

VTHACK3.TXT

Well, it's time for yet another installment in Virginia Tech hacking. Yes, it's.... VTHACK #3!!!! Brought to you by the Mad Hermit and crew. This time, we're going to focus on the OTHER big network on campus: LocalNet. LocalNet (L-Net) has been around for a much longer period of time, and as such has quite a few more caves and back alleys to explore. Its main purpose is to connect the faculty and grad students directly to mainframes, and thus much of what is found when poking around are login prompts. An aggravating factor that has been added to this is the inclusion of "Port Servers" (PS's). You know when you've hit a PS when L-Net tells you you've connected, but no key that you press has any effect. The purpose of a PS is to act as a deterrent to hackers. It also might have the additional function of baud rate detection, but though it sounds logical, we haven't found out for sure. We must admit that it does protect. The best way to keep system crashers away is not to tell them what they've found through simple redialing. This is a lot like keeping party crashers away by saying that there's a party going on at a certain place, but not telling them who's invited or who's giving the bash. Effective for the dim-witted, impatient, and amateur party crashers, but not for others.

PS's sit and stare out at you until you start sending it characters. If the first few aren't the specific ones it's looking for, it will continue to gobble up everything else until you give up and hang up. Typical PS "codes" are easy-to-remember sequences like 'ZZ' or 'ASDF', and they then pass you on to the main login prompt. These "codes" aren't like passwords, since the added access they give you isn't worth beans unless you've got a line on where to go from the login prompt. However, we here feel that information like that is in fact "restricted" in that you are gaining unauthorized additional access to systems. As such, we've decided to leave the fun of figuring them out to those interested in such weekend diversions.

Before we give you what you're probably waiting for: neat numbers to call on L-Net, we'd like to explain stuff. First, this isn't a complete list, nor could it really be. L-Net addresses are in Hexidecimal and range from 0000 to FFFF. That's 65536 different possibilities. We only went through ten thousand of these, and are only listing those that got any response. Second, L-Net addresses may connect to any number of ports, but we haven't seen any more than 4 or 5. Thus, the total possible connections assuming an average of 2 ports per connection and an average of about 15 connections per thousand addresses comes to just under 2000. Assuming this is correct (very doubtful), finding where these are is quite a task. Third, and on the positive side, some connections open up large worlds of access. These unpassworded gateways are known as servers, and typically are DECservers. The biggest and

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most notorious is listed at 0358 and can handle a max of 128 users. You can use these servers to connect to multiple computers at once, and have extensive help files telling you what to do. Fourth, and also on the plus side, L-Net doesn't kick you off. Ever. Multiple redialing is the name of the game, and listed below is a Red Ryder script that works under version 9.4 that dials consecutive integers at a rate of about 40 a minute. Fifth and finally, bum connections don't just leave you in the cold. Hitting CONTROL-A twice pops you immediately into local mode, where a STATUS tells you where you are connected, and a "DONE X" will disconnect you from session number X. Calling, by the way, is done by typing "CALL XXXX[,P]" where XXXX is the hex address, and P is the optional port number, which is separated by a comma.

Red Ryder 9.4 Local-Net Scanner Script.

```
COPYINTO ~8,ENTER NUMBER TO START AT
(GET1)
QUERY1 ~1
EMPTY ~1
IF YES JUMPTO (GET1)
LET EQUAL `1,~1
LET EQUAL `3,`1
COPYINTO ~8,ENTER LENGTH OF SEARCH
(GET2)
QUERY1 ~2
EMPTY ~2
IF YES JUMPTO (GET2)
LET EQUAL `2,~2
ADD `3,`2
COPYINTO ~3,`3
SUBTRACT `1,1
(NEXT)
ADD `1,1
TEST `1=~3
IF YES JUMPTO (QUIT)
TYPE Call
TYPE `1
TYPE ^M
ALERT1 UNIT/JUMPTO (NEXT)
ALERT2 BUSY/JUMPTO (NEXT)
PANICAFTER 10
PROMPT CONNECTED
PAUSE
BELL
BELL
BELL
BELL
```

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JUMPTO (QUIT)
 (QUIT)
 END

And here's what our illustrious, untiring crew have discovered:

