INFDS (File Information Data Structure)
PSDS (Program Status Data Structure)

FILE INFORMATION DATA STRUCTURE (INFDS)

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* ----------------------------------------------------------------
     * FILE INFORMATION DATA STRUCTURE
     * Voir aussi:
     * http://publib.boulder.ibm.com/iseries/v5r1/ic2924/books/c092508378.htm#HDRFILINDA
     * ----------------------------------------------------------------
     * The INFDS contains the following feedback information:
     * File Feedback (length is 80)
     * Open Feedback (length is 160)
     * Input/Output Feedback (length is 126)
     * Device Specific Feedback (length is variable)
     * Get Attributes Feedback (length is variable)
     * ----------------------------------------------------------------

     * Standard RPG feedback area 1-80
     * ------------------------------

    D INFDS           ds

    D File              *FILE
     *                                                  * File name
    D OpenInd                9      9
     *                                                  * File open?
    D EOFInd                10     10
     *                                                  * File at eof?
    D FileStatus        *STATUS
     *                                                  * Status code
    D OpCode            *OPCODE
     *                                                  * Last opcode
    D Routinr           *ROUTINE
     *                                                  * RPG Routine
    D ListNum               30     37
     *                                                  * Listing line
    D SpclStat              38     42S 0
     *                                                  * SPECIAL status
    D RecordFmt         *RECORD
     *                                                  * Record name
    D MsgID                 46     52
     *                                                  * Error MSGID

     * ----------------------------------------------------------------
     * The next 4 fields are available after POST
    D Screen_P          *SIZE
     *                                                  * Screen size
    D NLSIn_P           *INP
     *                                                  * NLS Input?
    D NLSOut_P          *OUT
     *                                                  * NLS Output?
    D NLSMode_P         *MODE
     *                                                  * NLS Mode?

     * ----------------------------------------------------------------
     * Open feedback area 81-240
     * NOTE that getting data beyond column 80 is expensive
     *      in terms of program opens...
    D ODP_TYPE              81     82
     *                                                 * ODP Type
    D FILE_NAME             83     92
     *                                                 * File name
    D LIBRARY               93    102
     *                                                 * Library name
    D SPOOL_FILE           103    112
     *                                                 * Spool file name
    D SPOOL_LIB            113    122
```

```
 *                                                      * Spool file lib
D SPOOL_NUM              123    124I 0
 *                                                      * Spool file num
D RCD_LEN                125    126I 0
 *                                                      * Max record len
D KEY_LEN                127    128I 0
 *                                                      * Max key len
D MEMBER                 129    138
 *                                                      * Member name
D TYPE                   147    148I 0
 *                                                      * File type
D ROWS                   152    153I 0
 *                                                      * Num PRT/DSP rows
D COLUMNS                154    155I 0
 *                                                      * Num PRT/DSP cols
D NUM_RCDS               156    159I 0
 *                                                      * Num of records
D ACC_TYPE               160    161
 *                                                      * Access type
D DUP_KEY                162    162
 *                                                      * Duplicate key?
D SRC_FILE               163    163
 *                                                      * Source file?
D VOL_OFF                184    185I 0
 *                                                      * Vol label offs
D BLK_RCDS               186    187I 0
 *                                                      * Max rcds in bl
D OVERFLOW               188    189I 0
 *                                                      * Overflow line
D BLK_INCR               190    191I 0
 *                                                      * Blk increment
D FLAGS1                 196    196
 *                                                      * Misc flags
D REQUESTER              197    206
 *                                                      * Requester name
D OPEN_COUNT             207    208I 0
 *                                                      * Open count
D BASED_MBRS             211    212I 0
 *                                                      * Num based mbrs
D FLAGS2                 213    213
 *                                                      * Misc flags
D OPEN_ID                214    215
 *                                                      * Open identifie
D RCDFMT_LEN             216    217I 0
 *                                                      * Max rcd fmt le
D CCSID                  218    219I 0
 *                                                      * Database CCSID
D FLAGS3                 220    220
 *                                                      * Misc flags
D NUM_DEVS               227    228I 0
 *                                                      * Num devs defin

 * ----------------------------------------------------------------
 * I/O feedback area 241-366
 *                                                      * 241-242 not used
D WRITE_CNT              243    246I 0
 *                                                      * Write count
D READ_CNT               247    250I 0
 *                                                      * Read count
D WRTRD_CNT              251    254I 0
 *                                                      * Write/read count
D OTHER_CNT              255    258I 0
 *                                                      * Other I/O count
D OPERATION              260    260
 *                                                      * Cuurent operatio
D IO_RCD_FMT             261    270
 *                                                      * Rcd format name
D DEV_CLASS              271    272
 *                                                      * Device class
D IO_PGM_DEV             273    282
 *                                                      * Pgm device name
```

