

BCI433 - IBM i Business Computing

Week 8: RPGLE Business
Application of OLTP

Agenda

- ▶ RPGLE Interactive Program File Update
- ▶ Lab 7
- ▶ Lab 8



Lesson Objectives

Upon completion of this lecture and lab 2 you'll be able to:

- ▶ Implement a RPGLE business application with OLTP process
- ▶ Use a CLLE driver program to automate testing of the update program
- ▶ Examine the journaled changes made to the master file

Term – Master File

Master file:

- ▶ The data or database file that holds a collection of records pertaining to one of the main subjects of a business application system, such as Customers, Employees, Products, and etc.
- ▶ Master files contain
 - descriptive data, e.g. name, address
 - summary information, e.g. amount due, year-to-date sales

Term – Transaction File

Transaction file:

- ▶ The data or database file that holds a collection of transaction records.
 - The data in transaction files **is used to update the master files.**
 - Transaction files also **serve as audit trails** and **history** for the organization
- ▶ Transaction file examples - typical transaction records:
 - EMPLOYEE PAYROLL RECORD
 - ORDER RECORD
 - PURCHASE ORDER

Term – OLTP

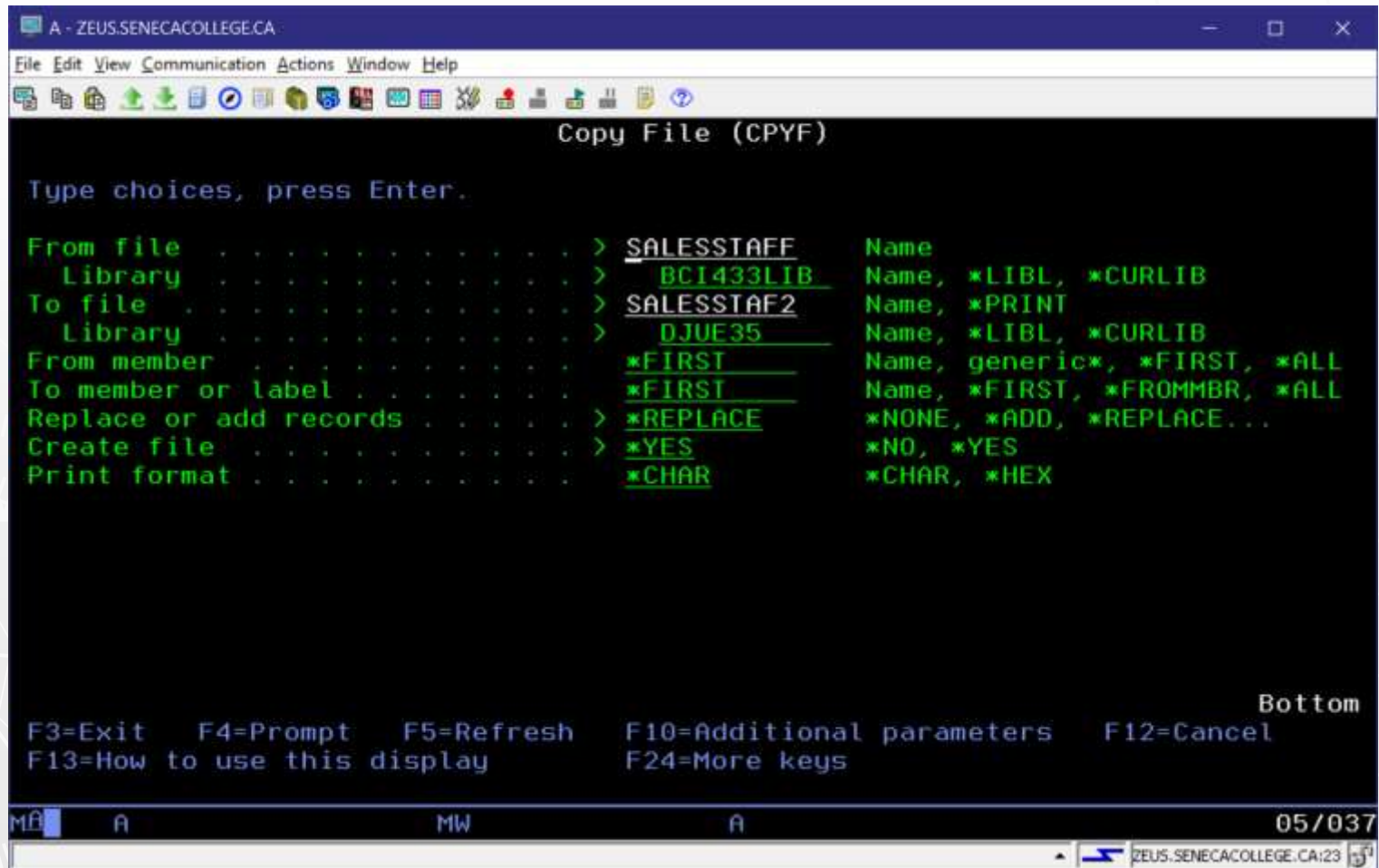
- ▶ OLTP stands for On-line Transaction Processing
- ▶ An OLTP system is usually a core information system of an organization.
 - For example, a banking accounting system in a bank, which supports customers to make payments, ...
- ▶ IBM i Power System server is designed for supporting On-line Transaction Processing (OLTP) systems.
- ▶ The term OLTP is opposite to OLAP (e.g. data warehouse, data mining systems)

