#### **Terms**

AS/400 – An old name for the power systems server

batch job – job that is submitted to run in the background.

CL – Control Language – ibm i 'scripting' language. Not quite a high-level language – but close!

Client Access – the green screen emulator program.

CLLE – type for Integrated Language Environment Control Language.

CUR – usually means current

DB2 – name of the power systems database

DDS – Data Description Specifications – language used to define \*FILE objects.

DFU – Data File Utility – maintenance program for files. You can access DFU via the UPDDTA and STRDFU commands

Display File – a \*FILE object that stores the layout of a screen.

DSPF - Display File

GUI - Graphical User Interface

job – work on the power systems – can be interactive and batch

IBM i – power systems server operating system

interactive job – your online conversation with the power systems

iSeries – An old name for the power systems server

i5 – an old name for the power systems server

i5/OS – an old name for ibm i.

library – object that stores other objects.

Library list – your ibm i search path. It's built when you signon (from system values and your user profile) and deleted when you signoff.

LF - Logical File

Logical File – a view or index of a physical file.

LPEX - Live Parsing Extensible Editor - RDi editor.

member – partition of a physical file. Most data physical files have 1 member. Source physical files have one member per program.

OS/400 – An old name for the power systems server operating system, ibm i

Overlay – when one screen format is displayed on top of another screen and both are still visible.

Packed number – a number that stores 2 digits in one byte.

PDM – Program Development Manager – green screen development environment.

Perspective – collection of RDi views or windows.

PF – physical file

Physical File – object that stores data.

power systems – ibm midrange server

PRD - Usually means Product

PRTF - Printer File

Printer File – stores the layout of a report.

QCLLESRC – the ibm defined name for the \*FILE that stores Control Language (CLLE) code.

QDDSSRC - the ibm defined name for the \*FILE that stores Data Description Specification (DDS) code.

QRPGLESRC - the ibm defined name for the \*FILE that stores Report Program Generator (RPGLE) code

RPG – Report Program Generator Language – the high-level language that we are studying in BCI433.

RPGLE - Integrated Language Environment RPG.

RDi – Rational Developer for ibm i – PC development program.

SEU – Source Entry Utility – Green Screen Editor

Signed number – a number that stores 1 digit/byte. Same as a zoned number.

source physical file – database file designed to store source code.

spooled file – Report waiting to be printed.

subsystem – logical grouping of resources of the power systems server

SYS – Usually means system

system – the server

system i – old name for power systems.

user id – the name of your user profile. You need a user id and password to sign on to the power systems server.

user profile – object that stores your personal settings on the power system.

USR – usually means user

workspace – folders used by RDi to store your RDi settings and preferences.

Zoned number – a number that stores 1 digit/byte. Same as a signed number.

#### **Objects**

\*FILE – file object, including source physical, physical file, logical file, display file or printer file.

\*LIB - Library

\*MODULE - Module or procedure

\*MSGQ - Message Queue

\*OUTQ - Output queue

\*PGM - Program

\*USRPRF - User Profile

### **CL Commands**

ADDLIBLE – Add Library List Entry – Adds a library to the user portion of the library list.

ADDPFM – Add Physical File Member – used to create a new member in a file – used to start writing a new program.

CALL – executes a program

CALLPRC – executes a module or procedure

CHGCURLIB – change Current Library – changes the current library on your library list

CHGLIBL – change library list – changes the User and Current library parts of your library list.

CHGPF – Change Physical File - used to change a data physical file based on modifications to the source code.

CHGPRF – Change Profile – Changes your own user profile.

CHGSPLFA – Change a spooled file attributes – used to move a spooled file from your output queue to another output queue.

CHGUSRPRF – Change a User Profile – Changes a specific User Profile.

CHGVAR - Change Variable - Changes a Variable

CLROUTQ – Clear Output Queue – Clears an output queue.

CPYF – Copy File – Copies the data from one physical data file to another.

CPYSRCPF – Copy a Source Physical File – Copies a source member from one source physical file member to another.

CRTBNDCL - CL Compiler Program

CRTBNDRPG – RPG Compiler Program

CRTDSPF – Create a display file – used to compile DDS code for a display file.

CRTOUTQ - Create an Output Queue

CRTPF - Create a physical file - used to create/compile data physical files.

CRTPRTF – Create a Printer File – used to create/compile DDS code for a printer file.

CRTSRCPF – Create Source Physical File – creates a DB2 \*FILE object designed to store source code.

DCL – Declare a variable – valid variable types are \*DEC (Decimal), \*CHAR (Character), \*LGL (Logical), \*INT (Integer), or \*UINT(Unsigned Integer)

DCLF - Declare a File

DO – Starts a logical block

DOFOR - CL For Loop. Must end in an ENDDO

DOUNTIL - Do Until - Executes a loop until the condition is true. Must end in an ENDDO.

DOWHILE - Do While - Executes a loop while the condition is true. Must end in an ENDDO.

DSPFD – Display File Description – Displays information about the \*FILE object, such as key fields of an access path.

DSPFFD – Display File Field Description – Displays the fields in the \*FILE object.