```
D IO_RCD_LEN            283    286I 0
 *                                                * Rcd len of I/O

 * ---------------------------------------------------------------
 * POST area 241-nnn
 * Display
D PGM_DEV_P             241    250
 *                                                * Program device
D DEV_DSC_P             251    260
 *                                                * Dev description
D USER_ID_P             261    270
 *                                                * User ID
D DEV_CLASS_P           271    271
 *                                                * Device class
D DEV_TYPE_P            272    277
 *                                                * Device type
D REQ_DEV_P             278    278
 *                                                * Requester?
D ACQ_STAT_P            279    279
 *                                                * Acquire status
D INV_STAT_P            280    280
 *                                                * Invite status
D DATA_AVAIL_P          281    281
 *                                                * Data available
D NUM_ROWS_P            282    283I 0
 *                                                * Number of rows
D NUM_COLS_P            284    285I 0
 *                                                * Number of cols
D BLINK_P               286    286
 *                                                * Allow blink?
D LINE_STAT_P           287    287
 *                                                * Online/offline?
D DSP_LOC_P             288    288
 *                                                * Display location
D DSP_TYPE_P            289    289
 *                                                * Display type
D KBD_TYPE_P            290    290
 *                                                * Keyboard type
D CTL_INFO_P            342    342
 *                                                * Controller info
D COLOR_DSP_P           343    343
 *                                                * Color capable?
D GRID_DSP_P            344    344
 *                                                * Grid line dsp?

