

EARN Document

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Earn Users' interface for a PC: the M1/M2 proposal 17/8/89

This document describe an EARN Mail User Agent for Personal Computers.

This product should come in two parts:

- a part located in the PC. This part (called M1) provides ALL the interface between the user and the network. It includes a part of (optionally all) the mail/book facilities, and optionally the 'names' function of VM system. The M1 program is able to set up a dial-up link with the user's host, either directly or through a modem, and to send and receive the user outcoming and incoming mail.
- a part located in the node. This part (called M2) is able to answer to the request of M1. M2 will receive the messages from M1, and send it to the appropriate MTA. It will also take care of the user mailbox, and send the received mail and/or messages to M1. Neither M1 nor M2 contain any routing procedures: The job of M1 is to send a piece of mail to M2, the job of M2 is to send the given mail to the MTA.

1) M1 description and development

The prototyping of M1 is in progress on a Macintosh micro-computer. The development will be performed concurrently on Macintosh and MS-DOS (IBM) PC. M1 performs 4 main functions: connection, storage/retrieval of incoming mail, storage/retrieval of recipients, preparation/sending of outcoming mail.

1.1) Connection:

Part of the software that store infos from user input, and uses this info to

a) reach the node through by available connections (direct, PSDN, modem,...), either immediatly or automatically, according to defined schedule,

-> Macintosh 1 Month/Man
--> IBM PC : 1 Month/Man

b) perform the M1/M2 session:

- send the pending mail (see 1.4)

- collect the received mail & the names of senders (see 1.2, 1.3) -
keep a log file of the session

-> Macintosh 5 days/man
--> IBM PC : 5 days/man

1.2) storage/retrieval of recipients ('NAMES file').

Includes definition of a folder for each recipient, or for a group of recipients.

-> Macintosh 2 Weeks/man
--> IBM PC : 2 Weeks/man

Option: Including synchronization with 'NAMES' file on the host: see below,

1.3) Storage/retrieval of messages includes parsing of RFC822 and X-400 fields (Assuming that EARN furnishes full X-400 protocol), date parsing and control.

-> Macintosh 4 Weeks/man
--> IBM PC : 3 Weeks/man

Options: Including storage of messages into folders, depending of the origin/recipient of msg, automatic creation of new folders, moving of messages between folders

-> Macintosh 2 Weeks/man more
--> IBM PC : 2 Weeks/man more

1.4) preparation/sending of outgoing mail Message body formatting (justification, line length), message header preparation and/or formatting (depending on M2 design).

-> Macintosh 3 weeks/man
--> IBM PC : 2 weeks/man

Option: Including 'Reply, Reply from, Reply both, Forward' functions,

-> Macintosh 2 Weeks/man more

--> IBM PC : 1 Week/man more

Option: Including Earn software support: Listserv & Netserv
messages pre-p

--> Macintosh 2 Weeks/man more

--> IBM PC : 1 Week/man more

2) M2 development

M2 mainly depends on the host. The SUNIST furnish the support and the CPU time for the development of CMS/VM version of M2. All the times below assumes development of M2 at the SUNIST (node FRSUN12), for VM/CMS system. If EARN can furnish a permanent access to a VAX (or whatever) node, including the availability of programming tools, a separate contract about the development of VAX (or whatever) version of M2 should be discussed.

The main functions of M2 are:

- Answer to the request of connection from M1.

- get the received mail from the mailbox, and send it to M1 (Collect mail)

- get the pending mail from M1, and send it to the MTA (Send Mail)

- maintain the 'NAMES file'.

The transmission protocol between M1 and M2 is not yet defined. For technical reasons, it's still impossible to use Kermit, thus the link between M1 and M2 will be 7 bit ascii for now.

2.1) initiate the connection

-> 2 Days/man

2.2) Collect Mail

-> 4 Days/man

2.3) Send Mail

-> a Week/man

2.4) Synchronize the names file (Option)

-> a Week/man more

3) Documentation and package

M1/M2 couple is an opportunity to set up, produce and distribute an 'EARN box'. The EARN box is a package containing the M1 software (on a Mac disk and on a PC disk), a M1 manual, and an EARN manual. The M1 software in the box may be tailored to access a node that agrees in offering a 'guest' account. This way, new EARN users can test the network before opening their own account in a node.

3.1) Documentation for M1 on Macintosh, EXCLUDING Earn manual
-> 2 Weeks/man

3.2) Documentation for M1 on MS-DOS PC, EXCLUDING Earn manual
-> 2 Weeks/man

3.3) Earn Manual. The Earn manual must be node and system-independent. It will include Netserv/Listserv user's guide for beginners, EARN chart, Usage guidelines, eventually a list of lists sorted by Topic.
-> 3 Weeks/man

-> Total
M2 CMS/VM: 1 Month/man
Including Options: 1,3 Months/man

M1 Mac version: 3,5 Months/man
Including Options: 5 Months/man

M1 MS-DOS PC version: 3 Months/man
Including Options: 4 Months/man

-> Grand total 7,5 Month/man 22000 E.C.U.
Including options: 10,3 Months/man 30000 E.C.U.

This job may be performed following two modes:

1) the job is made on university mode, i. e. the people working on it are not only managing this project. The cost is of course the lowest, but time spent on it is not contiguous. All the prices given assumes this mode.

2) The project is seen as a final product, and people working on it are full time. The cost is about 40% higher than in the last option, i. e.:

-> Grand total 7,5 Month/man 30000 E. C. U.
Including options: 10,3 Months/man 42000 E. C. U.

Time needed to carry it well is as short as possible. The difference between the two costs is only due to the work load:

mode 2 assumes the hiring of one more programmer by UCRI.

The given prices includes:

- development and tests of the product on node FRSUN12 through available connections, i. e. 8 bits 300,1200, and 2400 bds async and 7 bits Videotex.
- Test on node FRMOP11 through the same links.
- Release of the 'beta Versions' of M1 mac, M1 IBM and M2 VM within a delay of 7, 9 and 5 months respectively, assuming mode 2, or 9, 14 and 8 months assuming mode 1.
- Release of the Version 1 of the three products about 3 months after the beta-release, and 6 months of follow-up done by UCRI. The follow-up may be done through a Listserv List supported by EARN. Any subsequent follow-up of the Version 1, or improvements and modifications, including those dues to OS changes, must be discussed in one or more separate contracts.

By this contract, EARN owns the stable version 1 of M1/M2, including the sources for all supported machines and OS. The distribution and support for all EARN/BITNET/NETNORTH users and nodes is done by EARN. Earn is entitled to modify the software and to distribute the modified version to EARN/BITNET/NETNORTH users and nodes ONLY, for use within the EARN/BITNET network.

UCRI keeps hability to modify, rewrite, extend, as sell or distribute this product to any third party without refering to EARN.