Node	Port#	What
----	-----	-----
0008	1	
0074	0,1	VTME (Mechanical Engineering)
0116	0,1	
0124	0,1	
0126	0,1	
000A	1	
000B	0,1	
000C	0,1	
000E	0,1	
00FF	0,1	
0170	0,1	
0175	0,1	Popeye (Computer Science)
0350	0	VTCC1
0351	0,1	" "
0352	0,1	" "
0354	0,1	" "
0355	1	" "
0356	0,1	" "
0357	0,1	" "
0358	0,1	DECServer 500
0359	0,1	DECServer 500 (same as above, different port bank)
0400	0,1	VTME (again)
0401	0,1	" " "
0402	0,1	" " "
0403	0,1	
0404	0,1	VTME (yet again)
0405	0	" " " "
0450	0,1	DECServers (see note 3)
0451	0,1	" " "
0452	0,1	" " "
0453	0,1	" " "
0454	0,1	" " "
0455	0,1	" " "
0536	0,1	
600-601		"Remote Ports Busy"
603-607		"Remote Ports Busy"
1010	0,1	
1100-1103		"Remote Ports Busy"
1300	0	VTVM1
5100	1	VTVM1

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5300	0,1	
5500-5503		"Remote Ports Busy"
5510	0,1	
5512	0,1	
5514	0,1	
5516	0,1	
5518	1	
5530	0,1	
5534	0,1	
5536	0,1	
5548	0,1	
5548	0,1	
5550	0,1	
5552	0,1	
5554	0	
6000	1	
6002	0	Node[20] (see note 1)
6003	0,1	
6100-6103		"Remote Ports Busy"
6200	1	Node[2] (see note 2)
6230-6231		"Remote Ports Busy"
6300	0,1	
6301	0,1	
6302	0,1	Node[2] (see note 2)
6303	0	
6410	1	
6414	0	
6419	1	
6420	1	
6428	0,1	
6429	1	
6433	0	
6437	1	
643A	1	
643B	0	
6502	0	VTVMS
6503	0	" "
6504	0	" "
6505	0	" "
6506	0	" "
6507	0	" "
6508	0	" "
6509	0	" "
8001	1	
8002	0	
8003	0	
8004	0,1	
8005	0	

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```
8006      1
8007      1
8008      0
8009      0
8080      0,1
9000-9016      "Remote Ports Busy"
9018-9019      "Remote Ports Busy"
9302      0
9300      0,1,2,3,4
```

Notes:

1) Node[20], popularly known as the Node Router, went out of services shortly after VTHacker #2 was distributed. Apologies are NOT extended to those who assumed that the list in VTHack2 was gospel. Things change all the time, and those things that are especially good tend to go away. Apparently, number 40062 was used by CNS's chief diagnostician as a way to test the VA Council of Higher Education's access to the Net and L-Net. Poking around there was terminated, but our scan of L-Net turned up another way in...

2) If you wondered why the Node Router was labelled "20" (really, what happened to the other 19?), then this might clear things up. The following connections were observed:

Node	What
0	Passworded
1	L-Net
3	the Net
5	Passworded
6	Passworded
9	Dead End
10	Dead End
12	L-Net
20	Restricted (*)

*) This did connect you to a really screwed up L-Net port, which continually spewed out garbage and error messages, but we think our poking around in it got it shut off, due to the incredible quickness with which it was restricted (we were still on-line!)

3) Ah, what a joy it is to explore, and find a pristine cavern laden with sweet delight, and a menu to boot! Well, what I'm talking about is BAMBI and THUMPR, two side-by-side DEC Servers. Calling the listed numbers with port 0 gets you BAMBI, and using port 1 gets you THUMPR. In our experience, nobody has ever been dumped for staying on too long, and though the computers you can

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connect to aren't all that interesting (all Mechanical Engineering) the services and privileges allowed to ordinary users is about as generous as possible. The listings that follow are verbatim text sent by the servers, and we think that you'll be able to figure out what's going on.

DECserver 200 Terminal Server V2.0 (BL29) - LAT V5.1
AMDF Network - Server BAMBI

Please type HELP if you need assistance
Enter username> Jack Meoff

Local> show nodes all

Node Name	Status	Identification
BAMBI	Reachable	AMDF Network - Server BAMBI
BERT	Reachable	AMDF VAXstation I (VMS 4.2)
ERNIE	Reachable	AMDF VAXstation I (VMS 4.2)
POOH	Reachable	AMDF MicroVAX II (VMS 4.6)
SPOCK	Reachable	ZONIC Lab VAXstation 2000 (VMS 4.6)
SULU	Unreachable	AMDF Cluster VAXstation 2000 (Color)
THUMPR	Reachable	AMDF Network - Server THUMPR
UHURA	Unreachable	AMDF Cluster VAXstation 2000 (B & W)
VTME	Reachable	ME VAX 11/780 (VMS 4.4)
VTMEX	Reachable	AMDF Cluster VAXserver 3600 (VMS 4.7)

Local> show ports all

Port	Access	Status	Services Offered
1	Dynamic	Idle	
2	Dynamic	Idle	
3	Dynamic	Local mode	
4	Dynamic	Idle	
5	Dynamic	Idle	
6	Dynamic	Idle	
7	Dynamic	Idle	VTLAN
8	Dynamic	Idle	VTLAN

Local> help

HELP

The online HELP facility allows you to access reference and tutorial information about the DECserver 200. Choose one of the following options:

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- o Enter TUTORIAL to see a succession of HELP frames with "getting started" information on basic DECserver functions (for beginners)
- o Enter HELP for full information on how to use the HELP facility
- o Choose a HELP topic from the following list:

BACKWARDS	FORWARDS	RESUME
BROADCAST	HELP	SET
CONNECT	LIST	SHOW
DEFINE	LOCK	TEST
DISCONNECT	LOGOUT	

Topic? list

LIST

Use the LIST command to display information from the permanent database.

LIST option

The option value is a topic about which you need information.

Additional HELP is available for the LIST options:

PORTS SERVER SERVICES

LIST Subtopic? server

SHOW/LIST SERVER

Use the SHOW SERVER command to display information about the current operational state of the server. Use LIST SERVER to show values for the permanent server characteristics.

Command formats:

