NAME

archives – device header

DESCRIPTION

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/* Magic numbers */

#define CMN_ASC  0x070701   /* Cpio Magic Number for –c header */
#define CMN_BIN  070707     /* Cpio Magic Number for Binary header */
#define CMN_BBS  0143561    /* Cpio Magic Number for Byte-Swap header */
#define CMN_CRC  0x070702   /* Cpio Magic Number for CRC header */
#define CMS_ASC  "070701"   /* Cpio Magic String for –c header */
#define CMS_CHR  "070707"   /* Cpio Magic String for odc header */
#define CMS_CRC  "070702"   /* Cpio Magic String for CRC header */
#define CMS_LEN  6          /* Cpio Magic String length */

/* Various header and field lengths */

#define CHRSZ    76         /* –H odc size minus filename field */
#define ASCSZ    110        /* –c and CRC hdr size minus filename field */
#define TARSZ    512        /* TAR hdr size */

#define HNAMLEN  256        /* maximum filename length for binary and
                               odc headers */
#define EXPNLEN  1024       /* maximum filename length for –c and
                               CRC headers */
#define HTIMLEN  2          /* length of modification time field */
#define HSIZLEN  2          /* length of file size field */

/* cpio binary header definition */

struct hdr_cpio {
        short   h_magic,                /* magic number field */
                h_dev;                  /* file system of file */
        ushort  h_ino,                  /* inode of file */
                h_mode,                 /* modes of file */
                h_uid,                  /* uid of file */
                h_gid;                  /* gid of file */
        short   h_nlink,                /* number of links to file */
                h_rdev,                 /* maj/min numbers for special files */
                h_mtime[HTIMLEN],       /* modification time of file */
                h_namesize,             /* length of filename */
                h_filesize[HSIZLEN];    /* size of file */
        char    h_name[HNAMLEN];        /* filename */
} ;

/* cpio –H odc header format */

struct c_hdr {
        char    c_magic[CMS_LEN],
                c_dev[6],
                c_ino[6],
                c_mode[6],
                c_uid[6],
                c_gid[6],
                c_nlink[6],
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                c_rdev[6],
                c_mtime[11],
                c_namesz[6],
                c_filesz[11],
                c_name[HNAMLEN];
};

/* −c and CRC header format */

struct Exp_cpio_hdr {
        char    E_magic[CMS_LEN],
                E_ino[8],
                E_mode[8],
                E_uid[8],
                E_gid[8],
                E_nlink[8],
                E_mtime[8],
                E_filesize[8],
                E_maj[8],
                E_min[8],
                E_rmaj[8],
                E_rmin[8],
                E_namesize[8],
                E_chksum[8],
                E_name[EXPNLEN];
};

/* Tar header structure and format */
#define TBLOCK     512      /* length of tar header and data blocks */
#define TNAMLEN    100      /* maximum length for tar file names */
#define TMODLEN    8        /* length of mode field */
#define TUIDLEN    8        /* length of uid field */
#define TGIDLEN    8        /* length of gid field */
#define TSIZLEN    12       /* length of size field */
#define TTIMLEN    12       /* length of modification time field */
#define TCRCLEN    8        /* length of header checksum field */

/* tar header definition */

union tblock {
        char dummy[TBLOCK];
        struct header {
                char  t_name[TNAMLEN];          /* name of file */
                char  t_mode[TMODLEN];          /* mode of file */
                char  t_uid[TUIDLEN];           /* uid of file */
                char  t_gid[TGIDLEN];           /* gid of file */
                char  t_size[TSIZLEN];          /* size of file in bytes */
                char  t_mtime[TTIMLEN];         /* modification time of file */
                char  t_chksum[TCRCLEN];        /* checksum of header */
                char  t_typeflag;               /* flag to indicate type of file */
                char  t_linkname[TNAMLEN];      /* file this file is linked with */
                char  t_magic[6];               /* magic string always "ustar" */
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            char  t_version[2];          /* version strings always "00" */
            char  t_uname[32];           /* owner of file in ASCII */
            char  t_gname[32];           /* group of file in ASCII */
            char  t_devmajor[8];         /* major number for special files */
            char  t_devminor[8];         /* minor number for special files */
            char  t_prefix[155];         /* pathname prefix */
      } tbuf;
};

/* volcopy tape label format and structure */

#define VMAGLEN8
#define VVOLLEN6
#define VFILLEN  464

struct volcopy_label {
      char  v_magic[VMAGLEN],
            v_volume[VVOLLEN],
            v_reels,
            v_reel;
      long  v_time,
            v_length,
            v_dens,
            v_reelblks,        /* u370 added field */
            v_blksize,         /* u370 added field */
            v_nblocks;         /* u370 added field */
      char  v_fill[VFILLEN];
      long  v_offset;          /* used with -e and -reel options */
      int   v_type;            /* does tape have nblocks field? */
} ;
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