

Published: 02/21/69

Identification

Extraction of segments into Multics from CTSS archive files
extract_archive
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Purpose

extract_archive extracts the component segments from a CTSS (non ASCII) archive file into Multics segments named with the actual segment names.

Usage

extract_archive is called as follows:

```
extract_archive >path>aname.bname
```

or

```
extract_archive aname.bname
```

where aname is the first name and bname is the second name of the CTSS archive file from which the Multics segments are to be extracted. If no path name is specified in this argument, the current working directory is assumed.

Implementation

The command first checks to see if this segment is in correct CTSS archive file format, then the following is done for each of the component segments:

The segment is read and then written into a Multics branch with a unique name created by hcs_\$make_seg in the working directory.

The CTSS names and word count in the header are converted to ASCII from BCD.

Get_name (see description below) is called to find the segment name.

The segment name and type of file (i.e., "ep1", "ep1bsa", "link"), are concatenated with a "." between (unless the type is "text" in which case only the segment name is used) and the branch is renamed to this name. If a branch with the same name already exists in the working directory, an error message is returned and the segment is not renamed from its unique name.

The bit count of the segment is set and then corrected, if necessary, by adjust. (BX.99.08).

Get_name is called in the following way:

```
call get_name (seg_ptr, length, type , name);  
    decl    seg_ptr ptr,  
           (length, type) fixed bin(17),  
           name char(32) var;
```

where segptr is a pointer to the segment whose name is to be found

length is the length in words of the segment

type is the kind of file, indicated by the second part of the archive file name such that:

```
1=ep1  
2=ep1bsa  
3=text  
4=link  
5=symbol
```

name is the segment name returned by get_name. If the segment name could not be found, get_name returns a null character string and the default is the concatenation of the CTSS NAME1 and NAME2 with a "." between as they were found in the archive header for that segment. In either case, the segment name of each branch created will be printed out.