

DATA BASE DICTIONARY

(Cap. 5)

1) Structura dictionarului de date:

```
SQL> desc dictionary
```

Name	Null?	Type
TABLE_NAME		VARCHAR2(30)
COMMENTS		VARCHAR2(4000)

```
SQL> select table_name from dictionary where table_name like 'USER%';
```

```
TABLE_NAME
```

```
-----  
USER_INDEXES  
USER_IND_COLUMNS  
USER_IND_EXPRESSIONS  
USER_JOIN_IND_COLUMNS  
USER_OBJECTS  
USER_PROCEDURES  
USER_STORED_SETTINGS  
USER_PLSQL_OBJECT_SETTINGS  
USER_ARGUMENTS  
USER_RESUMABLE  
USER_ROLE_PRIVS  
USER_SYS_PRIVS  
USER_SEQUENCES  
USER_SYNONYMS  
USER_TABLES  
USER_OBJECT_TABLES  
USER_ALL_TABLES  
USER_TAB_COLS  
USER_TAB_COLUMNS  
USER_NESTED_TABLE_COLS  
USER_TAB_COL_STATISTICS  
USER_TAB_HISTOGRAMS  
USER_TAB_COMMENTS  
USER_TAB_PRIVS  
USER_TAB_PRIVS_MADE  
USER_TAB_PRIVS_RECD  
USER_USERS  
USER_PROXIES  
USER_VIEWS  
USER_CONSTRAINTS
```

2) Toate tabelele din userul current:

SQL> desc user_tables

Name	Null?	Type
-----	-----	-----
TABLE_NAME	NOT NULL	VARCHAR2(30)
TABLESPACE_NAME		VARCHAR2(30)
CLUSTER_NAME		VARCHAR2(30)
IOT_NAME		VARCHAR2(30)
PCT_FREE		NUMBER
PCT_USED		NUMBER
INI_TRANS		NUMBER
MAX_TRANS		NUMBER
INITIAL_EXTENT		NUMBER
NEXT_EXTENT		NUMBER
MIN_EXTENTS		NUMBER
MAX_EXTENTS		NUMBER
PCT_INCREASE		NUMBER
FREELISTS		NUMBER
FREELIST_GROUPS		NUMBER
LOGGING		VARCHAR2(3)
BACKED_UP		VARCHAR2(1)
NUM_ROWS		NUMBER
BLOCKS		NUMBER
EMPTY_BLOCKS		NUMBER
AVG_SPACE		NUMBER
CHAIN_CNT		NUMBER
AVG_ROW_LEN		NUMBER
AVG_SPACE_FREELIST_BLOCKS		NUMBER
NUM_FREELIST_BLOCKS		NUMBER
DEGREE		VARCHAR2(10)
INSTANCES		VARCHAR2(10)
CACHE		VARCHAR2(5)
TABLE_LOCK		VARCHAR2(8)
SAMPLE_SIZE		NUMBER
LAST_ANALYZED		DATE
PARTITIONED		VARCHAR2(3)
IOT_TYPE		VARCHAR2(12)
TEMPORARY		VARCHAR2(1)
SECONDARY		VARCHAR2(1)
NESTED		VARCHAR2(3)
BUFFER_POOL		VARCHAR2(7)
ROW_MOVEMENT		VARCHAR2(8)
GLOBAL_STATS		VARCHAR2(3)
USER_STATS		VARCHAR2(3)
DURATION		VARCHAR2(15)

SKIP_CORRUPT	VARCHAR2(8)
MONITORING	VARCHAR2(3)
CLUSTER_OWNER	VARCHAR2(30)
DEPENDENCIES	VARCHAR2(8)

SQL> select table_name from user_tables;

TABLE_NAME

BONUS
DEPT
EMP
SALGRADE

3) Vizualizare obiectelor create de un user:

SQL> desc user_objects

Name	Null?	Type
-----	-----	-----
OBJECT_NAME		VARCHAR2(128)
SUBOBJECT_NAME		VARCHAR2(30)
OBJECT_ID		NUMBER
DATA_OBJECT_ID		NUMBER
OBJECT_TYPE		VARCHAR2(18)
CREATED		DATE
LAST_DDL_TIME		DATE
TIMESTAMP		VARCHAR2(19)
STATUS		VARCHAR2(7)
TEMPORARY		VARCHAR2(1)
GENERATED		VARCHAR2(1)
SECONDARY		VARCHAR2(1)

