

## DB2 Version 8 Data Movement

DB2 Quickstart Education

Maintained by Paul Yip (ypaul@ca.ibm.com)

February 2003

IBM Software Group

## Presentation Notes

- The following presentation should be delivered interactively with the students.
- Any slides with the QUICKLAB heading can be done by the students using the SAMPLE database.

## Data Movement Tools

- LOAD, IMPORT, EXPORT
  - ▶ IXF, DEL, ASC
- db2move - easily export set of tables & data (IXF)
- db2look - can extract
  - ▶ DDL
  - ▶ permissions
  - ▶ database statistics
  - ▶ tablespace characteristics

## QuickLab: EXPORT

- Export data based on SQL Statement

```
EXPORT TO emp_photo.ixf of IXF  
SELECT * FROM emp_photo
```

```
EXPORT TO employee.del of DEL  
SELECT firstme, lastname  
FROM employee  
FETCH FIRST 10 ROWS ONLY
```

## QuickLab: IMPORT

- High-speed SQL INSERT
  - ▶ Activates triggers
  - ▶ All Constraints enforced immediately
  - ▶ Uses BUFFERPOOL

```
IMPORT FROM emp_photo.ixf OF IXF  
COMMITCOUNT 10  
REPLACE_CREATE  
INTO emp_photo_copy
```

Very important for performance!

## QuickLab: LOAD

- Very High Speed, low level data loader
  - ▶ separate LOAD, BUILD, DELETE phases
- Uses utility heap (UTIL\_HEAP\_SZ)
- Does NOT use bufferpool and does NOT activate triggers
- Constraints enforced as separate step, may define exception tables
- ONLINE LOAD SUPPORTED

```
LOAD FROM emp_photo.ixf OF IXF  
REPLACE INTO emp_photo_copy
```

```
SET INTEGRITY FOR emp_photo_copy  
ALL IMMEDIATE UNCHECKED
```

## db2move

- **EASY** way to move a set of tables and data (demo)

```
** DB2MOVE
**
** Please read the DB2 Administration Guide for more info!
**
** Usage: "db2move dbname action [options]"
**
** - Action: must be EXPORT, IMPORT, or LOAD.
** - Options: If not specified, defaults will be used.
**
**      Option          Default          Notes
** =====
** -tc table-creators    all creators      EXPORT. Wildcard (*) allowed.
** -tn table-names       all user tables   EXPORT. Wildcard (*) allowed.
** -sn schema-names     all schemas    EXPORT. Wildcard (*) allowed.
** -io import-option     REPLACE_CREATE  IMPORT only.
** -lo load-option       INSERT          LOAD only.
** -l lobpaths           current dir    separated by commas. NO BLANKS.
** -u userid             logged on userid
** -p password           logged on password
** -aw allow-warnings    false         include tables that encounter
**                                     warnings during export.
**
```

## db2look

- Extract DDL, tablespace info, and statistics to script
- Too many options to describe, see db2look -h for details
- Example:

**db2look -d sample -l -e -o sample.ddl**

database name

layout  
(tablespaces  
& bufferpools)

extract DDL

output file