

Published: 12/18/67

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:

```

dc1 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).
```