SQL> select object_name from user_objects;

OBJECT_NAME

BONUS
DEPT
EMP
SALGRADE

4) Adaugarea unei constrangeri pe o tabela:

SQL> alter table dept add constraint deptno_pk primary key (deptno);

Table altered.

```
SQL> alter table emp add constraint emp_fk foreign key (deptno) references dept(deptno);
```

Table altered.

```
SQL> select object_name, object_type from user_objects;
```

OBJECT_NAME	OBJECT_TYPE
BONUS	TABLE
DEPT	TABLE
DEPTNO_PK	INDEX
EMP	TABLE
SALGRADE	TABLE
V_SAL	VIEW

5) Vizualizare toate constrangerile aferente userului curent

```
SQL> desc user_constraints
```

Name	Null?	Type
OWNER	NOT NULL	VARCHAR2(30)
CONSTRAINT_NAME	NOT NULL	VARCHAR2(30)
CONSTRAINT_TYPE		VARCHAR2(1)
TABLE_NAME	NOT NULL	VARCHAR2(30)
SEARCH_CONDITION		LONG
R_OWNER		VARCHAR2(30)
R_CONSTRAINT_NAME		VARCHAR2(30)
DELETE_RULE		VARCHAR2(9)
STATUS		VARCHAR2(8)
DEFERRABLE		VARCHAR2(14)
DEFERRED		VARCHAR2(9)
VALIDATED		VARCHAR2(13)
GENERATED		VARCHAR2(14)
BAD		VARCHAR2(3)
RELY		VARCHAR2(4)
LAST_CHANGE		DATE
INDEX_OWNER		VARCHAR2(30)
INDEX_NAME		VARCHAR2(30)
INVALID		VARCHAR2(7)
VIEW_RELATED		VARCHAR2(14)

```
SQL> select owner,constraint_name,constraint_type, table_name from user_constraints;
```

OWNER	CONSTRAINT_NAME	C	TABLE_NAME
UBD1	DEPTNO_PK	P	DEPT
UBD1	EMP_FK	R	EMP

6) Vizualizare structura tabelara

SQL> desc user_tab_columns

Name	Null?	Type
TABLE_NAME	NOT NULL	VARCHAR2(30)
COLUMN_NAME	NOT NULL	VARCHAR2(30)
DATA_TYPE		VARCHAR2(106)
DATA_TYPE_MOD		VARCHAR2(3)
DATA_TYPE_OWNER		VARCHAR2(30)
DATA_LENGTH	NOT NULL	NUMBER
DATA_PRECISION		NUMBER
DATA_SCALE		NUMBER
NULLABLE		VARCHAR2(1)
COLUMN_ID		NUMBER
DEFAULT_LENGTH		NUMBER
DATA_DEFAULT		LONG
NUM_DISTINCT		NUMBER
LOW_VALUE		RAW(32)
HIGH_VALUE		RAW(32)
DENSITY		NUMBER
NUM_NULLS		NUMBER
NUM_BUCKETS		NUMBER
LAST_ANALYZED		DATE
SAMPLE_SIZE		NUMBER
CHARACTER_SET_NAME		VARCHAR2(44)
CHAR_COL_DECL_LENGTH		NUMBER
GLOBAL_STATS		VARCHAR2(3)
USER_STATS		VARCHAR2(3)
AVG_COL_LEN		NUMBER
CHAR_LENGTH		NUMBER
CHAR_USED		VARCHAR2(1)
V80_FMT_IMAGE		VARCHAR2(3)
DATA_UPGRADED		VARCHAR2(3)

SQL> select table_name,column_name,data_type from user_tab_columns
where table_name='EMP';

TABLE_NAME	COLUMN_NAME	DATA_TYPE
EMP	EMPNO	NUMBER
EMP	ENAME	VARCHAR2
EMP	JOB	VARCHAR2
EMP	MGR	NUMBER
EMP	HIREDATE	DATE

EMP	SAL	NUMBER
EMP	COMM	NUMBER
EMP	DEPTNO	NUMBER

7) Toate obiectele create de alti utilizatori la care are acces utilizatorul curent:

