The following information on using the TYMNET data communications network is the text of an on-line file <DOC>TYMNET.INFO. Attached is a current listing of another on-line file <DOC>TYMNET.DIALUP-NUMBERS.--The dialup number(s) recommended by the SUMEX staff for your use are noted on that list.

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USING TYMNET

Using SUMEX-AIM via the TYMNET network

When communicating with TENEX via TYMNET, it be must remembered that one is talking to TENEX via an independent system - TYMNET. As such, a connection must first be established with TYMNET before communication with TENEX is possible. Also, a TENEX session termination (for any reason) does not necessarily imply the termination of the TYMNET connection (and billing time). The following paragraphs outline the TYMNET connect and disconnect procedures.

ENTERING THE TYMNET SYSTEM

The specific procedure for contacting the computer depends on the terminal arrangement. Two typical communication devices are the data modem (acoustic coupler) and the data phone. The procedures for using these two devices are described here. TYMNET operates terminals in the full-duplex mode. Check your terminal for a Full Duplex/Half Duplex mode switch. In addition, some terminals have an Upright/Inverted code switch. This switch should be in tne Upright position. If you have any questions about using TYMNET, contact the SUMEX staff or TYMNET Network Control (see attached bulletin).

Data Modem:

1. Put the terminal in the line, or compute mode.
2. Be sure that both cords from the terminal are plugged into the modem and that the modem is plugged into a standard wall outlet.
3. Using a regular telephone, dial the TYMNET computer number.
4. When the answer tone sounds, place the telephone handset into the modem in the orientation indicated on the coupler; push the modem's ORIGINATE button.

Data Phone:

1. Put the terminal in the line, or compute mode.
2. Depress the TALK button.
3. Dial the TYMNET number.
4. When the answer tone sounds, depress the DATA button and replace the handset.

IDENTIFYING THE TERMINAL

As soon as the connection to TYMNET is made, the system turns on the terminal and sends a message. This message is sent at 10 characters per second and is readable only on a 10 cps terminal. On other terminals, a sequence of characters will print, and then the terminal will pause.

Type the identification character for your terminal. This character tells the system which code and which transmission speed to use to communicate with your terminal.

Then the system will return the carriage and display:

PLEASE LOG IN:

The table below lists the identification characters. If you have a question about which one applies to your particular terminal, contact the SUMEX staff.

IDENTIFICATION CHARACTER	CPS IN/OUT	EXAMPLES	COMMENTS
D	10	Model 33 Teletype	
B	15	Model 37 Teletype	ASCII
Carriage Return	15	IBM 2741, Datel, Dura, Novar	Correspondence Code
J	15	Model 37 Teletype	ASCII (even parity)
F	15/30	Tymshare 1030, Execuport, Gulton, Syner-Data	Recommended over C where telephone line quality is marginal
A	30	CRT Terminals	
C	30	Tymshare 1030, DCT 500, Gulton, Syner-Data	The particular character used depends on the Carriage Return speed of the terminal
G	30	Memorex, GE Terminet 300	
E	30	Execuports, TI725, NCR260, TI733, TI735	

LOGGING IN

The login procedure requires typing a user name and password, both of which are registered with TYMNET. The system checks both the user name and the password before admitting the user to the system. The user name in this case is the host name "SUMEX" identifying to TYMNET the system desired by the user. The current password may be obtained from the SUMEX staff. All SUMEX-AIM-TENEX users of TYMNET have the same user name and password as follows:

User Name: SUMEX

Current Password: TYMSUMEX

After the system types PLEASE LOG IN:, the user types a Carriage Return <CR>. The system replies with a request for the user name. The user types the user name followed by a Carriage Return. The system next requests the password. The user types the password followed by a Carriage Return. For security, the computer does not print the password on the terminal:

```
PLEASE LOG IN:  <CR>
USER NAME:  sumex <CR>
PASSWORD:  <CR>
```

If there are typing errors while logging in, the system replies with ERROR,TYPE: followed by another request for that information. To abort a TYMNET login sequence, hit the ESC key, and TYMNET will start the login sequence over. In the following example, the user types an unacceptable user name, corrects his error, and continues to log in:

```
PLEASE LOG IN:  <CR>
USER NAME:  sumx <CR>
ERROR,TYPE: USER NAME:  sumex <CR>
PASSWORD:  <CR>
```

Once the user is thoroughly familiar with this login procedure, an alternate and faster method can be used as follows:

```
PLEASE LOG IN:  sumex;  (non-printing password here)  <CR>
```

(A semicolon must be typed between the user name and the password and a Carriage Return should follow the password.)

The error diagnostics are the same regardless of which login procedure is used. When the system indicates an error, the user can correct the error and type the rest of the login information in the normal way.

Tne user is allowed two (2) minutes to log in. This time limit is set for security to prevent an illegal user from accessing the system. If the login is not completed within the time limit, the system prints a disconnect message and hangs up.

Once a successful connection to the TYMNET has been completed, SUMEX-AIM-TENEX should respond with its login herald, and the user should log in to TENEX in the normal manner (Almost, that is. To insure that type ahead will not reveal one's password, terminate user name with <CR> or Altmode.).

When logging out, TENEX automatically breaks the TYMNET connection; however, it does not do so when detaching. In that case, one must hang up the telephone to terminate the TYMNET connection. If the telephone is hung up (or the TYMNET connection is otherwise broken) while using TENEX on the TYMNET, TENEX will detach the job, wait 20 minutes, then kill the job.

Michael Heathman
June, 1975

Attachments (2)