CN/DPG/92/MIN/5

THE CN DIVISIONAL PLANNING GROUP

Minutes of the Meeting held on 15th. June 1992

PRESENT: R.Brun, J.J.Bunn(Secretary), C.Eck, F.Gagliardi, J.Gamble, C.M.S.Jones, S.Jarp, J.–C.Juvet, M.Metcalf, A.Osborne, A.G.Silverman, D.O.Williams(Chairman).

- *MINUTES OF LAST MEETING (CN/DPG/92/MIN/3), AND MATTERS ARISING*

The Chairman and Secretary apologised for having cancelled the last meeting. Apologies for not being able to attend the present meeting were received from Robertson, Richards and Carminati.

In the previous Minutes, the phrase "there were strong hopes of being able to do an ATM Field Test with Alcatel" should replace the statement that this had been decided.

- *CHAIRMAN'S REPORT*

DOW presented several items:

1. The Lawrence Berkeley Lab. Computer Newsletter contained much useful information on workstations.
2. Information on the Ampex Terastore product was available from DOW.
3. He asked about the status of the Kerberos Task Force. AGS replied that Ben Segal was in charge of this, and that he was currentlky visiting sites in the U.S.A. who had Kerberos running. A search was being made for a suitable environment at CERN in which to do a Kerberos test. DOW asked that the topic be placed on the next DPG Agenda.
4. Copies of the draft "A Policy for Informatics at CERN" by Roy Billinge would be circulated. The document was currently under discussion in the Directorate.
5. Final approval to procede with the PARC (RS6000 cluster) project had been given. In time it was hoped that this would give us a clearer idea of when the Cray could be decommisioned.
6. The CERN Emergency and Advisory Response Team (CEART) needed setting up: in particular it required a team leader. DOW asked if anyone was interested in this task.
7. After having visited China, he asked for volunteers from within the Division to look after liaising on computing matters with IHEP, Beijing.

- *DECWORLD AND ALPHA*

J.J.Bunn presented further details on what had been discovered at DECworld. Most information was contained in the trip report already circulated to the DPG. He listed the machines that DEC were intending to produce containing Alpha chips. Copies of the transparencies are attached to these Minutes.

- *UNIX WORKSTATION BACKUP*

A.G.Silverman presented the results of his investigation into tools which could be used to facilitate centralised backup of user files on Unix workstations. Copies of his slides are attached.

The traditional Unix tools that can be used for file backup tend to be unconvivial, and often impose a heavy load on the network when used with NFS mounted volumes. Several commercial tools had thus been investigated. DECnsr, while well–liked elsewhere, had several problems in our environment. It was understood that these would be fixed with the next release. OMNIBACK, which only runs on Apollos and HP workstations, was currently being used to backup around 6

GBytes of files per week successfully, mainly from machines in the Computer Centre. WDSF (an IBM product) was being used to back up around 1 GBytes of files each week, mainly from PCs, especially Novell Servers. It used the DES encryption algorithm for password hashing, which meant problems outside the U.S.A.. Other tools that had been looked at were Legato Networker and Delta Budtool.

AGS said that the result of the recommendation was to continue with OMNIBACK at the current level, and to expand the use of WDSF. Eventually it was hoped to move to a single tool.

Several people asked whether AGS had recommendations on *which* files the users should have backed up. An existing practice on the central machines was to only back up those files which could not easily be regenerated from existing data. It was felt that the users of the backup service should not themselves dictate *when* backups were performed, else there was a risk of network congestion at certain times of the day and week. In this context, it was noted that 10 GBytes per week corresponded to a *sustained* network traffic rate of around 15 kBytes/sec, and that the possible increase of this traffic would have to be carefully monitored.

AGS was asked to return to the DPG with recommendations on which files to back up, how to start up a public service, and what should be provided for users on standalone machines.

- *REPORT FROM THE COMPUTING MODELS TASK FORCE*

RB reported on progress he had made in analysing the current services offered in the Computer Centre. This work was the first step in trying to propose how to migrate to the model he was currently deciding on.

Part of this analysis had involved investigating tape mount statistics. Some surprising facts had been discovered on usage patterns, and RB showed various plots to support the conclusion that there was apparently little logic in how the experiments were making use of, for example, the robot facility.

Another investigation had shown that, on CERNVM, around 50% of the interactive CPU was being consumed by only 1% of the user community. This, in fact, is a well understood phenomenon. RB requested that an analysis of service use along the lines he had taken be *de riguer* for all central services in the future.

He predicted the rise in popularity of the PC in the HEP community, particularly given the recent availability of the CERN program Library for MS–DOS.

RB said that, instead of forming a working group whose purpose would be to propose several different models of future computing in HEP, he had decided to write a discussion paper proposing just one model. This paper was intended to be ready by the end of June, and would be circulated to the DPG at that time.

- *AUTUMN POW DISCUSSION ITEMS*

AO circulated a list of items which it was hoped to cover at the residential POW meeting in October. This list has since been circulated to the DPG with the updates from the meeting.

- *ANY OTHER BUSINESS*

  JCJ suggested that the CERN–DEC Joint Project Meeting be put into suspended animation, until such time as there were projects other than the Unix Data Centre (which had its own meeting) to discuss. This was agreed.

- *NEXT MEETING*

  The next meeting will be held on 17th. August at the usual time and place.

Table 1: Action Items

Name	Entry Date	Target Date	Task
D.Williams	April 1991	Summer 1991	Produce cover note for Costs paper
F.Fluckiger	November 1991		1992 Give Computer Colloquium on Multimedia
R.Brun	January 1992	1992	Task Force on Computing Models
A.Silverman	June 1992	1992	Elaborate on WS backup recommendations