SQL> select table_name from dictionary where table_name like 'ALL%';

```
TABLE_NAME
-----
ALL_XML_SCHEMAS
ALL_XML_SCHEMAS2
ALL_CATALOG
ALL_CLUSTERS
ALL_COL_COMMENTS
ALL_COL_PRIVS
ALL_COL_PRIVS_MADE
ALL_COL_PRIVS_RECD
ALL_ENCRYPTED_COLUMNS
ALL_DB_LINKS
ALL_INDEXES
ALL_IND_COLUMNS
ALL_IND_EXPRESSIONS
ALL_JOIN_IND_COLUMNS
ALL_OBJECTS
ALL_PROCEDURES
ALL_ERRORS
```

8) Vizualizare obiecte pentru toti utilizatorii

SQL> desc all_objects

Name	Null?	Type
OWNER	NOT NULL	VARCHAR2(30)
OBJECT_NAME	NOT NULL	VARCHAR2(30)
SUBOBJECT_NAME		VARCHAR2(30)
OBJECT_ID	NOT NULL	NUMBER
DATA_OBJECT_ID		NUMBER
OBJECT_TYPE		VARCHAR2(18)
CREATED	NOT NULL	DATE
LAST_DDL_TIME	NOT NULL	DATE
TIMESTAMP		VARCHAR2(19)
STATUS		VARCHAR2(7)
TEMPORARY		VARCHAR2(1)
GENERATED		VARCHAR2(1)
SECONDARY		VARCHAR2(1)

SQL> select owner,object_name,object_type from all_objects where owner='SCOTT';

OWNER	OBJECT_NAME	OBJECT_TYPE
SCOTT	BONUS	TABLE
SCOTT	DEPT	TABLE
SCOTT	EMP	TABLE
SCOTT	PK_DEPT	INDEX
SCOTT	PK_EMP	INDEX
SCOTT	SALGRADE	TABLE
SCOTT	V_SAL	VIEW

9) Vizualizare toate obiectele bazei de date

SQL> select table_name from dictionary where table_name like 'DBA%';

10) Vizualizare informatii despre userii creati pe baza de date

SQL> desc dba_users

Name	Null?	Type
USERNAME	NOT NULL	VARCHAR2(30)
USER_ID	NOT NULL	NUMBER
PASSWORD		VARCHAR2(30)
ACCOUNT_STATUS	NOT NULL	VARCHAR2(32)
LOCK_DATE		DATE
EXPIRY_DATE		DATE
DEFAULT_TABLESPACE	NOT NULL	VARCHAR2(30)
TEMPORARY_TABLESPACE	NOT NULL	VARCHAR2(30)
CREATED	NOT NULL	DATE
PROFILE	NOT NULL	VARCHAR2(30)
INITIAL_RSRC_CONSUMER_GROUP		VARCHAR2(30)
EXTERNAL_NAME		VARCHAR2(4000)

SQL> select username,password from dba_users;

USERNAME	PASSWORD
SYS	C25502B5BB0A298F
SYSTEM	13107DAA798B5279
STUD2	8559EA3BEAC5C774
STUD3	449984BB0BA7005B
UBD1	6CB27176BF298E4B
STUD1	A9F4036978CEC351
SCOTT	F894844C34402B67
UBD2	E8BEF81B3D8D339C

UBD3	D02B9B6DE306737B
HR	6399F3B38EDF3288
MDSYS	72979A94BAD2AF80
SH	9793B3777CD3BD1A
PM	72E382A52E89575A
RMAN	E7B5D92911C831E1

36 rows selected.

11) Vizualizare informatii despre tablespace-uri create pe baza de date

SQL> desc dba_tablespaces

Name	Null?	Type
-----	-----	-----
TABLESPACE_NAME	NOT NULL	VARCHAR2(30)
BLOCK_SIZE	NOT NULL	NUMBER
INITIAL_EXTENT		NUMBER
NEXT_EXTENT		NUMBER
MIN_EXTENTS	NOT NULL	NUMBER
MAX_EXTENTS		NUMBER
PCT_INCREASE		NUMBER
MIN_EXTLEN		NUMBER
STATUS		VARCHAR2(9)
CONTENTS		VARCHAR2(9)
LOGGING		VARCHAR2(9)
FORCE_LOGGING		VARCHAR2(3)
EXTENT_MANAGEMENT		VARCHAR2(10)
ALLOCATION_TYPE		VARCHAR2(9)
PLUGGED_IN		VARCHAR2(3)
SEGMENT_SPACE_MANAGEMENT		VARCHAR2(6)
DEF_TAB_COMPRESSION		VARCHAR2(8)
RETENTION		VARCHAR2(11)
BIGFILE		VARCHAR2(3)