 * ---------------------------------------------------------------
 * The following fields apply to ISDN.
D ISDN_LEN_P            385    386I 0
 *                                                * Rmt number len
D ISDN_TYPE_P           387    388
 *                                                * Rmt number type
D ISDN_PLAN_P           389    390
 *                                                * Rmt number plan
D ISDN_NUM_P            391    430
 *                                                * Rmt number
D ISDN_SLEN_P           435    436I 0
 *                                                * Rmt sub-address
D ISDN_STYPE_P          437    438
 *                                                * Rmt sub-address
D ISDN_SNUM_P           439    478
 *                                                * Rmt sub-address
D ISDN_CON_P            480    480
 *                                                * Connection
D ISDN_RLEN_P           481    482I 0
 *                                                * Rmt address len
D ISDN_RNUM_P           483    514
 *                                                * Rmt address
D ISDN_ELEN_P           519    520
 *                                                * Extension len
D ISDN_ETYPE_P          521    521
 *                                                * Extension type
```

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D ISDN_ENUM_P           522    561
 *                                                 * Extension num
D ISDN_XTYPE_P          566    566
 *                                                 * X.25 call type

 * ----------------------------------------------------------
 * ICF
D PGM_DEV_P             241    250
 *                                                 * Program device
D DEV_DSC_P             251    260
 *                                                 * Dev description
D USER_ID_P             261    270
 *                                                 * User ID
D DEV_CLASS_P           271    271
 *                                                 * Device class
D DEV_TYPE_P            272    272
 *                                                 * Device type
D REQ_DEV_P             278    278
 *                                                 * Requester?
D ACQ_STAT_P            279    279
 *                                                 * Acquire status
D INV_STAT_P            280    280
 *                                                 * Invite status
D DATA_AVAIL_P          281    281
 *                                                 * Data available
D SES_STAT_P            291    291
 *                                                 * Session status
D SYNC_LVL_P            292    292
 *                                                 * Synch level
D CONV_TYPE_P           293    293
 *                                                 * Conversation typ
D RMT_LOC_P             294    301
 *                                                 * Remote location
D LCL_LU_P              302    309
 *                                                 * Local LU name
D LCL_NETID_P           310    317
 *                                                 * Local net ID
D RMT_LU_P              318    325
 *                                                 * Remote LU
D RMT_NETID_P           326    333
 *                                                 * Remote net ID
D APPC_MODE_P           334    341
 *                                                 * APPC Mode
D LU6_STATE_P           345    345
 *                                                 * LU6 conv state
D LU6_COR_P             346    353
 *                                                 * LU6 conv
 *                                                 *    correlator

 * ----------------------------------------------------------
 * The following fields apply to ISDN.
D ISDN_LEN              385    386I 0
 *                                                 * Rmt number len
D ISDN_TYPE             387    388
 *                                                 * Rmt number type
D ISDN_PLAN             389    390
 *                                                 * Rmt number plan
D ISDN_NUM              391    430
 *                                                 * Rmt number
D ISDN_SLEN             435    436I 0
 *                                                 * sub-addr len
D ISDN_STYPE            437    438
 *                                                 * sub-addr type
D ISDN_SNUM             439    478
 *                                                 * Rmt sub-address
D ISDN_CON              480    480
 *                                                 * Connection
D ISDN_RLEN             481    482I 0
 *                                                 * Rmt address len
D ISDN_RNUM             483    514
 *                                                 * Rmt address
```

```
D ISDN_ELEN              519    520
 *                                                * Extension len
D ISDN_ETYPE             521    521
 *                                                * Extension type
D ISDN_ENUM              522    561
 *                                                * Extension num
D ISDN_XTYPE             566    566
 *                                                * X.25 call type

 * ---------------------------------------------------------------
 * The following information available only when program started
 * result of a received program start req. (P_ stands for protected)
D TRAN_PGM               567    630
 *                                                * Trans pgm name
D P_LUWIDLN              631    631
 *                                                * LUWID fld len
D P_LUNAMELN             632    632
 *                                                * LU-NAME len
D P_LUNAME               633    649
 *                                                * LU-NAME
D P_LUWIDIN              650    655
 *                                                * LUWID instance
D P_LUWIDSEQ             656    657I 0
 *                                                * LUWID seq num

 * ---------------------------------------------------------------
 * Below info is available only when a protected conversation
 * is started on a remote system.  (U_ stands for unprotected)
D U_LUWIDLN              658    658
 *                                                * LUWID fld len
D U_LUNAMELN             659    659
 *                                                * LU-NAME len
D U_LUNAME               660    676
 *                                                * LU-NAME
D U_LUWIDIN              677    682
 *                                                * LUWID instance
D U_LUWIDSEQ             683    684I 0
 *                                                * LUWID seq num

 * ---------------------------------------------------------------
 * Device independent area 367-nnn
 * NOTE that this area is shared with the POST feedback area above!
 * ---------------------------------------------------------------
 * Printer

D CUR_LINE               367    368I 0
 *                                                * Current line num
D CUR_PAGE               369    372I 0
 *                                                * Current page cnt
D PRT_MAJOR              401    402
 *                                                * Major ret code
D PRT_MINOR              403    404
 *                                                * Minor ret code
 * ---------------------------------------------------------------
 * Disk

D FDBK_SIZE              367    370I 0
 *                                                * Size of DB fdbk
D JOIN_BITS              371    374I 0
 *                                                * JFILE bits
D LOCK_RCDS              377    378I 0
 *                                                * Nbr locked rcds
D POS_BITS               385    385
 *                                                * File pos bits
D DLT_BITS               384    384
 *                                                * Rcd deleted bits
D NUM_KEYS               387    388I 0
 *                                                * Num keys (bin)
D KEY_LEN                393    394I 0
 *                                                * Key length
D MBR_NUM                395    396I 0
```

```
 *                                                     * Member number
D DB_RRN                 397    400I 0
 *                                                     * Relative-rcd-num
D KEY                    401   2400
 *                                                     * Key value (max
 *                                                     *   size 2000)
 * ------------------------------------------------------------------
 * ICF

D ICF_AID                369    369
 *                                                     * AID byte
D ICF_LEN                372    375I 0
 *                                                     * Actual data len
D ICF_MAJOR              401    402
 *                                                     * Major ret code
D ICF_MINOR              403    404
 *                                                     * Minor ret code
D SNA_SENSE              405    412
 *                                                     * SNA sense rc
D SAFE_IND               413    413
 *                                                     * Safe indicator
D RQSWRT                 415    415
 *                                                     * Request write
D RMT_FMT                416    425
 *                                                     * Remote rcd fmt
D ICF_MODE               430    437
 *                                                     * Mode name
 * ------------------------------------------------------------------
 * Display

D DSP_FLAG1              367    368
 *                                                     * Display flags
D DSP_AID                369    369
 *                                                     * AID byte
D CURSOR                 370    371
 *                                                     * Cursor location
D DATA_LEN               372    375I 0
 *                                                     * Actual data len
D SF_RRN                 376    377I 0
 *                                                     * Subfile rrn
D MIN_RRN                378    379I 0
 *                                                     * Subfile min rrn
D NUM_RCDS               380    381I 0
 *                                                     * Subfile num rcds
D ACT_CURS               382    383
 *                                                     * Active window
 *                                                     *  cursor location
D DSP_MAJOR              401    402
 *                                                     * Major ret code
D DSP_MINOR              403    404
 *                                                     * Minor ret code
```