DB2 Collection

- ▶ A collection is created using SQL statement
 - a library on IBM i operating system

- ▶ Copying physical file across collections:
 - In 'green/white' screen, type 'CPYF' then press F4 key. See next slide for details.
 - Then press F9 to get the complete command, which needs to be placed into the CLLE driver program.
 - Note: make sure to run the command and add the collection to the RDi's library list before you compile the RPGLE program.

Copying physical file across collections



The screenshot shows a terminal window titled "A - ZEUS.SENECACOLLEGE.CA:". The main window is titled "Copy File (CPYF)". It displays a list of options for copying a file, with green text on a black background. The options are: "From file", "Library", "To file", "Library", "From member", "To member or label", "Replace or add records", "Create file", and "Print format". Each option has a corresponding value entered in the next column. The values are: "SALESSTAFF", "BCI433LIB", "SALESSTAF2", "DJUE35", "*FIRST", "*FIRST", "*REPLACE", "*YES", and "*CHAR". To the right of these values, there are additional options for each row, such as "Name", "Name, *LIBL, *CURLIB", "Name, *PRINT", "Name, *LIBL, *CURLIB", "Name, generic*, *FIRST, *ALL", "Name, *FIRST, *FROMMBR, *ALL", "*NONE, *ADD, *REPLACE...", "*NO, *YES", and "*CHAR, *HEX". At the bottom of the window, there are function key definitions: "F3=Exit", "F4=Prompt", "F5=Refresh", "F10=Additional parameters", "F12=Cancel", "F13=How to use this display", and "F24=More keys". The bottom status bar shows "MA", "A", "MW", "A", and the date "05/037".

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A - ZEUS.SENECACOLLEGE.CA:
File Edit View Communication Actions Window Help

Copy File (CPYF)

Type choices, press Enter.

From file      . . . . . > SALESSTAFF      Name
Library        . . . . . > BCI433LIB      Name, *LIBL, *CURLIB
To file        . . . . . > SALESSTAF2     Name, *PRINT
Library        . . . . . > DJUE35         Name, *LIBL, *CURLIB
From member     . . . . . > *FIRST         Name, generic*, *FIRST, *ALL
To member or label . . . . . > *FIRST         Name, *FIRST, *FROMMBR, *ALL
Replace or add records . . . . . > *REPLACE       *NONE, *ADD, *REPLACE...
Create file     . . . . . > *YES           *NO, *YES
Print format    . . . . . > *CHAR          *CHAR, *HEX

F3=Exit  F4=Prompt  F5=Refresh  F10=Additional parameters  F12=Cancel
F13=How to use this display  F24=More keys

MA  A  MW  A  05/037
ZEUS.SENECACOLLEGE.CA:23
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Homework

- ▶ Review lecture notes.
- ▶ Lab 7
- ▶ Start Lab 8 – it will be due in the last week



Lab 7 Demo



The End

