

DTGen Demonstration #1

Developed by DMSTEX (<http://dmstex.com>)

Table of Contents:

Table of Contents

Table of Contents:.....	1
Introduction:.....	1
Exercise #1: Basic Generation.....	1
Exercise #2: Sequences and Surrogate Primary Keys.....	3
Exercise #3: Indexed Foreign Keys and Natural Keys.....	3
Exercise #4: Natural Key Updatable Views.....	3
Exercise #5: Full Path Hierarchy Data.....	3
Exercise #6: Enforced Discrete Domains.....	3
Exercise #7: Enforced Case Folding.....	3
Exercise #8: Full Procedural APIs.....	3
Exercise #9: Custom Check Constraints.....	3

Introduction:

The set of exercises in this demonstration is focused on basic DTGen functionality. All functionality in this demonstration is available through both command line and graphical user interface (GUI) forms. For simplicity in understanding the under-lying workings of DTGen, this demonstration is conducted entirely by command-line. (No GUIs will be injured during the execution of this demonstration.)

This demonstration directory contains several exercises. The exercises are numbered and must be executed in sequential order. The demo users must be created with the "create_demo_users.sql" script in the parent directory before the first exercise is run. The demo users must be dropped with the "drop_demo_users.sql" script before the "create_demo_users.sql" script can be re-used. The exercises also assume that the default username/password (dtgen/dtgen) is still in use for the generator. Names and passwords are set at the top of each script and can be modified, if necessary. Also, the DTGen database objects must be installed in the database and ready to generate code.

Exercise #1: Basic Generation

Command Line:

```
sqlplus /nolog @e1
```

Based on Oracle's demobld.sql script, this exercise implements the EMP and DEPT tables using DTGen. The script for this exercise performs the following functions:

1. Removes any old DEMO1 Items from DTGEN
2. Creates new DEMO1 Items in DTGEN
3. Generates the DEMO1 Application in DTGEN
4. Creates the "install_db.sql" script
5. Runs the "install_db.sql" script
6. Loads and Reports Data

Steps 1-3 are captured in the "e1.LST" file:

```
Login to dtgen
Connected.
Remove old DEMO Schema from DTGEN
create a DEMO Schema in DTGEN
Generate Demo1 Application
Capture install_db.sql Script
```

Step 4 is captured in the "install_db.sql" file. This file is 78,281 bytes and has 3,145 lines. It is not listed here

Steps 5 and 6 are captured in the "install.LST" file:

```
Login to dtgen_db_demo
Connected.
```

```
TABLE_NAME
-----
*** dept ***
```

```
TABLE_NAME
-----
*** emp ***
```

```
TABLE_NAME
-----
*** dept ***
```

```
TABLE_NAME
-----
*** emp ***
```

```
TABLE_NAME
-----
*** dept ***
```

```
TABLE_NAME
-----
*** emp ***
```

DEPTNO	DNAME	LOC
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

EMPNO	ENAME	JOB	M_EMP_NK1	HIREDATE	SAL	D_DEPT_NK1
7782	CLARK	MANAGER	7839	09-JUN-81	2450	10
7698	BLAKE	MANAGER	7839	01-MAY-81	2850	30
7566	JONES	MANAGER	7839	02-APR-81	2975	20
7902	FORD	ANALYST	7566	03-DEC-81	3000	20
7788	SCOTT	ANALYST	7566	09-DEC-82	3000	20
7876	ADAMS	CLERK	7788	12-JAN-83	1100	20
7369	SMITH	CLERK	7902	17-DEC-80	800	20
7900	JAMES	CLERK	7698	03-DEC-81	950	30
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	30
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	30
7521	WARD	SALESMAN	7698	22-FEB-81	1250	30

EMPNO	ENAME	JOB	M_EMP_NK1	HIREDATE	SAL	D_DEPT_NK1
-------	-------	-----	-----------	----------	-----	------------

7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	30
7934	MILLER	CLERK	7782	23-JAN-82	1300	10
7839	KING	PRESIDENT		17-NOV-81	5000	10

Exercise #2: Sequences and Surrogate Primary Keys

Exercise #3: Indexed Foreign Keys and Natural Keys

Exercise #4: Natural Key Updatable Views

Exercise #5: Full Path Hierarchy Data

Exercise #6: Enforced Discrete Domains

Exercise #7: Enforced Case Folding

Exercise #8: Full Procedural APIs

Exercise #9: Custom Check Constraints