PROGRAMMING STAFF NOTE 67

TO: CTSS Maintenance Staff

FROM: T.H. Van Vleck

SUBJ: FIB

DATE: April 5, 1966

It turns out to be quite simple to add a very powerful facility to FIB, allowing for the pre-scheduling of absentee jobs. With this facility implemented, a user may request that a job he run up to a month later; at the same time, the proposal allows a reasonable approach to the difficulties of preventing any user from monopolizing the limited FIB capacity of the computer.

It is proposed that the FIB command accept two additional arguments, an hour and a day, specifying the earliest that this job be run. Thus the command form will be

FIB JØBNAM -TLIM- -HOUR- -DAY-

If a time earlier than the present is specified, FIB will assume that the job is to be run the next day or month. If no time-to-wait-until is specified the current time will be used.

Since one goal of FIB is to enable us to schedule jobs not requiring supervision for tunning when the machine would otherwise sit idle, we can use the proposed facility to preschedule work for times like 3:00 AM Sunday. In addition, automatic accounting and so forth become possible.

Over-use of FIB

The time quota for FIB imposes a gross control on the total amount of absentee work a user may do in a month, and the 5 - minute limit on runs controls the amount of time a single job may run. We are interested also in preventing any user from having too many FIB jobs in at any one time and thus monopolizing the facility.

The solution is to have the FIB command refuse any job which would be scheduled within a time K (say 2 hours) of any other job for this user. The user is required to "space" his jobs. This is better than the previously-proposed idea that only one job for any user be allowed in FIBJOB FILE, since a job scheduled a week away should not prevent FIB use in the interim.

Implementation

Changes necessary are:

- 1. Change FIBMON to check the time parameter and skip a job if its time hasn't arrived.
- 2. Change FIB to handle extra arguments and insert the parameter into FIBJOB FILE.
- 3. Change FIB to check for pre-existing jobs and reject if jobs are too close.

All of these have been written, but not tested.