Identification

System Operator Command to Create New Processes
startup
W. R. Strickler

Purpose

Among the processes listed as system processes in BQ.1.02,
only some in the System Control Process-Group exist after
Multics is initialized and the system operator's process-group
is created. Certain of the other processes in the list
are created as the result of the system operator issuing
the startup command. In Initial Multics initialization
is required for the backup system.

Usage

The system operator types

       startup process_name

where process_name is the name of a system process or
process-group which the system operator is authorized
to create.

Implementation

The contents of data segments "operator_comm" and "request_name"
(that is, the structures op_comm and op_req) are described
in BX.15.05. A data segment shared by System Control
and the operator's process-group contains the character
string:

       dcl process_name char (24) based (sp);

The startup command takes the following steps:

1.   Place the argument process_name in sp→process_name.

2.   Create an event channel over which System Control can
      reflect completion of the startup request; place the
      name of the event channel in rp→op_req.ref_chn.

3.   Place the name "startup" in rp→op_req.req_name.

4.   Signal System Control, over the event whose ID is in
      p→op_comm.op_req_chn.

5.   Call the Wait Coordinator (BQ.6.06) to wait for the
      reflection signal from System Control.

6.   Examine status returned by System Control, and inform
      the system operator, by means of a console message, of
      the success or failure of process creation.

7.   Delete the event channel created in step 2.

8.   Return.