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-- File: CoreSwapDefs.mesa
-- Last edited by Sandman; August 3, 1977  8:22 AM

DIRECTORY
  ControlDefs: FROM "controldefs",
  SegmentDefs: FROM "segmentdefs";

CoreSwapDefs: DEFINITIONS =

BEGIN

  SVPointer: TYPE = POINTER TO ControlDefs.StateVector;

  ExternalStateVector: TYPE = RECORD [
    state: SVPointer,
    reason: SwapReason, level: [0..377B],
    gft, av, sd, tables: POINTER,
    drumFile: SegmentDefs.FileHandle,
    parameter: POINTER TO DebugParameter,
    loadstate: SegmentDefs.FileSegmentHandle,
    fill: PRIVATE ARRAY [9..19) OF WORD
        ];

  SwapReason: TYPE = {
    -- handled by debugnub
    proceed,      -- THIS MUST BE FIRST !!
    start,
    call,
    resume,
    quit,
    attach,
    showscreen,

    -- handled by external debugger
    install,
    breakpoint,
    worrybreak,
    uncaughtsignal,
    explicitcall,
    return,
    punt,
    interrupt
    };

  DebugParameter: TYPE = MACHINE DEPENDENT RECORD [
    string: STRING,
    body: SELECT COMPUTED SwapReason FROM
      uncaughtsignal => [
        msg: UNSPECIFIED,
        signal: UNSPECIFIED],
      return => [
        value: UNSPECIFIED],
      start, attach => [
        frame: ControlDefs.GlobalFrameHandle],
      call => [
        sv: ControlDefs.StateVector],
      ENDCASE
    ];

  uncaughtsignalDP: TYPE = POINTER TO uncaughtsignal DebugParameter;
  returnDP: TYPE = POINTER TO return DebugParameter;
  startDP: TYPE = POINTER TO start DebugParameter;
  attachDP: TYPE = POINTER TO start DebugParameter;
  callDP: TYPE = POINTER TO call DebugParameter;

  SetLevel: PROCEDURE [l: INTEGER];
  CoreSwap: PROCEDURE [why: SwapReason, sp: SVPointer];
  CantSwap: SIGNAL;
  CAbort: SIGNAL;

END ...
```