PROGRAM STATUS DATA STRUCTURE (PSDS)

```
* ------------------------------------------------------------
     * Program Status Data Structure -- PSDS
     * Voir aussi:
     * http://publib.boulder.ibm.com/iseries/v5r1/ic2924/books/c092508380.htm#HDRPROGXPE
     * ------------------------------------------------------------
    D                SDS

    D PROC_NAME          *PROC
     *                                          Procedure name
    D PGM_STATUS         *STATUS
     *                                          Status code
    D PRV_STATUS              16     20S 0
     *                                          Previous status
    D LINE_NUM                21     28
     *                                          Src list line nu
    D ROUTINE            *ROUTINE
     *                                          Routine name
    D PARMS              *PARMS
     *                                          Num passed parms
    D EXCP_TYPE               40     42
     *                                          Exception type
    D EXCP_NUM                43     46
     *                                          Exception number
    D PGM_LIB                 81     90
     *                                          Program library
    D EXCP_DATA               91    170
     *                                          Exception data
    D EXCP_ID                171    174
     *                                          Exception Id
    D DATE                   191    198
     *                                          Date (DATE fmt)
    D YEAR                   199    200S 0
     *                                          Year (YEAR fmt)
    D LAST_FILE              201    208
     *                                          Last file used
    D FILE_INFO              209    243
     *                                          File error info
    D JOB_NAME               244    253
     *                                          Job name
    D USER                   254    263
     *                                          User name
    D JOB_NUM                264    269S 0
     *                                          Job number
    D JOB_DATE               270    275S 0
     *                                          Date (UDATE fmt)
    D RUN_DATE               276    281S 0
     *                                          Run date (UDATE)
    D RUN_TIME               282    287S 0
     *                                          Run time (UDATE)
    D CRT_DATE               288    293
     *                                          Create date
    D CRT_TIME               294    299
     *                                          Create time
    D CPL_LEVEL              300    303
     *                                          Compiler level
    D SRC_FILE               304    313
     *                                          Source file
    D SRC_LIB                314    323
     *                                          Source file lib
    D SRC_MBR                324    333
     *                                          Source file mbr
    D PROC_PGM               334    343
     *                                          Pgm Proc is in
    D PROC_MOD               344    353
     *                                          Mod Proc is in
    D CURR_USER              358    367
     *                                          Mod Proc is in

     * ------------------------------------------------------------
```

```
* Values of PGM_STATUS (*STATUS) -- if %Status = 00100 ...
* ------------------------------------------------------------

* Normal Codes
*
*  Code      Condition
*  00000     No exception/error occurred
*  00001     Called program returned with the LR indicator on.

* Exception/Error Codes

* Code      Condition
* 00100     Value out of range for string operation
* 00101     Negative square root
* 00102     Divide by zero
* 00103     An intermediate result is not large enough to
*           contain the result.
* 00104     Float underflow. An intermediate value is too
*           small to be contained in the intermediate
*           result field
* 00112     Invalid Date, Time or Timestamp value.
* 00113     Date overflow or underflow. (For example, when
*           the result of a Date calculation
*           results in a number greater than HIVAL or less
*           than LOVAL.)
* 00114     Date mapping errors, where a Date is mapped from a 4
*           character year to a 2 character year and the date range
*           is not 1940-2039.
* 00120     Table or array out of sequence.
* 00121     Array index not valid
* 00122     OCCUR outside of range
* 00123     Reset attempted during initialization step of program
* 00202     Called program or procedure failed; halt indicator
*           (H1 through H9) not on
* 00211     Error calling program or procedure
* 00222     Pointer or parameter error
* 00231     Called program or procedure returned with halt
*           indicator on
* 00232     Halt indicator on in this program
* 00233     Halt indicator on when RETURN operation run
* 00299     RPG IV formatted dump failed
* 00333     Error on DSPLY operation
* 00401     Data area specified on IN/OUT not found
* 00402     PDA not valid for non-prestart job
* 00411     Data area type or length does not match
* 00412     Data area not locked for output
* 00413     Error on IN/OUT operation
* 00414     User not authorized to use data area
* 00415     User not authorized to change data area
* 00421     Error on UNLOCK operation
* 00425     Length requested for storage allocation is out of range
* 00426     Error encountered during storage management operation
* 00431     Data area previously locked by another program
* 00432     Data area locked by program in the same process
* 00450     Character field not entirely enclosed by shift-out
*           and shift-in characters
* 00501     Failure to retrieve sort sequence.
* 00502     Failure to convert sort sequence.
* 00802     Commitment control not active.
* 00803     Rollback operation failed.
* 00804     Error occurred on COMMIT operation
* 00805     Error occurred on ROLBK operation
* 00907     Decimal data error (digit or sign not valid)
* 00970     The level number of the compiler used to generate
*           the program does not agree with the level number
*           of the RPG IV run-time subroutines
* 09998     Internal failure in ILE RPG/400 compiler or in
*           run-time subroutines
* 09999     Program exception in system routine.
```