DSPLIBL – Displays your library list

DSPMSG - Display Message

DSPPFM – Display Physical File Member – displays the data in the \*FILE.

DSPSYSVAL – displays a system value. WRKSYSVAL is also useful.

EDTLIBL – Edit Library List – changes the user portion of the library list.

EDTOBJAUT – Edit Object Authority – gives User Profiles, Group Profile and Authorization

ELSE – used with an if statement to do the opposite.

ENDDBG – End Debug

ENDDO – ends a DO statement

ENDPGM - Ends a CL Program.

ENDSELECT – ends a select statement.

GO - execute a menu

GOTO – goes to a specific label

IF – if statement.

MONMSG - Monitor Message - Used to trap the black screen of death

OTHERWISE – the default condition in a SELECT statement.

PGM - Program - starts a CL program.

QSH – executes the Unix shell environment.

RMVLIBLE – Remove Library List Entry – Removes a library from the user portion of the library list.

SBMJOB – submits a job to run in the background

SNDMSG – Sends a message to a user profile or message queue

SNDPGMMSG – Send Program Message – sends a message to the calling program.

STRDBG – Start the debugger. You must give the name of the program that you are debugging. When you're finished, make sure that you end the debugger with the ENDDBG command

STRDFU - Start Data File Utility - Starts a DFU program.

STRSQL – (start SQL) executes the sql environment

RCVF – reads a record from a file

RTVJOBA – Retrieve Job Attributes – retrieves information from the job environment.

RTVSYSVAL – Retrieves System Value – Retrieves the value of a system value.

RTVUSRPRF - Retrieve User Profile - Retrieves information from the user profile

RUNQRY – executes a query. If only a file name is passed as a parameter, Query builds a default report that is similar to running an SQL Select statement.

SELECT – starts a select statement

SIGNOFF - Command to end your interactive job

SNDMSG – Send Message – sends a message to a user profile.

SNDRCVF – Send Receive File – displays a screen and wait for input.

UPDDTA – Update Data – used to update data in DB2 objects using DFU

WHEN – defines a condition in a select statement.

WRKACTJOB – Work with Active Jobs – displays the active jobs on the system.

WRKLIBPDM - Work with Libraries using PDM (Program Development Manager)

WRKMBRPDM - Work with Members using PDM (Program Development Manager)

WRKOBJPDM – Work with Objects using PDM (Program Development Manager)

WRKOBJ - Work with Objects that have the specified name and you have the \*USE authority to use

WRKOUTQ - Work with Output Queue - Work with the spooled files in a specific output queue.

WRKSBMJOB - Work with Submitted Jobs.

WRKSPLF - Work with Spooled Files - works with all your spooled file.

WRKSYSVAL – Work with system values – displays a list of all system values.

#### **DDS Keywords**

COLHDG – column headings – used in physical file definitions

DSPATR – Display Attribute – used in display file definitions

RI – Reverse Image

PC - Position Cursor

UL - Underline

HI - Highlight

BL - Blink

EDTCDE – Edit Code – used in display file, physical file and printer file definitions. Changes the way a number is displayed. More restrictive than an EDTWRD.

EDTWRD – Edit Word – used in display file, physical file and printer file definitions. Changes the way a number is displayed.

## **RPG Verbs and Constants**

DCL-F – Free form file declaration

DCL-S – Free format declaration of stand-alone variable/work field

/FREE – the compiler directive that starts the free format RPG part of the program. Note: you don't need to use it after DCL-F, DCL-S or other free form declarations.

\*INLR – Last record indicator – must be set \*ON at the end of the program

\*OFF - Logical '0'

\*ON - logical '1'

%EOF – checks for the end of file.

BEGSR – Begins a subroutine. You must give the subroutine a name.

DOW – Do While. You must give a condition name.

ENDDO – ends a dow loop

ENDIF – ends an if statement

ENDSL – ends a select statement.

ENDSR - Ends a subroutine.

EXSR — Executes Sub Routine. You must give a subroutine name that is defined later in your program with a BEGSR.

EXFMT – displays a display file record format. Any data typed in the both or input fields will be saved and passed back to the program.

IF – starts an if statement

OTHER - the default condition in a select statement

READ – Reads a record from a database object.

SELECT – starts a select statement

WHEN – a condition in a select statement

WRITE – displays a display file record format. Any data typed in will be lost.

# **DDS Reference: Physical and Logical Files**

Valid data type entries (position 35) are as follows:

Entry	Meaning
P	Packed Decimal
S	Zoned Decimal
В	Binary
F	Floating-Point
A	Character
Н	Hexadecimal
L	Date
Т	Time
Z	TimeStamp

The valid entries (position 17) for physical files are:

Entry	Meaning
R	Record format name
Blank	Field name
K	Key field name

**Note:** Specify only one R because a physical file can contain only one record format.

The valid entries (position 17) for logical files are:

Entry	Meaning
R	Record format name
J	Join specification
Blank	Field name or select/omit
	AND condition
K	Key field name
S	Select field name
0	Omit field name