Comments on the IBICT proposal.

Mimo: First it looks really good - both in general and in most of
the detail, my comments

/* Written 4:11 pm Aug 25, 1988 by igc:gsears in gn:apc.brazil */
From lgoree Wed Aug 24 13:50 PDT 1988
To: gsears
Subject: post apc.brazil
Cc: jscott
Status: R

Geoff: Would you post this to apc.brazil for me so that I don't have to
upload it again. Looks like IBICT will bite on this and you'll be putting
two systems in down here. Hope you are doing great!

Mimo
>From lgoree Wed Aug 24 13:45 PDT 1988
To: lgoree
Subject: Academic net in Brazil
Cc: laanet@emx.utexas.edu
Status: R

Brasilia, Brazil
August 24, 1988

Here is some information on some of the recent happenings here
n Brazil regarding the implementation of the APC system software.
his letter is being sent to the apc.brazil conference on Peacenet
hich contains information related to the two projects in the
lanning stage for Brazil. It is also being sent to the members
f the Latin American Studies Network mailing list.

his letter contains information related to our project for the
mplentation of an academic network here in Brazil. The other
roject, the creation of the non-governmental organization network
ased at IBASE in Rio de Janeiro is gathering momentum and should
e in operation (depending on the resolution of hardware problems
: IGC) within two months.

When Geoff Spears from Institute for Global Communication
levlopers of the APC software) was here last month we had meetings
th the Instituto Brasileiro de Informacao em Ciencia e Tecnologia
BICT) which is part of the Minisiterio de Ciencia e Tecnologia
d part of the Conselho Nacional de Desenvolvimento Cientifico e
cnologia. We also met with the Coordenadoria de Cooperacao
ternacional (CAPES) from the Ministerio da Educacao at the
vitation of Itamaraty (the Brazilian State Department). Both
oups happen to support and fund projects in this area and they
re very interested in our proposal as a means of connecting the
azilian academic community both nationally and internationally.

Just yesterday the United Nations Development Programme
esented IBICT with a proposal for the creation of REDEPEQ - REDE
PESQUISAS BRASILEIRAS: A PROJECT FOR THE DEVELOPMENT OF A LOW-
ST, QUICKLY IMPLEMENTED BRAZILIAN NATIONAL ACADEMIC COMPUTER
TWORK. Quoting from the project document:

e project being suggested here intends to implement a mail
rvice based on the UNIX operating system's UUCP mail and file
nge capabilities and a national conferencing system that would
de immediate access to researchers to fellow academics outside

research and academic interchange could be conducted.

and further:

The purpose of this project is to provide a low cost, quickly implemented academic computer network for Brazilian researchers, academics and scientists. This network would link academics through their personal computers and through existing campus local networks to other academics throughout Brazil using the existing Brazilian packet-switching network, RENPAC. A central micro-computer would be the network hub, storing messages and acting as the forwarding point for international electronic mail traffic. Using software especially designed for conferencing, discussion groups would be maintained bringing together researchers in each discipline who are working at different research centers and universities. This network would have access by means of high speed modems to the UUCP international link UUNET for the exchange of electronic mail that would be gatewayed into any of the existing academic computer networks. This would give immediate access to Brazilian academics to news and conferences on BITNET, Internet, etc.

Access to REDEPEQ would be available to any researcher or academic who could demonstrate to the network administrator a need to communicate with other researchers or academics. Access would be through RENPAC and would support connections from micro-computers to main-frames using commercially available communications software. A RENPAC account and the payment of data transfer costs would be the responsibility of the end-user. These costs would, it is imagined, be absorbed by the research facility or university. A user-fee would be charged per month for the maintenance of equipment, long distance data transfer charges and for administrative staff.

It would also be expected that Brazilian universities would develop their own capacity to exchange UUCP mail with the REDEPEQ host. UUCP is a mail transfer protocol that is available for a variety of computer operating system. It is a standard component of any UNIX operating system. It would be a fairly simple procedure for each university to establish a UUCP node using the REDEPEQ host as a store and forward computer for the long-haul connection to the UUNET international UUCP host. This would diminish load on the REDEPEQ host computer for inter-university electronic mail traffic.

SYSTEM HARDWARE

The network would be run on a micro-computer using a 386 chip which allows multi-tasking. Using a dedicated data line into the RENPAC system and special communication port hardware the system would allow access for up to sixteen users at one time. With a 200 Mb hard disk and 8 megabytes of random access memory the system would allow for the initial use of up to 5000 academics and 15 users at any given time. Using high speed modems the system would use conventional long-distance telephone lines to exchange compressed electronic mail messages. It is hoped that in the future arrangements can be made with Embratel, the Ministry of Communications and the Special Secretary for Informatica (SEI) to allow high speed satellite data transfer, reducing the costs for international electronic mail exchange. Negotiations with EMBRATEL for reduced data transfer charges should be initiated to provide for lower rates for academic users of REDEPEQ through the RENPAC system.

SYSTEM SOFTWARE

The network software would be an adaptation of the APC software system designed by the Institute for Global Communications in Palo Alto, California, a non-profit group that promotes computer mediated communication for non-commercial interests. This system is presently used to maintain the ECONET and PEACENET networks. The software is primarily designed to provide an environment for the exchange of information in two forms; private electronic mail transfer and conferencing. The software runs under the UNIX operating system which is specifically well suited for the exchange of information between computers. The APC software is available free of charge from IGC for non-commercial users, although a license to use the UNIX operating system would have to be purchased.

The electronic mail feature of the APC software allows for the exchange of mail between users of the system and also for the storage of mail to be exchanged with other computer networks. The mechanics of mail exchange are invisible to the end-users because the system uses a sophisticated mail server that is part of the UNIX operating system. Mail between academic users in Brazil would be almost instantaneous. Electronic mail destined for the other international networks would be stored and forwarded several times daily, but most often during off-peak phone rate hours. It would be estimated that international mail could be sent and received within a single day.

End of segement from project document

The UNDP is very well aware of the plans underway for the development of a BITNET style network here in Brazil. That project is still in the planning stage and faces some serious upcoming political negotiations. The REDEPEQ project is intended as a low cost, quickly implemented system that will integrate perfectly with the larger Rede Nacional de Pesquisa and build a large user base and user mentality within the academic community necessary to make that long range project viable and useful.

We welcome your comments and suggestions.

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