❁ 115. User Level Pump

```
user level pump는 현업에서 가장 많이 쓰인다.

실습 1.
1. PROD 쪽에서 scott이 가지고 있는 모든 객체를 user level로 export pump 하시오.
(PROD)
expdp scott/tiger directory=datapump_dir schemas=scott dumpfile=scott.dmp

-> 만약에서 에러가 난다면 아래의 코드로 실행하기
rm scott.dmp
expdp system/oracle_4U directory=datapump_dir schemas=scott dumpfile=scott.dmp
```

```
[PROD:~]$ expdp scott/tiger directory=datapump_dir schemas=scott dumpfile=scott.
dmp

Export: Release 11.2.0.1.0 - Production on Thu Feb 22 15:53:32 2024

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Connected to: Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - Produc
tion
With the Partitioning, OLAP, Data Mining and Real Application Testing options
Starting "SCOTT"."SYS_EXPORT_SCHEMA_01":  scott/******** directory=datapump_dir
schemas=scott dumpfile=scott.dmp
Estimate in progress using BLOCKS method...
Processing object type SCHEMA_EXPORT/TABLE/TABLE_DATA
Total estimation using BLOCKS method: 60.68 MB
Processing object type SCHEMA_EXPORT/USER
Processing object type SCHEMA_EXPORT/SYSTEM_GRANT
Processing object type SCHEMA_EXPORT/ROLE_GRANT
Processing object type SCHEMA_EXPORT/DEFAULT_ROLE
Processing object type SCHEMA_EXPORT/PRE_SCHEMA/PROCACT_SCHEMA
Processing object type SCHEMA_EXPORT/TABLE/TABLE
Processing object type SCHEMA_EXPORT/TABLE/INDEX/INDEX
Processing object type SCHEMA_EXPORT/TABLE/CONSTRAINT/CONSTRAINT
Processing object type SCHEMA_EXPORT/TABLE/INDEX/STATISTICS/INDEX_STATISTICS
Processing object type SCHEMA_EXPORT/TABLE/COMMENT
Processing object type SCHEMA_EXPORT/TABLE/AUDIT_OBJ
Processing object type SCHEMA_EXPORT/TABLE/INDEX/FUNCTIONAL_AND_BITMAP/INDEX
Processing object type SCHEMA_EXPORT/TABLE/INDEX/STATISTICS/FUNCTIONAL_AND_BITMA
P/INDEX_STATISTICS
Processing object type SCHEMA_EXPORT/TABLE/STATISTICS/TABLE_STATISTICS
Processing object type SCHEMA_EXPORT/TABLE/STATISTICS/USER_PREF_STATISTICS
. . exported "SCOTT"."SALES100"                          29.62 MB  918843 rows
. . exported "SCOTT"."EMP100"                            9.070 MB  229376 rows
. . exported "SCOTT"."ORDERS"                            4.394 MB  100000 rows
. . exported "SCOTT"."DEPT"                              6.023 KB       8 rows
. . exported "SCOTT"."DEPT_NEW"                          5.937 KB       4 rows
. . exported "SCOTT"."EMP"                               9.132 KB      28 rows
. . exported "SCOTT"."EMP1000"                           8.570 KB      14 rows
. . exported "SCOTT"."EMP612"                            9.132 KB      28 rows
. . exported "SCOTT"."EMP7100"                           5.484 KB       3 rows
. . exported "SCOTT"."EMP8100"                           5.515 KB       6 rows
. . exported "SCOTT"."EMP_INSA"                          20.25 KB      14 rows
. . exported "SCOTT"."EMP_PSH"                           8.570 KB      14 rows
. . exported "SCOTT"."PRODUCTS"                          26.16 KB      72 rows
. . exported "SCOTT"."SALGRADE"                          6.023 KB       6 rows
. . exported "SCOTT"."BONUS"                                 0 KB       0 rows
. . exported "SCOTT"."CHAINED_ROWS"                          0 KB       0 rows
. . exported "SCOTT"."EMP10"                                 0 KB       0 rows
. . exported "SCOTT"."EMP800"                                0 KB       0 rows
Master table "SCOTT"."SYS_EXPORT_SCHEMA_01" successfully loaded/unloaded
******************************************************************************
Dump file set for SCOTT.SYS_EXPORT_SCHEMA_01 is:
  /home/oracle/pump_prod/scott.dmp
Job "SCOTT"."SYS_EXPORT_SCHEMA_01" successfully completed at 15:53:53
```

```
2. psh2에 jones2계정을 생성한다.
create user jones2 identified by tiger;
grant dba to jones2;

3. export 받은 파일을 psh2 쪽 디렉토리로 copy 한다.
