Identification

Miscellaneous PL/I Statements
delay, display, reply, exit, stop
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Purpose

The PL/I statements described here are included in the
Multics PL/I primarily for compatibility with other PL/I
systems. It is clear that they are oriented to the batched
user and that in Multics we can provide only approximations
for their intended uses. All are described in the alphabetically-
arranged Chapter 8 of the PL/I manual.

Display and Reply

These statements are intended to facilitate communication
with "the machine operator". Since there may easily be
many machine operators on a Multics system, each with
his own separate console, and since direct communication
between Multics users and machine operators is a thing
to be highly discouraged anyway, display and reply will
communicate with the user's remote console.

The statements are implemented, respectively, by the calls

        call display_(message);

        call reply_(answer);

The declaration for the arguments expected in display_ and
reply_ is

        dcl (message, answer) char (*);

Display_ puts message on the I/O stream user_output.
Reply_ reads the I/O stream user_input and sets the value
of answer.

Exit and Stop

According to the PL/I manual these statements have identical
effects in the absence of tasking. Since tasking will
not be implemented in the first version of the Multics
PL/I, their implementation could be identical. However
for the sake of generality they will be implemented through
calls to two different library subroutines:

        call exit_;

        call stop_;

Each types an informative message and returns the user
to command level. [The concept of "command level" has
yet to be defined precisely. However, at command level
the user can "talk" with the system.]

Delay

The delay statement is probably intended primarily for
use in tasking. However even though tasking will not
be implemented in the initial version, delay should be
since it may be used elsewhere. The statement is implemented
by the call

        call delay_(n);

where n is declared

        dcl n fixed bin (71);

N is the number of milliseconds to delay. Delay_ will call
a traffic controller entry which causes the process to be blocked
for n milliseconds.