To: W. Shultz

From: W. C. Lynch

Location: Palo Alto

Subject: Pilot-Mesa Status Report for Apr. 77

Keywords: Pilot, Mesa, Status

File: <Lynch>April77.Status

Archive document #: To be assigned by Ode Lopez

General

Operational problems have continued to consume a significantly larger proportion of the available Mesa manpower. The comments of the March status report continue to apply. An extra model 31 disk has been recieved on loan from Charles Simonyi and has been installed on Rich Johnsson's Alto. This should improve the system building task significantly.

A logging procedure has recently been instituted to scope the magnitude of the bug repair effort. Most bugs are old ones that have been latent in the system for some time and which are now showing up for the first time under the current more vigorous usage of Mesa.

A complete Mesa compiler and system were released on March 23rd (as promised at the beginning of March). Problems were being fixed right up to the last minute. Despite this the release went very well. Most bug reports received subsequent to the release have been traced to problems that have been present for a long time rather than new bugs peculiar to this release.

A hold has been placed on any further releases pending agreement on a release plan. I am currently drafting a plan after consultation with W. Shultz.

The problem referred to in the March status report concerning the adverse affect on productivity that the absence of a release group has had on Mesa activity is still there. Smokey Wallace has this charter for SDD El-Segundo but not for Palo Alto. This arrangement is making less and less sense.

The Mesa consulting activity and the regular Mesa Style Seminar organized by Dick Sweet are still going well.

Attendance at the Mesa Style Seminars is holding up. Video tapes have been made to show elsewhere in SDD.

A training plan is almost complete. Barbara Koalkin has been assigned to upgrade the examples presented in Dallas. We are planning to video tape these in May and preliminary

arrangements have been made with Jim Meyer.

Staffing

With respect to staffing, the group currently includes Dave Cronk, Rich Johnsson, Barbara Koalkin, Dave Redell, Dick Sweet and John Wick.   Jim Sandman has transferred into the group from PARC and will be on board on May 4. Hugh Lauer will be on board by May 1. Currently, no offers are outstanding. Several candidates were interviewed. One rec is available to be filled. We have many well qualified applicants.

Mesa

The transfer of authority for the Mesa compiler from Satterthwaite and Geschke is essentially complete. This has the immediate effect of reducing the manpower devoted to Mesa by 33%. Considering the experience and expertise factors the effective reduction is more like 50%.

Due to more pressing matters for the members, the Mesa Language Working group has not met recently. A number of issues remain to be resolved.

Implementation of the new binder is now the very top priority. The binder proposal is still under review and feedback has not yet been recieved. We are forging ahead on the presumption that large changes will not be suggested. It is critical that we finish the binder as soon as possible as it has huge leverage on everyones' productivity. We project that it will be in a releasable state by June 1.

The Process Working Group has stopped meeting and Dave Redell has spent (and will continue to spend) a significant amount of time preparing a final report so as to capture the results. No decision has been made as to whether or not to implement the proposals, the decision awaiting the completion and review of the final report. The April 1 deadline has evaporated.

The debugger has continued to improve remarkably. The recent past has been spent preparing the debugger for the March 23 release and with coping with the resulting bug reports. The next step is to update the dubugger to keep it in step with the new binder changes (rather than a release or two behind, as has been the case and the source of most of the binder discomfort). A list of proposed functional enhancements is under construction from the feedback from the questionaire. Progress will be a little slower in April and May as Barbara Koalkin will be devoting some of her time to training issues.

The control of releases of Mesa, distribution of the system, and mechanism for reporting and dealing with bugs are still an issue. As mentioned earlier, a written proposal is under way.

Pilot

Things are going excruciatingly slowly with Pilot, primarily due to a lack of manpower. Only a portion of Dave Redell's time, about half of my time, a small fraction of John Wick's time and a fraction of Dave Cronk's time have been available.

A file system design group has been instituted and has had several meetings. The group consists of Charles Irby, Dave Redell, Paul McJones, Bob Ayers, Dave Cronk, and Bill Lynch. It has concentrated on the very important question of file compatibility. Roger

Needham is a recent but continuing guest and his input has been valuable.

The revision of the Pilot functional specs due at the end of April is grossly behind schedule primarily as a result of the shortage of manpower and the decision that the attention to the file system was urgent. The manpower situation will not get better until early in May with the arrival of two more people.

Assignments

Cronk: Arrives in Palo Alto April 15. After April 15, make a detailed design proposal for the file system removability and archive features.Become familiar with Mesa and Pilot. Actively participate in the File system working group. Act until April 15 as liason with Applications.

Johnsson: Implement the new binder facility; Learn the entire Mesa compiler and make all code generator changes. Assist in the preparation of Mesa for releases.

Koalkin: Learn the debugger; Implement all modifications to the debugger core; Give support and training to Mesa users, particularly at installation time.

Lauer: Reports for work May 1 – After orientation, work on the Pilot process structure design.

Redell: Prepare a final report for the Process working group; Participate in the File System working group; Learn the entire Mesa runtime system: Implement the Mesa FTP facility. Document the Mesa FTP facility.

Sandman: Reports for work May 4 – immediatly take over the Mesa runtime, freeing John Wick to work full time on Pilot (memory management)

Sweet: Add the required changes to the compiler for the new binder. Set up and manage the Mesa consultants: Set up and manage the Mesa Style Seminars: Learn the entire compiler; Implement all compiler changes other than those to the code generators. Assist in the preparation of Mesa for releases.

Wick: Participate in the implemention of the new binder, particularly required changes to the Mesa runtime. Maintain Mesa runtime package; Begin investigation of the Pilot process structure; Begin investigation of the Pilot memory management; Aid Redell in learning the Mesa Runtime system; Aid in delivery and installation of Mesa systems. Assist in the preparation of Mesa for releases. – After May 4, work on the Pilot memory maanagement.

TBA: The plan calls for one more person.

Distribution:
    Bergsteinsson
    Heinrich
    Irby
    Liddle
    Lynch
    Metcalfe
    Mullen
    Rider
    Shultz
    Simonyi
    Stottlemyre

Szelong
Thacker
Townsend
Wallace

Cc:
Cronk
Johnsson
Koalkin
Redell
Sweet
Wick