(PROD)
```

```
cp /home/oracle/pump_prod/scott.dmp /home/oracle/pump_psh2/scott.dmp

4. psh2 db에 user level로 import 한다.
(psh2)
impdp system/oracle directory=psh2_dir dumpfile=scott.dmp remap_schema=scott:jones2 remap_tables

(PROD scott)
select table_name, tablespace_name from user_tables;
(psh2 jones2)
select table_name, tablespace_name from user_tables;
```

```
PROD(SCOTT) >  select table_name, tablespace_name from user_tables;

TABLE_NAME                     TABLESPACE_NAME
------------------------------ ------------------------------
EMP_INSA                       INSA02
CHAINED_ROWS                   EXAMPLE
EMP612                         TS100
EMP8100                        TS8100
EMP7100                        TS7100
BONUS                          EXAMPLE
PRODUCTS                       EXAMPLE
SALES100                       EXAMPLE
DEPT_NEW                       EXAMPLE
SALGRADE                       EXAMPLE
EMP                            EXAMPLE

TABLE_NAME                     TABLESPACE_NAME
------------------------------ ------------------------------
DEPT                           EXAMPLE
EMP800                         TS800
EMP_PSH                        PSH
EMP1000                        TS100
ORDERS                         EXAMPLE
EMP100                         TEST100
EMP10                          SYSTEM

18 rows selected.
```

```
psh2(JONES2) >  select table_name, tablespace_name from user_tables;

TABLE_NAME                     TABLESPACE_NAME
------------------------------ ------------------------------
BONUS                          TS450
PRODUCTS                       TS450
SALES100                       TS450
DEPT_NEW                       TS450
SALGRADE                       TS450
EMP                            TS450
DEPT                           TS450
CHAINED_ROWS                   TS450
ORDERS                         TS450
EMP8100                        TS8100
EMP7100                        TS7100

TABLE_NAME                     TABLESPACE_NAME
------------------------------ ------------------------------
EMP10                          SYSTEM

12 rows selected.
```

```
5. 만약에 최종적으로 테이블이 모두 안 넘어갔으면 jones2유저를 drop하고 다시 생성한 다음에
다시 import를 하시오.
(psh2 sys)
drop user jones2 cascade;

create user jones2 identified by tiger;
grant dba to jones2;

-> 다시 할 때는 PROD scott에 있는 모든 tablespace들을 다 써준다.
