Identification

punch7: A Spliceable Outer Module to convert linear binary data into 7-punch card images
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Purpose

This section describes a spliceable I/O-System outer module which converts linear binary data into 7-punch card images. The card image format is the CTSS 7-punch format.

Usage

The segment punch7 uses the standard I/O-System outer calls attach, detach, and write (see Sections BF.1.00 for explanations and declarations). The user must first attach some 7-punch sink such as the card-punch DIM or a file. Then punch7 is attached by the following call.

call attach(ioname1, "punch7", ioname2, mode, status);

ioname1 is the ioname on which write calls to punch7 are to be issued. The type is "punch7". ioname2 is the ioname that punch7 is to write onto. mode is ignored. status is described in BF.1.07. At attach time punch7 issues a setsize call on ioname2 to set the element size to 972 bits (each card image occupies 26 2/3 words out of 27 words).

The following call is made to write an entire 7-punch deck.

call write(ioname1, wksp, offset, n, nt, status);

wksp is a pointer to the caller's workspace. offset is an offset in 36-bit elements (words) in the workspace and indicates where in the workspace the linear binary data is to be obtained. n is the maximum number of elements (words) that punch7 will attempt to transmit. nt is returned and is the actual number transmitted. status is described in BF.1.07 for a description of status. Upon receipt of a write call punch7 will write 7-punch card images onto ioname2 until n elements have been converted, or until fatal error status is returned by the 7-punch sink. In case of error the status returned by the 7-punch source is returned as status. If any valid data was transmitted prior to detecting an error, the proper count is returned in nt.