

Oracle Tuning / Checks

- kleine SQL Sammlung -

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Checks mit SQL

- Datensicherung

Wieviel gültige RMAN-Sicherungen sind in den letzten zwei Tagen gelaufen?

View: V\$RMAN_STATUS

```
select
  count(*)
from
  V$RMAN_STATUS
where
  operation='BACKUP' and
  status='COMPLETED' and
  object_type in ('DB INCR','DB FULL') and
  round(sysdate - end_time) < 3";
```

Checks mit SQL

- Füllgrad Tablespaces

Views: DBA_DATA_FILES
 DBA_FREE_SPACE

```
select a.TABLESPACE_NAME, a.BYTES bytes_used, b.BYTES bytes_free, b.largest,  
round(((a.BYTES-b.BYTES)/a.BYTES)*100,0) percent_used
```

from

```
(select TABLESPACE_NAME, sum(BYTES) BYTES from dba_data_files  
  group by TABLESPACE_NAME) a,
```

```
(select TABLESPACE_NAME, sum(BYTES) BYTES , max(BYTES) largest from dba_free_space  
  group by TABLESPACE_NAME) b
```

```
where a.TABLESPACE_NAME=b.TABLESPACE_NAME
```

Checks mit SQL

- Defekte Indizes

Views: DBA_INDEXES

```
select owner, index_name, status from dba_indexes  
where status not in ('VALID', 'N/A');
```

Checks mit SQL

- Warum hängt shutdown immediate

Views: V\$BH
V\$FAST_START_TRANSACTIONS

```
select count(*) from v$bh where dirty='Y'
```

- Wie lange geht der Restart noch

(nach shutdown abort)

```
SELECT xid,state,undoblocksdone,undoblockstotal, pid,cputime,rcvservers  
FROM v$fast_start_transactions;
```

Checks mit SQL

- Redologs zu klein?

Views: V\$LOGHIST

```
select
  t2.sequence# as seqno,
  to_char(t2.first_time,'DD.MM.YY Hh24:MI:SS') as zeitpunkt,
  round((t2.first_time - t1.first_time)*86400,0) AS zeitabstand
from
  v$loghist t1, v$loghist t2
where
  t2.first_change# = t1.switch_change#(+)
  and (t2.first_time - t1.first_time)*86400 < 60
order by
  t1.first_time desc
```

→ Wann wurde ein Logswitch nach weniger als 60sek durchgeführt

Checks mit SQL

- Diagnose-Dateien

Views: V\$DIAG_INFO

```
select * from v$diag_info;
```

→ Pfad der Alert-Log und Tracefiles

Checks mit SQL

- Alert-Log checken

Views: V\$DIAG_ALERT_EXT

```
select
  originating_timestamp, component_id
from
  v$diag_alert_ext
where
  component_id IN('tnslsnr','rdbms') and
  message_text like '%ORA-%' and
  originating_timestamp > sysdate - 10
order by
  datum desc
```

→ ORA-Fehlermeldungen im Alert-Log

Checks mit SQL

- Alert-Log checken

Views: V\$DIAG_ALERT_EXT

```
select  
  originating_timestamp, component_id  
from  
  v$diag_alert_ext  
where  
  component_id = 'rdbms' and  
  message_text LIKE 'Checkpoint not%' and  
  originating_timestamp > sysdate - 14
```

→ “Checkpoint not complete”-Meldungen der letzten 14 Tage

Checks mit SQL

- Alert-Log checken

Views: V\$DIAG_ALERT_EXT

```
select  
  originating_timestamp, message_text, component_id  
from  
  v$diag_alert_ext  
where  
  message_text LIKE '%ALTER SYSTEM SET%'
```

→ Parameteränderungen an der DB

Checks mit SQL

- Table-Scans

Views: V\$SQL_PLAN
V\$SQL

```
select sql_fulltext from v$sql where sql_id in  
(  
    select sql_id from v$sql_plan  
    where options = 'FULL' and operation = 'TABLE ACCESS'  
)
```

→ Alle Full-Table-Scans

Checks mit SQL

- Aktuell abgesetzte SQLs

Views: V\$SQLAREA

```
select sql_text from v$sqlarea order by first_load_time;
```

Checks mit SQL

- Aktuelle Langläufer

Views: V\$SESSION_LONGOPS

```
select  
  *  
from  
  v$session_longops  
where  
  sofar < totalwork;
```

Checks mit SQL

Kursempfehlung:

Muniqsoft: Datenbank – Monitoring

<http://www.muniqsoft.de>