

**STORAGE STRUCTURE**  
**( SEGMENTS AND DATABASE BLOCKS )**  
(Cap. 9)

1) Informatii despre starea unui tablespace si parametrii specifici blocurilor 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)

SQL> select tablespace\_name,block\_size,initial\_extent,min\_extents, max\_extents, status  
from dba\_tablespaces where tablespace\_name='BD\_DATA';

TABLESPACE_NAME	BLOCK_SIZE	INITIAL_EXTENT	MIN_EXTENTS	MAX_EXTENTS	STATUS
BD_DATA	8192	65536	1	2,147E+09	ONLINE

2) Informatii despre segmentele de tip tabela create intr-un tablespace

SQL> select owner,segment\_name,segment\_type, tablespace\_name, blocks, extents  
from dba\_segments where owner='SCOTT'and segment\_type='TABLE'

OWNER	SEGMENT_NAME			SEGMENT_TYPE
TABLESPACE_NAME		BLOCKS	EXTENTS	
SCOTT SYSTEM	DEPT	8	1	TABLE
SCOTT SYSTEM	EMP	8	1	TABLE
SCOTT SYSTEM	BONUS	8	1	TABLE
SCOTT SYSTEM	SALGRADE	8	1	TABLE

### 3) Informatii despre dimensiunea extensiilor alocate unui segment

SQL> desc dba\_extents

Name	Null?	Type
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OWNER		VARCHAR2(30)
SEGMENT_NAME		VARCHAR2(81)
PARTITION_NAME		VARCHAR2(30)
SEGMENT_TYPE		VARCHAR2(18)
TABLESPACE_NAME		VARCHAR2(30)
EXTENT_ID		NUMBER
FILE_ID		NUMBER
BLOCK_ID		NUMBER
BYTES		NUMBER
BLOCKS		NUMBER
RELATIVE_FNO		NUMBER

SQL> select owner, segment\_name, segment\_type, tablespace\_name, bytes, blocks from dba\_extents  
where owner='SCOTT' and segment\_name='EMP';

OWNER	SEGMENT_NAME	SEGMENT_TYPE	TABLESPACE_NAME	BYTES	BLOCKS
-----	-----	-----	-----	-----	-----
SCOTT	EMP	TABLE	SYSTEM	65536	8

SQL>select segment\_name, extent\_id, file\_id,block\_id, blocks from dba\_extents  
where owner='SCOTT' and segment\_name='EMP' ;

SEGMENT_NAME	EXTENT_ID	FILE_ID	BLOCK_ID	BLOCKS
-----	-----	-----	-----	-----
EMP	0	1	50465	8

### 4) Informatii despre extensiile libere dintr-un tablespace

SQL> desc dba\_free\_space

Name	Null?	Type
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TABLESPACE_NAME		VARCHAR2(30)
FILE_ID		NUMBER
BLOCK_ID		NUMBER
BYTES		NUMBER
BLOCKS		NUMBER
RELATIVE_FNO		NUMBER

SQL> select tablespace\_name, count(\*), max(blocks), sum(blocks) from dba\_free\_space  
group by tablespace\_name;

TABLESPACE_NAME	COUNT(*)	MAX(BLOCKS)	SUM(BLOCKS)
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CWMLITE	2	1328	1360
DRSYS	1	1320	1320

EXAMPLE	1	19032	19032
INDX	1	3192	3192
PBD_DATA	2	166648	166664
ODM	1	1368	1368
SYSTEM	2	12536	12568
TOOLS	1	504	504
UNDOTBS1	10	19960	24264
USERS	1	2736	2736

##### 5) Unificarea spatiilor contigue dintr-un tablespace

SQL> desc dba\_free\_space\_coalesced

Name	Null?	Type
TABLESPACE_NAME		VARCHAR2(30)
TOTAL_EXTENTS		NUMBER
EXTENTS_COALESCED		NUMBER
PERCENT_EXTENTS_COALESCED		NUMBER
TOTAL_BYTES		NUMBER
BYTES_COALESCED		NUMBER
TOTAL_BLOCKS		NUMBER
BLOCKS_COALESCED		NUMBER
PERCENT_BLOCKS_COALESCED		NUMBER

SQL> ALTER TABLESPACE BD COALESCE ;

SQL> select tablespace\_name,total\_extents, percent\_extents\_coalesced from dba\_free\_space\_coalesced;

TABLESPACE_NAME	TOTAL_EXTENTS	PERCENT_EXTENTS_COALESCED
SYSTEM	2	100
UNDOTBS1	10	100
CWMLITE	2	100
DRSYS	1	100
EXAMPLE	1	100
INDX	1	100
ODM	1	100
TOOLS	1	100
USERS	1	100
XDB	1	100
BD_DATA	2	100