

# Minutes for SCC meeting of May 25, 2005

by Dave Redell

## Attending

Mike Cheponis  
Mary Cicalese  
Mike Cochran  
Lee Courtney  
Bob Fraley  
Henry Gladney  
Kathe Gust

Phil Gust  
Gardner Hendrie  
Sellam Ismail  
Cynthia Jordan  
Jim McClure  
Paul McJones  
Randy Neff

Bernard Peuto  
Michael Powell  
Dave Redell  
Bill Selmeier  
Len Shustek  
Kirsten Tashev

## SCC Website Update

The SCC website continues to improve. It contains information on projects, meetings, the SCC calendar, a Help section, and home folder for members. Mike Powell went over some issues regarding content that needed clarification. He clarified the Plone distinction between *documents* and *files*. Documents are HTML, reformatted by the browser. Files are simple binary or textual information, and are not reformatted; for example, ASCII source files should be stored as text files rather than as documents. (In the long term, we may need to store some source files as binary and use fancier tools to deal with historical formats, such as pre-ASCII encodings, special characters, etc.) Editing of HTML documents is supported in four ways: a) direct editing of HTML as text, b) a simple HTML editor called *Epoz*, c) a get/put hook allowing editors to access files directly in Plone, and d) a checkin/out facility for editing a file locally and returning the result to Plone. There is also an FTP server with the expected properties regarding subtrees, filename extensions, etc.

**Reminder:** The site is located at: <http://community.computerhistory.org/scc>. SCC members are encouraged to register new personal accounts on the site. To register, send email to [scc-admin@computerhistory.org](mailto:scc-admin@computerhistory.org), as described on the site.

## Website Strategy

Bernard addressed some top-level issues regarding the website. We need clear models for at least three classes of users:

- Visitors would be the general public, and would see only published content.
- Active members would be everyone on the scc\_active email list.
- Contributors would be everyone with a personal account on the Plone server

There was discussion of possibly having a fourth category for project-specific groups.

In terms of core content, the best examples so far are Paul's Fortran and Lisp collections, each consisting of a collection of files with a thoughtful but not too formal organization and explanation. In the longer run, we can develop a more formal arrangement with searchable metadata and so on, but for now, members are encouraged to help populate the site in a manner analogous to the Fortran/Lisp collections.

We need a Front Page and a Visitor Guide to make the site as friendly and usable as possible. We need an effective way to detect and repair dangling links on the website. (There was some discussion of possible approaches, but none emerged as a clear winner.)

We need to clarify the relationship of the SCC email facilities to the website, and also establish a clear policy regarding privacy – e.g. protection of user personal information, etc. There are also remaining performance issues to be addressed.

Henry pointed out the need for clear guidelines for externally visible materials, which in terms of Plone means “published” documents and files. In particular, we need an IP clearance step to insure that individual contributors are not accidentally publishing unauthorized material in CHM’s name. There are already guidelines for this for the regular CHM collection, and we just need to make sure they are applied in this case as well.

### **User Requirements for a Software Archive**

Lee and Mary reported on their usability study plans. This includes an RFI – a two page survey for a targeted sample. The categories of users include IT, academic, corporate and so on. Users will be asked about their areas of interest, such as: IP issues, History, teams, oral history, etc. Lee and Mary anticipate completing three initial interviews by the June meeting and reporting the tentative results at that time, with the goal of validating the survey methodology for subsequent use on a real population of subjects.

### **Software Selection Criteria**

Sellam presented his current list of nine criteria. The list will be kept up to date in his home folder on the website as it evolves. The current criteria are:

- 1) Were a significant number of copies sold/installed?
- 2) Does this artifact illustrate a major failure?
- 3) Does this represent the birth of a new paradigm? (e.g. the first GUI, etc.)
- 4) Was a new software development methodology employed?
- 5) Does this software support other significant artifacts (e.g. an OS)
- 6) Is the code itself of very high quality or otherwise significant?
- 7) Was it embedded in some significant larger object? (e.g. Apollo, Shuttle, etc.)
- 8) Is this an example from the very early history of software?
- 9) Has it had a profound impact on society?

Further discussion of these criteria and refinement of the list is expected over time.

### **Recent Acquisitions**

Sellam updated the group on some recent acquisitions, including:

- a) MacInTax – a complete set of the packaged product, documents, etc.  
(source code TBD)
- b) 1401 code – games, printer tunes, etc.
- c) 1620 – additional software for the restored 1620 machine
- d) Sargon chess program – version I, II, and III.
- e) Apollo workstation software
- f) Books on software by Robert Glass – some for the collection, extra copies to sell.