select distinct tablespace_name from user_tables;
(위의 실습에서 테이블 스페이스 system, ts7100, ts8100은 실행이 되서 뺐음)

impdp system/oracle directory=psh2_dir dumpfile=scott.dmp remap_schema=scott:jones2 remap_tables
```

```
. . imported "JONES2"."EMP"                              9.132 KB      28 rows
. . imported "JONES2"."EMP1000"                          8.570 KB      14 rows
. . imported "JONES2"."EMP612"                           9.132 KB      28 rows
. . imported "JONES2"."EMP7100"                          5.484 KB       3 rows
. . imported "JONES2"."EMP8100"                          5.515 KB       6 rows
. . imported "JONES2"."EMP_INSA"                         20.25 KB      14 rows
. . imported "JONES2"."EMP_PSH"                          8.570 KB      14 rows
. . imported "JONES2"."PRODUCTS"                         26.16 KB      72 rows
. . imported "JONES2"."SALGRADE"                         6.023 KB       6 rows
. . imported "JONES2"."BONUS"                                0 KB       0 rows
. . imported "JONES2"."CHAINED_ROWS"                         0 KB       0 rows
. . imported "JONES2"."EMP10"                                0 KB       0 rows
. . imported "JONES2"."EMP800"                               0 KB       0 rows
Processing object type SCHEMA_EXPORT/TABLE/INDEX/INDEX
Processing object type SCHEMA_EXPORT/TABLE/CONSTRAINT/CONSTRAINT
Processing object type SCHEMA_EXPORT/TABLE/INDEX/STATISTICS/INDEX_STATISTICS
Processing object type SCHEMA_EXPORT/TABLE/COMMENT
Processing object type SCHEMA_EXPORT/TABLE/AUDIT_OBJ
Processing object type SCHEMA_EXPORT/TABLE/INDEX/FUNCTIONAL_AND_BITMAP/INDEX
Processing object type SCHEMA_EXPORT/TABLE/INDEX/STATISTICS/FUNCTIONAL_AND_BITMA
Processing object type SCHEMA_EXPORT/TABLE/STATISTICS/TABLE_STATISTICS
Processing object type SCHEMA_EXPORT/TABLE/STATISTICS/USER_PREF_STATISTICS
Job "SYSTEM"."SYS_IMPORT_FULL_01" completed with 1 error(s) at 16:26:37
```

문제 1. 양쪽에서 스키마 레벨로 통계정보를 수집하고 user_tables를 조회해서 테이블 이름과 num_rows를 조회하시오.

```
(PROD scott)
exec dbms_stats.gather_schema_stats('SCOTT');
select table_name, num_rows from user_tables;

(psh2 jones2)
exec dbms_stats.gather_schema_stats('JONES2');
select table_name, num_rows from user_tables;
```

```
PROD(SCOTT) > select table_name, tablespace_name from user_tables;

TABLE_NAME                     TABLESPACE_NAME
------------------------------ ------------------------------
EMP_INSA                       INSA02
CHAINED_ROWS                   EXAMPLE
EMP612                         TS100
EMP8100                        TS8100
EMP7100                        TS7100
BONUS                          EXAMPLE
PRODUCTS                       EXAMPLE
SALES100                       EXAMPLE
DEPT_NEW                       EXAMPLE
SALGRADE                       EXAMPLE
EMP                            EXAMPLE

TABLE_NAME                     TABLESPACE_NAME
------------------------------ ------------------------------
DEPT                           EXAMPLE
EMP800                         TS800
EMP_PSH                        PSH
EMP1000                        TS100
ORDERS                         EXAMPLE
EMP100                         TEST100
EMP10                          SYSTEM

18 rows selected.
```

```
psh2(JONES2) > select table_name, tablespace_name from user_tables;

TABLE_NAME                     TABLESPACE_NAME
------------------------------ ------------------------------
EMP612                         TS450
EMP8100                        TS8100
EMP7100                        TS7100
BONUS                          TS450
PRODUCTS                       TS450
SALES100                       TS450
DEPT_NEW                       TS450
SALGRADE                       TS450
EMP                            TS450
DEPT                           TS450
EMP_INSA                       TS450

TABLE_NAME                     TABLESPACE_NAME
------------------------------ ------------------------------
EMP800                         TS450
CHAINED_ROWS                   TS450
EMP_PSH                        TS450
EMP1000                        TS450
ORDERS                         TS450
EMP100                         TS450
EMP10                          SYSTEM

18 rows selected.
```

문제 2. PROD쪽과 psh2쪽의 테이블을 비교하기 위해 db링크를 생성하고 조회했을 때 잘 이행되는지 확인하시오.

```
(PROD scott)
create public database link psh2_jones2_link
connect to jones2
identified by tiger
using '192.168.19.40:1521/psh2';

select * from dept@psh2_jones2_link ;

select table_name, num_rows
from user_tables
minus
select table_name, num_rows
from user_tables@psh2_jones2_link ;
```

```
PROD(SCOTT) > select table_name, num_rows
from user_tables
minus
select table_name, num_rows
from user_tables@psh2_jones2_link ;  2    3    4    5

no rows selected
```