-1、查看表空间的名称及大小   
SELECT t.tablespace\_name, round(SUM(bytes / (1024 \* 1024)), 0) ts\_size   
FROM dba\_tablespaces t, dba\_data\_files d   
WHERE t.tablespace\_name = d.tablespace\_name   
GROUP BY t.tablespace\_name;   
--2、查看表空间物理文件的名称及大小   
SELECT tablespace\_name,   
file\_id,   
file\_name,   
round(bytes / (1024 \* 1024), 0) total\_space   
FROM dba\_data\_files   
ORDER BY tablespace\_name;   
--3、查看回滚段名称及大小   
SELECT segment\_name,   
tablespace\_name,   
r.status,   
(initial\_extent / 1024) initialextent,   
(next\_extent / 1024) nextextent,   
max\_extents,   
v.curext curextent   
FROM dba\_rollback\_segs r, v$rollstat v   
WHERE r.segment\_id = v.usn(+)   
ORDER BY segment\_name;   
--4、查看控制文件   
SELECT NAME FROM v$controlfile;   
--5、查看日志文件   
SELECT MEMBER FROM v$logfile;   
--6、查看表空间的使用情况   
SELECT SUM(bytes) / (1024 \* 1024) AS free\_space, tablespace\_name   
FROM dba\_free\_space   
GROUP BY tablespace\_name;   
SELECT a.tablespace\_name,   
a.bytes total,   
b.bytes used,   
c.bytes free,   
(b.bytes \* 100) / a.bytes "% USED ",   
(c.bytes \* 100) / a.bytes "% FREE "   
FROM sys.sm$ts\_avail a, sys.sm$ts\_used b, sys.sm$ts\_free c   
WHERE a.tablespace\_name = b.tablespace\_name   
AND a.tablespace\_name = c.tablespace\_name;   
--7、查看数据库库对象   
SELECT owner, object\_type, status, COUNT(\*) count#   
FROM all\_objects   
GROUP BY owner, object\_type, status;   
--8、查看数据库的版本　   
SELECT version   
FROM product\_component\_version   
WHERE substr(product, 1, 6) = 'Oracle';   
--9、查看数据库的创建日期和归档方式   
SELECT created, log\_mode, log\_mode FROM v$database;

SQL2:

复制代码代码如下:

--1G=1024MB   
--1M=1024KB   
--1K=1024Bytes   
--1M=11048576Bytes   
--1G=1024\*11048576Bytes=11313741824Bytes   
SELECT a.tablespace\_name "表空间名",   
total "表空间大小",   
free "表空间剩余大小",   
(total - free) "表空间使用大小",   
total / (1024 \* 1024 \* 1024) "表空间大小(G)",   
free / (1024 \* 1024 \* 1024) "表空间剩余大小(G)",   
(total - free) / (1024 \* 1024 \* 1024) "表空间使用大小(G)",   
round((total - free) / total, 4) \* 100 "使用率 %"   
FROM (SELECT tablespace\_name, SUM(bytes) free   
FROM dba\_free\_space   
GROUP BY tablespace\_name) a,   
(SELECT tablespace\_name, SUM(bytes) total   
FROM dba\_data\_files   
GROUP BY tablespace\_name) b   
WHERE a.tablespace\_name = b.tablespace\_name

当我们的Oracle系统数据越积越多的时候，加之原来的系统规划没有做好，这时经常出现某个表空间的空间不够的情况。当然我们也可以在建立表空间的时候指定不受限制的表空间文件大小

例如 我们可以通过以下命令建立不受限制的表空间文件  
SQL>create tablespace testts logging  
2 datafile ‘/opt/oracle/oradata/testts01.dbf’ size 1000M autoextend on next 500M maxsize unlimited,  
3 datafile ‘/opt/oracle/oradata/testts02.dbf’ size 1000M autoextend on next 500M maxsize unlimited  
4 extent management LOCAL;  
这里就是指定不受限制的数据文件(其实这里会受到一定的oracle的block限制，可以参考小文件block的文件大小限制)。

但是我们如果没有在create的时候指定unlimited，那么我们将面临表空间不够的考验。

那么当我们的表空间不够了，我们需要如何操作哟。其实很简单，这里我们提供两种方式

1. 添加新的表空间文件  
SQL>alter tablespace testts add dafile ‘/opt/oracle/oradata/testts03.dbf’ size 1000M autoextend on next 500M maxsize 4000M;

2. resize已有的表空间文件  
SQL>alter database datafile ‘/opt/oracle/oradata/testts02.dbf’ offline;

SQL>alter database datafile ‘/opt/oracle/oradata/testts02.dbf’ resize 4000M;

SQL>alter database datafile ‘/opt/oracle/oradata/testts02.dbf’ online;

这两种方法可以根据自己的实际情况进行合适的选择。

**Test for undo tablespace**

/\*create new undo tabalspace\*/

create undo tablespace test1\_undo datafile '/u01/oradata/ora11g/testundotbs01.dbf' size 2m;

show parameter undo;

/\*switch current undo tablespace to new one\*/

alter system set undo\_tablespace=test1\_undo;

show parameter undo;

/\*increase datafile size\*/

alter database datafile '/u01/oradata/ora11g/testundotbs01.dbf' resize 10000m;

**// ORA-30036: unable to extend segment by 8 in undo tablespace 'UNDOTBS1'Show parameter undo\_tablespace;**

show parameter undo;

/\*check undo\_tablespace usage status\*/

SELECT a.tablespace\_name as tablespace\_name,

to\_char(b.total/1024/1024,999999.99) as Total,

to\_char((b.total-a.free)/1024/1024,999999.99) as Used,

to\_char(a.free/1024/1024,999999.99) as Free,

to\_char(round((total-free)/total,4)\*100,999.99) as Used\_Rate

FROM (SELECT tablespace\_name, sum(bytes) free FROM DBA\_FREE\_SPACE GROUP BY tablespace\_name) a,

(SELECT tablespace\_name, sum(bytes) total FROM DBA\_DATA\_FILES GROUP BY tablespace\_name ) b

WHERE a.tablespace\_name=b.tablespace\_name

AND a.tablespace\_name='UNDOTBS1'

ORDER BY a.tablespace\_name;

/\*check datafile path for tablespace\*/

SELECT tablespace\_name,

file\_id,

file\_name,

round(bytes / (1024 \* 1024), 0) total\_space

FROM dba\_data\_files

ORDER BY tablespace\_name;

/\*increase datafile size in 2 methods\*/

alter database datafile '/u01/oradata/ora11g/undotbs01.dbf' resize 10000m;

alter tablespace UNDOTBS1 add datafile '/u01/oradata/ora11g/undotbs01.dbf'size 1000m;

Oracle modifies user’s default table space:

Alter user XXX default tablespace XXXXX;