```
SHOW SERVER [CHARACTERISTICS]
             [COUNTERS      ]
             [STATUS        ]
             [SUMMARY       ]
```

```
LIST SERVER [CHARACTERISTICS]
            [SUMMARY       ]
```

The default option for SHOW/LIST SERVER is CHARACTERISTICS.

Additional help available for:

Local> help

Topic? tutorial

TUTORIAL HELP

LOGGING INTO THE DECSERVER

To login to the DECserver you may be required by your server manager to enter a login password. If you are not required to do so, go on to the next screen. If you are, here are the steps to take to log in.

- 1 Press <RETURN> twice; a number sign (#) appears along with an audible "beep".
- 2 Enter the login password. (You get the password from your server manager.)
For example, to log in with the password A1B2C3...

<RETURN> <RETURN> enter <RETURN> twice

A1B2C3 type the password (which is not echoed)

- 3 If you make a mistake, the prompt reappears (and the "beep") to let you try again. You have several chances to enter the correct password.

- 4 If you use a dial-in modem, you have 60 seconds to respond to the # prompt with the correct password. If you don't, the server disconnects your modem.

If you do not need to enter a login password, press <RETURN> twice to log into your DECserver.

When you log in, an introductory line of text appears...

DECserver 200 Terminal Server V1.0 (BL20) - LAT V5.1

If your port does not have a permanent username defined, enter your name (1 to 16 keyboard characters) after the following text appears...

Please type HELP if you need assistance

Enter username>

The Local> prompt appears after you type your username.

If your port does have a permanent username, here's what you see...

Please type HELP if you need assistance

Local>

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USING ONLINE HELP

Online help is documentation about DECserver commands that is stored in server memory. You can see this documentation interactively on your terminal while you are using the DECserver. The HELP command gives you access to online help. You can use it in two ways:

You can type HELP at the Local> prompt...

```
Local> HELP
```

This generates a succession of HELP "frames", "menus", and prompts. Frames are made up of the information that can fit on one or more terminal screens. Menus are lists of topics you can choose from.

Alternatively, you can specify topics and subtopics when you enter the HELP command. For example...

