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-- SegMap.Mesa  Edited by Sandman on August 30, 1977  10:30 AM

DIRECTORY
  IODefs: FROM "iodefs",
  AltoDefs: FROM "altodefs",
  SegmentDefs: FROM "segmentdefs";

DEFINITIONS FROM AltoDefs, IODefs, SegmentDefs;

SegMap: PROGRAM IMPORTS IODefs, SegmentDefs SHARES SegmentDefs = PUBLIC BEGIN

  byte: NumberFormat = NumberFormat[8,FALSE,TRUE,3];
  word: NumberFormat = NumberFormat[8,FALSE,TRUE,6];

  PrintDataSegment: PROCEDURE [seg:DataSegmentHandle] RETURNS [BOOLEAN] =
    BEGIN OPEN seg;
    WriteNumber[VMpage,byte]; WriteChar[SP];
    WriteNumber[AddressFromPage[VMpage],word];
    WriteString["     "];
    WriteNumber[pages,byte];
    WriteLine[" VM"];
    WriteChar[CR];
    RETURN[~More[]]
    END;

  PrintFileSegment: PROCEDURE[seg:FileSegmentHandle] RETURNS [BOOLEAN] =
    BEGIN OPEN seg;
    WriteNumber[VMpage,byte]; WriteChar[SP];
    WriteNumber[AddressFromPage[VMpage],word]; WriteChar[SP];
    WriteNumber[base,byte];  WriteChar[SP];
    WriteNumber[pages,byte]; WriteChar[SP];
    WriteString["SN"]; WriteOctal[file.fp.serial.part2];
    SELECT class FROM
      code => WriteString[" code"];
      symbols => WriteString[" syms"];
      bcd => WriteString[" bcd"];
      ENDCASE;
    IF read OR write THEN WriteChar[' ];
    IF read THEN WriteChar['R];
    IF write THEN WriteChar['W];
    IF swappedin THEN WriteString[" in"];
    IF lock > 0 THEN
      BEGIN
      WriteString[" lock="];
      WriteOctal[lock];
      END;
    WriteChar[CR];
    RETURN[~More[]]
    END;

  lc: INTEGER;
  full: INTEGER = 18;

  More: PROCEDURE RETURNS [BOOLEAN] =
    BEGIN  c: CHARACTER;
    IF (lc ← lc+1) >= full THEN
      BEGIN  lc ← 0;
      DO -- until non-random input
        SELECT (c ← ReadChar[]) FROM
          SP,CR,LF => EXIT;
          DEL => RETURN[FALSE];
          ENDCASE;
        ENDLOOP;
      END;
    RETURN[TRUE]
    END;


  DO  WriteChar[CR];  lc ← 0;
    [] ← EnumerateFileSegments[PrintFileSegment];
    WriteChar[CR];  lc ← full;
    IF More[] THEN
      [] ← EnumerateDataSegments[PrintDataSegment];
    WriteChar[CR];  STOP;
    ENDLOOP;
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END.
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