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Subject: SCAMP Strategy

Reference:

To: Pat Rickert - GSDHQ, Atlanta

One of the original SCAMP designs proposed by the SCAMP task force last year included a disk file. In fact, if you recall, I proposed using the GSD Ruby file (which was decommitted on the day of my proposal), and no other small disk in IBM was appropriate. As a result, the present SCAMP prototype was planned and developed around a design which does not require a disk file.

The recent demonstration of feasibility of the small "flexidisk" at Los Gatos (which you saw on your visit) may have major impact on the optimal choice of SCAMP development strategy. A discussion of such a strategy follows:

I. MAJOR ASSUMPTION

The Los Gatos Flexidisk can be product engineered and brought into production within 12-15 months.

If the above assumption is true, the following development tactics become possible (and quite attractive).

II. RESULTANT DEVELOPMENT TACTICS

1. Produce SCAMP BASIC by emulating the System/3 (including disk file). Modernize the System/3 BASIC. This tactic has the following advantages:
 - (a) Uses existing BASIC software which is well debugged and documented.
 - (b) Provides a modern BASIC language to the user.
 - (c) Replaces a 15-18 calendar month project with a 6-9 month effort.
 - (d) Resultant manpower savings could be invested in developing "bells and whistles" which make the total product even more appealing to the customer. These "bells and whistles" are such things as graphics capability on the display and printer, a fully supported sensor-based I/O port, and a full set of programs supporting SCAMP as an intelligent terminal on a communications link with S/370 (and later with FS).

2. If proven feasible, produce SCAMP APL by extending present SCAMP 1130 emulator to handle the flexidisk; then use the 1130 APL Program Product (now decommitted) with the following advantages:
 - (a) virtual workspaces
 - (b) full APL operator set
 - (c) no practical restriction on vector and array rank and size
 - (d) 9 digit precision (instead of 6) (and with a more straightforward approach for extension to 11+ digits)
 - (e) this APL software is extremely well documented
 - (f) reduces read/write memory requirement (possibly by 50%).

III. HOW TACTICS FIT WITHIN LONGER TERM STRATEGIES

1. The development of the GEM engine by Roy Harper's group is beautifully placed to play a major role in the above strategic plan. This is so because the GEM engine is far superior to PALM as an engine to emulate 1130 and S/3. When ready, GEM could be installed in SCAMP with only the relatively minor effort of producing the two emulators in GEM code. Note that it should not be necessary to modify APL or BASIC software at all when GEM is introduced!
2. The addition of the flexidisk makes possible the advantages of running major portions of present 1130 and S/3 program libraries as proposed originally for SCAMP 2. These huge libraries could be run if the 1130 and S/3 "GEMULATORS" were to be fully extended to include the handling of logical card I/O, printer, and console operations.

The thought of being able to run CSMP, RPG, COGO, ECAP, etc. etc. fairly makes my mouth water, and I think our customers will agree. One can visualize CSMP or COGO or ECAP being operated interactively using the SCAMP display - WOW!

IV. SUMMARY

Obviously the above proposal is predicated on the viable and timely product development of the flexidisk. The possibility of this development should be assessed immediately in order to determine the total optimal product development strategy.

Paul
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