```
Local> HELP SET PORT
```

This command produces online documentation that describes the SET PORT command.

SOME DEFINITIONS

The primary function of the DECserver is to allow you to connect to "services" offered on your network. A service can be a computer system that you can use just as though your terminal were attached directly to the system, or it can be a function offered by such a system. In addition, services can be set-up to allow access to printers, dial-out modems, personal computers and terminal switches. To connect to a service, you only need to know the service name.

A "service node" is a computer system or server that offers services.

A "session" is a connection to a service. You can have one or more simultaneous sessions with one service, or more than one service. The connection you are using at any one time is called your "current session". Your other sessions are inactive, but can be resumed by using server commands or session switches.

"Service mode" is your environment when you interact with a service. For example, if the service is a computer system, your environment is the same as a terminal directly wired to the system. You can all use the system's commands and resources.

"Local mode" is your environment when you interact with the DECserver using commands entered at the Local> prompt.

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CONNECTING TO A SERVICE

Use the local mode SHOW SERVICES command to display a list of services you can use.

```
Local> SHOW SERVICES
```

To connect to a service (establish a session with the service) enter the DECserver CONNECT command with the name of the service you want. For example, for a service called SALES, enter the following command:

```
Local> CONNECT SALES
```

This command places you in service mode in an active session with the service SALES.

RETURNING TO LOCAL MODE FROM A SERVICE SESSION

To return to local mode without ending your session, press <BREAK> or press your local switch character. Both these characters are, in effect, DECserver commands that instruct the server to go back to local mode.

The <BREAK> character must be set up to permit this (by default it is), and the local switch character must be defined (by default it is not).

Use the HELP command for more details on setting up the <BREAK> character and local switch character.

NOTE

Some modems interpret the <BREAK> character as a command to end your dial-in connection. If you are using one of these modems, do not use <BREAK> to return to local mode.

Your session, now inactive, is still your current session because it is the session you were using most recently.

RESUMING YOUR SERVICE SESSION FROM LOCAL MODE

To resume your current session (and service mode) while you are in local mode, enter the DECserver RESUME command.

```
Local> RESUME
```

You go back to where you left off when before returning to local mode.

DISCONNECTING FROM A SERVICE

To end your current session while in service mode, use the command that

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terminates whatever process you are using. For example, you can terminate a session on a VAX/VMS system by typing the VMS LOGOUT command. Refer to the documentation for the service node that offers the service.

To end your current session while in local mode, enter the DECserver DISCONNECT command.

```
Local> DISCONNECT
```

You cannot resume a service session after you end the connection with DISCONNECT.

CONNECTING TO A SECOND SERVICE

The DECserver allows you to have several sessions at one time, to the same or to different services. To connect to a second (or subsequent) service, simply enter another CONNECT command from local mode, specifying the name of the service. For example, to connect to the service PRODUCTION, enter the following command:

```
Local> CONNECT PRODUCTION
```

To resume one of your non-current sessions, use the FORWARDS command to switch to your next session, or the BACKWARDS command to switch to your previous session. Alternatively, you can use the RESUME command and specify the session number. You can find this number from the SHOW SESSIONS display:

```
Local> RESUME SESSION 2
```

To disconnect a particular session, use the DISCONNECT command and specify the session number. For example:

```
Local> DISCONNECT SESSION 1
```

LOGGING OUT OF THE DECSERVER

To logout from the DECserver, enter the DECserver LOGOUT command (in local mode).

```
Local> LOGOUT
```

LOGOUT disconnects all sessions. A DECserver message appears verifying the logout.

The next batch of stuff comes from DECServer 500:

```
Local> show users
```

Port	Username	Status	Service
------	----------	--------	---------

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```

5      LC-1-5      Connected      VTCC1
6      LC-1-6      Connected      VTCC1
7      LC-1-7      Connected      VTCC1
8      LC-1-8      Connected      VTCC1
34     LC-3-2      Connected      VTCC1
53     LC-4-5      Local Mode
67     LC-5-3      Connected      VTCC1

