Identification

Logout Command
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Purpose

The logout command enables a user to indicate that he no longer wishes to use the system at this time.

Usage

The console user types:

    logout

The logout procedure may, of course, be called directly by another procedure:

    call logout;

No matter where or when logout appears in any of a user's working processes, the process-group involved is logged out immediately.

Implementation

The operation of logging a user out of the system is performed in the Overseer and User Control processes associated with the user-process-group serving that user. Sections BQ.2.03 on User Control and BQ.3.01 on the overseer procedure explain the mechanism involved. Here we are concerned only with the interface between the Overseer process and working process regarding logging out.

The overseer procedure in the Overseer process creates a working process table (the segment wpt) in the process-group directory (see BD.6.10 on process-group directories). The working process table contains the structure:
dcl 1 wpt based (p),
  2 wpp bit (18), /* relative ptr to most recent entry in table */
  2 overseer_process_id bit (36), /* used by logout - see below */
  2 logout_chn bit (70), /* channel to send logout event to overseer - see below */
  2 (completion, start, hold, reset) bit (70), /* channels for other events from working process - see BQ.3.01 for further information */
  2 wps area (4096); /* area in which entries for each process are allocated */

The two items of interest are p->wpt.overseer_process_id and p->wpt.logout_chn. With these items, the logout command can send a logout event to the Overseer. The Overseer and User Control processes take it from there.

The steps in the logout command are:

1) call gdir (BY.17.03) to get pathname of process-group directory and concatenate ">wpt" for the pathname of the working process table;

2) pick up from the working process table the Overseer process id and the name of the event channel to signal a logout to the Overseer;

3) call unique_bits (BY.15.01) to obtain a unique 70-bit string to identify the logout event about to be sent;

4) call ecm$set_event (see BQ.6.04) to send the logout event to the overseer;

5) call die (BW.2.01) effectively blocking until the process is destroyed.

The User Control and Overseer processes take over and log the user out. User Control writes the following comment on the user console.

(user id) logged out (date and time).

Total cost of console session: $(amount).