SQL> select tablespace_name,block_size,max_extents,status from dba_tablespaces;

TABLESPACE_NAME	BLOCK_SIZE	MAX_EXTENTS	STATUS
-----	-----	-----	-----
SYSTEM	8192	2147483645	ONLINE
UNDOTBS1	8192	2147483645	ONLINE
SYSAUX	8192	2147483645	ONLINE
TEMP	8192		ONLINE
USERS	8192	2147483645	ONLINE
EXAMPLE	8192	2147483645	ONLINE
BD_DATA	8192	2147483645	ONLINE
BD_TEMP	8192		ONLINE

8 rows selected.

12) Vizualizare informatii despre indecsi:

SQL> desc dba_indexes

Name	Null?	Type
OWNER	NOT NULL	VARCHAR2(30)
INDEX_NAME	NOT NULL	VARCHAR2(30)
INDEX_TYPE		VARCHAR2(27)
TABLE_OWNER	NOT NULL	VARCHAR2(30)
TABLE_NAME	NOT NULL	VARCHAR2(30)
TABLE_TYPE		VARCHAR2(11)
UNIQUENESS		VARCHAR2(9)
COMPRESSION		VARCHAR2(8)
PREFIX_LENGTH		NUMBER
TABLESPACE_NAME		VARCHAR2(30)
INI_TRANS		NUMBER
MAX_TRANS		NUMBER
INITIAL_EXTENT		NUMBER
NEXT_EXTENT		NUMBER
MIN_EXTENTS		NUMBER
MAX_EXTENTS		NUMBER
PCT_INCREASE		NUMBER
PCT_THRESHOLD		NUMBER
INCLUDE_COLUMN		NUMBER
FREELISTS		NUMBER
FREELIST_GROUPS		NUMBER
PCT_FREE		NUMBER
LOGGING		VARCHAR2(3)
BLEVEL		NUMBER
LEAF_BLOCKS		NUMBER
DISTINCT_KEYS		NUMBER
AVG_LEAF_BLOCKS_PER_KEY		NUMBER
AVG_DATA_BLOCKS_PER_KEY		NUMBER
CLUSTERING_FACTOR		NUMBER
STATUS		VARCHAR2(8)
NUM_ROWS		NUMBER
SAMPLE_SIZE		NUMBER
LAST_ANALYZED		DATE
DEGREE		VARCHAR2(40)
INSTANCES		VARCHAR2(40)
PARTITIONED		VARCHAR2(3)
TEMPORARY		VARCHAR2(1)
GENERATED		VARCHAR2(1)

SECONDARY	VARCHAR2(1)
BUFFER_POOL	VARCHAR2(7)
USER_STATS	VARCHAR2(3)
DURATION	VARCHAR2(15)
PCT_DIRECT_ACCESS	NUMBER
ITYP_OWNER	VARCHAR2(30)
ITYP_NAME	VARCHAR2(30)
PARAMETERS	VARCHAR2(1000)
GLOBAL_STATS	VARCHAR2(3)
DOMIDX_STATUS	VARCHAR2(12)
DOMIDX_OPSTATUS	VARCHAR2(6)
FUNCIDX_STATUS	VARCHAR2(8)
JOIN_INDEX	VARCHAR2(3)
IOT_REDUNDANT_PKEY_ELIM	VARCHAR2(3)
DROPPED	VARCHAR2(3)

```
SQL> select owner,index_name,index_type,table_name from dba_indexes
       where owner in ('SCOTT');
```

OWNER	INDEX_NAME	INDEX_TYPE	TABLE_NAME
SCOTT	STI_PK	NORMAL	STUDENTI
SCOTT	CAG_PK	NORMAL	CATALOG
SCOTT	DIE_PK	NORMAL	DISCIPLINE
SCOTT	PK_DEPT	NORMAL	DEPT
SCOTT	PK_EMP	NORMAL	EMP