-- MIUtilityDefs.Mesa Edited by Sandman on March 21, 1978 3:47 PM

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DIRECTORY
  AltoDefs: FROM "altodefs",
  AltoFileDefs: FROM "altofiledefs",
  ControlDefs: FROM "controldefs",
  ImageDefs: FROM "imagedefs",
  LoadStateDefs: FROM "loadstatedefs",
  ProcessDefs: FROM "processdefs",
  SegmentDefs: FROM "segmentdefs",
  StreamDefs: FROM "streamdefs";

DEFINITIONS FROM ImageDefs;

MIUtilityDefs: DEFINITIONS SHARES ImageDefs, ProcessDefs =
  BEGIN

  CFA: TYPE = AltoFileDefs.CFA;
  DataSegmentHandle: TYPE = SegmentDefs.DataSegmentHandle;
  FP: TYPE = AltoFileDefs.FP;
  FileHandle: TYPE = SegmentDefs.FileHandle;
  FileRequest: TYPE = ImageDefs.FileRequest;
  FileSegmentHandle: TYPE = SegmentDefs.FileSegmentHandle;
  PageCount: TYPE = AltoDefs.PageCount;
  PageNumber: TYPE = AltoDefs.PageNumber;
  shortFileRequest: TYPE = short ImageDefs.FileRequest;
  vDA: TYPE = AltoFileDefs.vDA;
  GlobalFrameHandle: TYPE = ControlDefs.GlobalFrameHandle;
  LoadStateGFT: TYPE = LoadStateDefs.LoadStateGFT;
  ConfigIndex: TYPE = LoadStateDefs.ConfigIndex;
  StreamHandle: TYPE = StreamDefs.StreamHandle;
  ProcDesc: TYPE = ControlDefs.ProcDesc;

  -- file requests

  InitFileRequest: PROCEDURE;
  AddFileRequest: PROCEDURE [r: POINTER TO FileRequest];
  DropFileRequest: PROCEDURE [f: FileHandle];
  ProcessFileRequests: PROCEDURE;

  -- bcd file names

GetBcdFileNames: PROCEDURE  [nbcds: ConfigIndex]
 RETURNS [names: DESCRIPTOR FOR ARRAY OF STRING];

  -- Bcd Merging Management

MergeAllBcds: PROCEDURE [initialgft: LoadStateGFT, code: BOOLEAN,
  names: DESCRIPTOR FOR ARRAY OF STRING];
MergeABcd: PROCEDURE [config: ConfigIndex, initgft: LoadStateGFT,
  code: BOOLEAN, names: DESCRIPTOR FOR ARRAY OF STRING];
NewBcdSegmentFromStream: PROCEDURE [
  stream: StreamDefs.DiskHandle, page: PageNumber]
  RETURNS [newpage: PageNumber, seg: FileSegmentHandle];
MoveWords: PROCEDURE [source: POINTER, nwords: CARDINAL];


  -- space allocation

  SpaceHeader: TYPE = RECORD [
    link: POINTER TO SpaceHeader,
    segment: DataSegmentHandle];

  InitSpace: PROCEDURE;
  GetSpace: PROCEDURE [n: CARDINAL] RETURNS [p: POINTER];
  GetString: PROCEDURE [oldstring: STRING] RETURNS [newstring: STRING];
  FreeAllSpace: PROCEDURE;

  -- image file management

  LockCodeSegment: PROCEDURE [p: ProcDesc];
  UnlockCodeSegment: PROCEDURE [p: ProcDesc];
  KDSegment: PROCEDURE RETURNS [FileSegmentHandle];
  DAofPage: PROCEDURE [file: FileHandle, page: PageNumber] RETURNS [next: vDA];
  FillInCAs: PROCEDURE [
    Image: POINTER TO ImageHeader, mapindex: CARDINAL, ca: POINTER];
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SwapOutUnlockedCode: PROCEDURE [f: GlobalFrameHandle] RETURNS [BOOLEAN];
SwapOutUnlocked: PROCEDURE [s: FileSegmentHandle] RETURNS [BOOLEAN];
BashHint: PROCEDURE [s: FileSegmentHandle] RETURNS [BOOLEAN];
BashFile: PROCEDURE [f: FileHandle] RETURNS [BOOLEAN];
PatchUpGFT: PROCEDURE;
InitLoadStateGFT: PROCEDURE [initgft: LoadStateGFT, merge: BOOLEAN, nbcds: ConfigIndex];
NumberGFIInConfig: PROCEDURE [initgft: LoadStateGFT, con: ConfigIndex]
    RETURNS [ngfi: ControlDefs.GFTIndex];

END.
```