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From October 31, 1994  
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==== CytometryNet1 =====  
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- CytometryNet:

The function of the CytometryNet is to provide easy access to the addresses and activities of the national, regional and international cytometric societies. The necessity for closer contact arises from the explosive growth of cytometric techniques in basic, clinical and industrial research with the resulting need for fast mutual information fluxes.

Besides structural information on a cytometric society like address of the secretariat, officers, bylaws, membership, history etc. the informations on the functional activities of the societies like meetings, abstract titles, newsletters, courses etc. are of high interest for an efficient international cooperation.

The planned on-line display of the ongoing work on consensus protocols for immunophenotyping seems of high interest for the joint international efforts for quality assurance and control in cytometry.

The decentralized CytometryNet assures a maximum of world wide information efficiency at a minimum of efforts for the respective cytometric societies.

- Function of a Gopher server node:

While E-mail messages can be send to any existing E-mail address, it is not possible to address or login at these E-mail addresses to actively inspect or retrieve information from there. Server nodes are created for these purposes e.g. for on-line information systems. A server node, when addressed, recognizes the demand and communicates with the login user permitting him to access the stored information. An indicated E-mail address in the server node information package usually permits to the login user to communicate with the association, institution or person providing the on-line information via E-mail.

- Installation of a CytometryNet Gopher server nodes:

Concerning the CytometryNet, the following two E-mail messages CytometryNet2 and CytometryNet3 contain the present installation of the: cytogerm.biochem.mpg.de Gopher server node, localized in a MS-DOS PC in my laboratory, as a setup example.

- Binarize and decompress files:

The messages will usually arrive on a mainframe computer from which they are transferred via WINDOWS, NFTP or FTP programs into a MS-DOS PC.

The message CytometryNet2 contains the file: LHARC.UUE. This file is an ASCII code transform from the originally binary program file: LHARC.EXE via the public domain program: UUENCODE.EXE. The ASCII transform is a precondition for E-mail transfer.

The executable binary version of the: LHARC.UUE program is reconstituted with the public domain program: UUDECODE.EXE by executing: UUDECODE LHARC in the MS-DOS PC.

The message CytometryNet3: CYTOGERM.UUE is retransformed into binary code by: UUDECODE CYTOGERM.UUE. This yields the compressed binary file: CYTOGERM.LZH. The file is copied into the root directory of the main drive C: or into the root directory of another drive together with the LHARC.EXE program.

The command: LHARC E /R CYTOGERM.LZH unpacks the: CYTOGERM.LZH file and provides the files: CONFIG.GPH, AUTOEXEC.GPH and FTPUSERS in the root directory as well as the directories: \GOPHER and \GOPHERD. The LHARC program questions as to whether directories are to be generated are all answered with: Y to ensure the correct directory and file structure.

- Gopher node directory and file structure:

Directory \GOPHER contains subdirectories: \GOPHER\CYTOGERM with the various ASCII text files (secretar.txt, executiv.txt etc) on the respective cytometric society while subdirectory: \GOPHER\LINKS contains the links i.e. the computer nodes of the other cytometric societies. This facilitates automated dialing. It is important to assure that the node names of the various societies are maintained for a longer period of time e.g. for several years to provide stable links.

- Maintenance of stable links:

Maintenance of the mnemonic computer address e.g: cytogerm.biochem.mpg.de means that the server node may well be transferred without problems from one computer to another under the same institutional main node. The computer address changes, however, when the server is relocalized under another institutional main node.

The maintenance of the server node under the same institutional main node is not problematic because the FTP server function of the NOS192.EXE public domain software permits remote alterations of the Gopher node text files via a specified username e.g: valet in the: FTPUSERS file in conjunction with a password e.g: admin. The potential for remote alterations is of importance upon changes of the presidency or of the secretariat of a cytometry society.

Changes of a CytometryNet gopher node to another institutional main node should be communicated to all CytometryNet societies via their secretariat's E-mail address to assure stable links.

- Gopher server program NOS192.EXE:

Directory: \GOPHERD contains the Gopher network server program: NOS192.EXE as well as the network command file: AUTOEXEC.NOS. The server activation call: NOS192 AUTOEXEC.NOS can be executed manually in the GOPHERD directory but automated execution by the: \AUTOEXEC.GPH and \CONFIG.GPH upon file e.g. in case of power failure is preferable. Both files are adjusted for this purpose to the needs of the particular MS-DOS PC and activated for automated action by: COPY \CONFIG.GPH C:\CONFIG.SYS and: COPY \AUTOEXEC.GPH C:\AUTOEXEC.SYS.

- Monitoring of CytometryNet Gopher node activity:

The external use of the node can be monitored by the NOS192.EXE

program command: TAIL /GOPHER/CYTOGERM.LOG. Printing of the:  
\GOPHER\CYTOGERM.LOG file is achieved by file transfer into another  
computer via the remote FTP operation providing: user name and  
password  
(e.g. valet admin).

- Setup and addressing of CytometryNet Gopher node:  
The activation of the Gopher server requires the correct addresses  
of the local INTERNET and ethernet nodes e.g. 141.61.1.1 and subnodes  
in the AUTOEXEC.NOS file. This setup has to be made by the local  
computer  
center. The commands and setup of the Gopher server are explained in  
the NOS192.TXT text file which is in ASCII code while the more  
extensive  
manual: KA9QNOS.PS can be printed on a Postscript file printer.

In the present setup the: cytogerm.biochem.mpg.de Gopher node may  
be called by DOS or WINDOWS programs: GOPHER.EXE or HGOPHER.EXE as  
well as by: FTP.EXE due to the incorporated FTP server function of  
the NOS192.EXE program.

The FTP server of the Gopher node is addressed from another  
computer  
by running: FTP.EXE. The access to the Gopher node is opened with the  
command: open cytogerm.biochem.mpg.de. The consecutive FTP program  
question: user name is answered by: anonymous and the password  
question by the: user name.

The cytogerm Gopher node can presently also be reached via the  
WINDOWS: MOSAIC program for the world wide web net (www) by  
providing:  
gopher://cytogerm.biochem.mpg.de at the: OPEN URL question.

- Programs to address the CytometryNet Gopher node  
Versions of the GOPHER, HGOPHER, FTP and MOSAIC programs are in  
all  
likelihood available in most computer centers. In any case the help  
of the local computer center is required to set up the correct node  
addresses of these programs.

Changing the "cytogerm" name to respective cytometric society name  
e.g. "cytoesacp, cytofrance, cytohong, cytoiber, cytoindia, cytoisac,  
cytoital, cytojapan, cytoruss, cytoug" in the various files (GINFO,  
HELP etc) in addition to providing the respective text files:  
secretar.txt, executiv.txt, council.txt etc. will adapt the node  
according to the respective needs.

Please, communicate the exact address of any installed  
CytometryNet nodes to the E-mail addresses of all linked societies  
to assure the appropriate links.

With best regards

G.Valet

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