Section BT.2.01 has been revised to summarize functions related to the handling of detachable I/O media. Section BT.2.02 describes a queue control facility that buffers requests for media operator service.
Identification

Summary of Media Management Functions
R. C. Daley, C. M. Mercer, J. H. Saltzer

Purpose

This section contains a summary of functions performed in the handling of detachable I/O media. References in addition to other BT.2 sections are BX.15 that describes operator commands, BT.1 that describes resource assignment, and BF.2.26 that describes the I/O Assignment Module.

Assignment Functions

The functions listed below are ultimately performed within the I/O Assignment Module as directed by the Resource Assignment Module.

1. Assign medium_type medium_name to user_id

   This function must precede all other media functions. It consists of validating a user's right to access a medium and then making an assignment table entry to permit access.

2. Unassign medium_type medium_name user_id

   This function negates a previous assignment.

Media Operator Functions

The functions listed below are ultimately performed by a media operator. Information that a media operator wishes to relay concerning the performance of a function takes the form of an event signal. BX.15.09 describes status indications passed from a media operator to the Media Request Manager for conversion to an event signal. Below each function description is a sample call to the Media Request Manager that, for example, a tape DSM might issue to trigger the function.

1. Locate medium_type medium_name

   This function consists of moving a medium from its permanent storage area to the operations area.

   call mrm$put_request ("locate", "tape", tape_name, ",", ",", event, cstat);
2. Load medium_type medium_name onto device_name
   This function consists of loading a medium that has been located.
   
   call mrm$put_request ("load", "tape", tape_name, "tape drive", drive_name, event, cstat);

3. Unload medium_type medium_name from device_name
   This function consists of unloading a loaded medium.
   
   call mrm$put_request ("unload", "tape", tape_name, "tape drive", drive_name, event, cstat);

4. Return medium_type medium_name
   This function consists of moving a medium from the operations area to its permanent storage area.
   
   call mrm$put_request ("return", "tape", tape_name, "", ",", event, cstat);