLE)
MAXTIMEOUT	FIXED(10)	Value of the TIMEOUT
COSTWARNING	FIXED(10)	Value of the COSTWARNING
COSTLIMIT	FIXED(10)	Value of the COSTLIMIT
DEFAULTCODE	CHAR(8)	Default value for code attribute
CREATEDATE	DATE(10)	Creation date of user

CREATETIME	TIME(8)	Creation time of user
ALTERDATE	DATE(10)	Change date of user
ALTERTIME	TIME(8)	Change time of user
PWCREADATE	DATE(10)	Creation date of password
PWCREATIME	TIME(8)	Creation time of password
SERVERDB	CHAR(18)	Name of database instance
SERVERNODE	CHAR(64)	Host node name of database instance
USER_ID	FIXED(10)	ID of the user
COMMENT	LONG	Comment about user

See also:

Evaluating System Tables → [USERS \[Page 22\]](#)



USERSTATISTICS

This statistics system table contains information about the resource consumption of users.

USERSTATISTICS

USERNAME	CHAR(32)	User name
USERMODE	CHAR(8)	User class
PERMCOUNT	FIXED(10)	Pages currently used for permanent objects
TEMPCOUNT	FIXED(10)	Pages currently used for temporary objects



VERSIONS

This system table describes the versions of the SAP DB database software.

VERSIONS

KERNEL	CHAR(40)	Version of the SAP DB database software
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RUNTIMEENVIRONMENT	CHAR(40)	Version of the runtime environment
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See also:

Evaluating System Tables → [VERSIONS \[Page 23\]](#)

**VIEWCOLUMNS**

This system table contains all the columns of the view tables for which the current user has privileges.

VIEWCOLUMNS

OWNER	CHAR(32)	Name of the owner of the view table
VIEWNAME	CHAR(32)	Name of the view table
VIEWCOLUMNNAME	CHAR(32)	Name of the column in the view table
TABLEOWNER	CHAR(32)	Name of the owner of the table that the used column belongs to
TABLENAME	CHAR(32)	Name of the table that the used column belongs to
COLUMNNAME	CHAR(32)	Original name of the column in the table
CREATEDATE	DATE(10)	Creation date of the view table
CREATETIME	TIME(8)	Creation time of the view table

See also:

Evaluating System Tables → [VIEWCOLUMNS \[Page 23\]](#)

**VIEWDEFS**

This system table contains the definitions of the view tables for which the current user has privileges.

VIEWDEFS

OWNER	CHAR(32)	Name of the owner of the view table
VIEWNAME	CHAR(32)	Name of the view table
LEN	FIXED(4)	Length of the definition of the view table

DEFINITION	LONG	Text of the definition of the view table
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See also:

Evaluating System Tables → [VIEWDEFS \[Page 24\]](#)

**VIEWS**

This system table contains all the view tables for which the current user has privileges.

VIEWS

OWNER	CHAR(32)	Name of the owner of the view table
VIEWNAME	CHAR(32)	Name of the view table
PRIVILEGES	CHAR(30)	Privileges of the user for the view table
TYPE	CHAR(8)	Table type
CREATEDATE	DATE(10)	Creation date of the view table
CREATETIME	TIME(8)	Creation time of the view table
UPDSTATDATE	DATE(10)	Date of the last UPDATE STATISTICS statement for the view table
UPDSTATTIME	TIME(8)	Date of the last UPDATE STATISTICS statement for the view table
ALTERDATE	DATE(10)	Change date of the view table
ALERTIME	TIME(8)	Change time of the view table
UNLOADED	CHAR(3)	View table is unloaded (YES NO)
COMMENT	LONG	Comment about the view table

See also:

Evaluating System Tables → [VIEWS \[Page 24\]](#)