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IN CONFIDENCE

SCIENCE AND ENGINEERING RESEARCH COUNCIL
RUTHERFORD APPLETON LABORATORY

INFORMATICS DIVISION

SOFTWARE ENGINEERING GROUP NOTE 19

VISIT TO KEELE
25th January 1985

1.   INTRODUCTION

FMR and RWW visited Keith Bennett's group to discuss

    1.   APP/SE/068   Dr White - Pascal diagnostics

    2.   CSC/IEC RG2   Dr Bennett - Network Topology.

RWW had not visited the department since about 1978 so was interested in recent developments.

2.   GENERAL

The department has grown slowly since 1978. Keele has been hit quite hard by the recent UGC cuts but Computer Science has not been too badly affected. They still occupy the 2nd World War prefabs constructed by the Americans. However a new purpose built building is being constructed (phase 1 finished, phase 2 started) which should enable all staff to reside in the same building with computing facilities and computing service machines. The University Computing Service is still based on GEC 4000 series, with access to UMRCC. The research group has 11/34, 11/23, 3 x PERQ2 and 1 x PERQ1 plus numerous BBC micros. Keele have a Campus Cambridge Ring and a research Cambridge Ring. Ethernet will run around the new building as well as Cambridge Ring. They are very underequipped.

The University is hoping to set up its own Science Park in conjunction with the local Council (Pearl's husband is in on this) and a property development company.

3.   DR NEIL WHITE

White got a small grant from STI for a PERQ on which to implement his Pascal run time diagnostic system as a contribution to the Common Base. This tool was originally produced for the GEC 4000 where it is still an integral part of the undergraduate teaching facility. We were given a brief demonstration of the GEC tool plus some background papers.

The STI project has made little progress due to late delivery of the PERQ, hardware unreliability (3 new Winchesters in a year!), the late release of PNX2 and ICL's reluctance to give White the sources of the Bracknell Pascal Compiler.

All of these problems have now been overcome and links with Colin Prosser (ICL Kidsgrove) and Barry Byrne (ICL Bracknell) have been established.

White has a decent symbolic debugging package already constructed for the GEC and some reasonable, but not outstanding, ideas for improving the package by exploiting PERQ graphics to display data structures and values. White was advised that his PERQ1 could not run both 16K WCS and Ethernet due to power supply problems and should contact K Robinson for more details.

His current application to Alvey is modest at £5K and I recommend we fund it with ICL as Uncle.

4.   DR BENNETT'S CSC/IEC RG2

CSC had recommended the continuation of Bennett's DCS work on network topology involving the problems of physically moving UNIX systems with a distributed UNIX system at alpha plus. With the recent launch of the transportable single user UNIX system from HP (the Integral) this research is now even more interesting and 'timely'.

According to Cliff Jones, B Warboys had sunk the RG2 at IEC because of his NIH attitude to UNIX. Hotchkiss had then sent it to Alvey!

RWW chatted to Keith and we agreed that RWW would put it back to Hotchkiss saying IEC should not be rejecting CSC alpha plus grants in this way. As I had already, pre CSC, told Hotchkiss it was DCS not Alvey SE I do not see why he sent it to us after IEC.

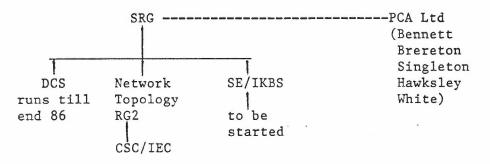Perhaps D E Talbot could try again to contact Warboys.

5.   INFRASTRUCTURE

Bennett needs a VAX/UNIX system for research activities. RWW agreed and advised trying for a VAX 750 rather than a 730. Bennett was advised to seek contributions from industry and possible Science Park involvement as well as SERC. The University is contributing £11K.

6.   IKBS/SE

A few months ago T Dignan and FMR had visited Keele to discuss Keele's future plans. Bennett is making a good job of building up the group - he actually has a strategy and a plan. I was impressed that he had such documents. I was even more impressed by the workplan he had produced for the CSC/IEC application. Good management is not often seen in Computer Science departments.

We only had 5 minutes to hear about these plans for IKBS use in SE so I encouraged Bennett to send in a draft proposal for us to review.

Bennett's group now called Systems Research Group

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              SRG ------------------------------PCA Ltd
               |                                 (Bennett
               |                                  Brereton
      ----------------------------                Singleton
      |            |            |                 Hawksley
    DCS         Network       SE/IKBS             White)
    runs till   Topology        |
    end 86      RG2           to be
                 |            started
               CSC/IEC
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SRG members
      Bennett
      Brereton
      Singleton
      Hawksley (multi-media)
      (Ms) Frances Grundy (databases and graphics for statistics)
      John Grant (demonstrator)
      1 RA vacancy
      John O'Connor (part time MSc Student from AIM, Cambridge)

7. POSTSCRIPT

British Rail were 'getting there' but only slowly. We got to Keele
1½ hours later (on a different set of trains to the original
schedule). We spent 5 hours + 4 hours = 9 hours travelling and 3
hours actually at the University!

seg1/lv