### **Software Preservation Symposium**

Sellam has been working with Bernard, Len and Henry Lowood on this. The target date is now May 2006. There will be a Call for Papers/Participation soon. The event is planned for either 1.5 or 2 days. The status regarding open vs. invitation-only is still being discussed. The tentative plan is to shoot for an ongoing bi-annual event, but exact plans will depend on the experience with the first one and on possible co-sponsors, such

as ACM or IEEE. The goal for CHM is both to provide a useful event for the larger community and to position CHM itself as a central resource for recovery, transcoding, archiving and preservation of historic software. Potential topics for the symposium include:

- 1) Collection criteria
- 2) Repository issues
- 3) Catalogs and meta-data
- 4) Presentation, UI and access
- 5) Transcoding & conversion
- 6) Format/structure
- 7) Data rendering
- 8) Emulation
- 9) Expected usage of software archives
- 10) Development (donations, marketing, etc)
- 11) Survey of existing archives and other preservations efforts  
(e.g. since the late 1980s)

If the list of topics is this long, multi-tracking will presumably be necessary; this is still an open issue. There was also tentative discussion of topics to exclude, including legal issues and data retention policies. Clearly, all of this is at a very early stage of development, but it's good to see the effort moving forward with a clearly defined group of people driving.

## **Project Reports**

**Fortran** (Paul M): Paul continues to make progress on Fortran, but things have calmed down a bit. He has the fabled microfiche from Micah Nutt and Al Kossow is doing an initial scan. They appear to include listings, flowcharts and a lot of other related materials – great stuff!

**Lisp** (Paul M): Since last month, this has moved to Paul's front burner. He showed a branching tree diagram of Lisp variants and talked about the people he has contacted and the artifacts he has uncovered. These include source listings of the original IBM 709 Lisp 1.5 system and the CTSS version. He also has a sample of Lisp applications, including puzzle solver and proof checker programs, etc.

**Plato** (Mike Cochran): Mike is a key participant in the cyber1.org group that preserves and runs the Plato computerized education system. He outlined the procedures used by the cyber1.org group to process incoming donated materials. He used a funnel-and-filter analogy to illustrate the process of evaluating the submissions, sorting out the IP issues, and then adding the materials to the cyber1 collection. There was also a brief discussion of the potential availability of a running late-model CDC system with a complete Plato system on it that is still in use by the FAA, but is thought to be nearing end-of-life. More investigation and discussion will be needed to determine if this is something that the museum can/should try to acquire as a complete running system. This specific hardware model is not particularly significant, but a running example of the CDC architecture and a functional Plato system both represent significant positive value.

**NLS** (Phil G): The NLS project is moving forward, although somewhat less rapidly than in the last couple of months. The project website is being set up. The IP issues are somewhat clouded, since both Boeing and British Telecom are involved, and neither

seems inclined to claim actual ownership of NLS. Phil and the other project members will keep working to resolve this.

**1401** (Bill S): The 1401 hardware came with a large collection of punched cards. A group of project members read the cards and transcoded a total of almost 300 card decks, including utilities, printer tunes, an autocoder-to-360 translator, etc. There is a second batch of about 150 decks to process, and a significant effort to figure out what all of these things do, since most are undocumented. All of this material is on the SCC website.

One interesting generic question came up during this discussion: what is the plan for running vintage software that processes input data if we have the code but we don't have any input data for it to process? This may be a significant issue, especially for business data processing software.

**PDP-1** (Mike Cheponis): Mike gave a brief overview of the project. It started in Nov 2003 with 8 main members. By May of 2004, the PDP-1 itself was running, although more work on peripherals remained to be done. The big milestone goal is to get SpaceWar running!

Both procedurally and technically, this project benefited from the example of the earlier 1620 restoration project. There are both significant challenges and major opportunities remaining for this project. For example, there is no complete/correct set of schematics for this PDP-1, and much of the other documentation is incomplete. It was noted that area local Peter Deutsch wrote the original PDP-1 Lisp system, so there is a significant opportunity to have him come by to film a demo of that system running on the real hardware. In a real *tour de force*, Peter Sampson has rewritten (from memory!) a bunch of his original PDP-1 music software. And so on. All in all, in keeping with the PDP-1's seminal role in the academic computing community, this project seems like an excellent example of a CHM hardware/software effort, and was mentioned in a recent article in Technology Review.

## Upcoming Meetings

| Day                 | Date         | Time              | Conf Room |
|---------------------|--------------|-------------------|-----------|
| Wednesday           | June 22      | 1:00 pm – 3:00 pm | Hopper    |
| No July Meeting     |              |                   |           |
| Wednesday           | August 24    | 1:00 pm – 3:00 pm | Hopper    |
| Wednesday           | September 21 | 1:00 pm – 3:00 pm | Hopper    |
| Wednesday           | October 19   | 1:00 pm – 3:00 pm | Hopper    |
| Wednesday           | November 16  | 1:00 pm – 3:00 pm | Hopper    |
| No December Meeting |              |                   |           |