```

Local> show devices all

Slot	Device Name	Device Type	Port List	Device Status	CSR Address	Vector Address	Total Errors
1	CONSOLE	DL	0	Running	177560	60	1
2	NETWORK	DEQNA		Running	174440	120	37
3	LC-1	CXY08	1-8	Running	160440	310	2
4	LC-2	CXY08	17-24	Running	160460	320	0
5	LC-3	CXY08	33-40	Running	160500	330	1
6	LC-4	CXY08	49-56	Running	160520	340	0
7	LC-5	CXY08	65-72	Running	160540	350	0
8	LC-6	CXY08	81-88	Running	160560	360	0
9	LC-7	CXY08	97-104	Running	160600	370	5085
10	LC-8	CXY08	113-120	Running	160620	400	15

Local> show server

```

DECserver 500 V1.0 LAT V5.1      ROM V1.0.2      Uptime: 12 7:18:36
Address: 08-00-2B-0A-10-63      Name: CCSR2      Number: 22
Identification:
Circuit Timer: 80
Password Limit: 3
Inactivity Timer: 2
Queue Limit: 8
Keepalive Timer: 20
Retransmit Limit: 10
Multicast Timer: 60
Session Limit: 256
Node Limit: 100
Service Groups: 0

```

```

Backup Hosts: None
Enabled Characteristics:
Announcements

```

Local> show services all

Service Name	Status	Identification
--------------	--------	----------------

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```

DCSSVX      Unavailable  VT CC DCSS VS2000 Ultrix 2.2/UNIX
DSW         Unavailable  VT CNS dataswitch
GOLEM       Unavailable  VT Mathematics VAXstation I  VMS - Node
LAN         Unavailable  VT CNS LocalNet
MTHOPR      Unavailable  VT Mathematics VAXstation I  VMS - Node
MTHSUN      Unavailable  VT Mathematics Sun 3/50 - MTHSUN
MTHUNH      Unavailable  VT Mathematics VS2000 Ultrix 2.2 - Node
MTHUNX      Unavailable  VT Mathematics VS2000 Ultrix 2.2 - Node
NFNITY      Unavailable  VT Mathematics VS2000 VMS - Node NFNITY
POPEYE      Unavailable  Systems Research Center VAX-11/785 SVR2/
QUANTM      Unavailable  VT Mathematics VS2000 Ultrix 2.2 - Node
VTAGE1      Unavailable  Ag. Engineering MicroVAX II / MicroVMS V
VTCC1       6 Connected  TechCluster - Node VTCC1
VTCPE1      Unavailable  VT EE Department VS2000 Ultrix 2.2/UNIX
VTCPE2      Unavailable  VT EE Department VS2000 Ultrix 2.2/UNIX
VTCPE3      Unavailable  VT EE Department VS2000 Ultrix 2.2/UNIX
VTCPE4      Unavailable  VT EE Department VS3200 Ultrix 2.2/UNIX
VTCS1       Unavailable  Va Tech CS Lab:  VMS Service
VTDAL3      Unavailable  VT EE Department VS2000 Ultrix 2.0/UNIX
VTDAL4      Unavailable  VT EE DAL VS3200 Ultrix 2.2/Unix
VTDAL5      Unavailable  VT EE DAL VS3200 Ultrix 2.2/UNIX
VTDAL6      Unavailable  VT EE DAL VS3200 Ultrix 2.2/Unix
VTHCL       Unavailable  Va Tech Human/Computer Interface Lab
VTMAP       Unavailable  CE-Geography SDA Lab -Node VTMAP - Micro
VTMATH      Available   TechCluster - Node VTCC1
VTMILO      Unavailable  Human/Computer Lab - VAXStation II
VTODIE      Unavailable  VT CS Department MicroVax 2000 Ultrix 2.0
VTSDA       Unavailable  Spatial Data Analysis Lab - Vax 11/785
VTUNIX      Available   VT CC VAX 11/785 Ultrix 2.2/UNIX
VTYR        Unavailable  VT Mathematics VS2000 VMS - Node VTYR
XPRT549     Unavailable  Fifth floor printer

```

Local> show ports all

Port	Access	Status	Local Services
1	Local	Idle	
2	Local	Idle	
3	Local	Idle	
4	Local	Idle	
5	Local	Connected	
6	Local	Connected	
7	Local	Connected	
8	Local	Connected	
9	Local	Offline	
10	Local	Offline	
11	Local	Offline	

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12	Local	Offline
13	Local	Offline
14	Local	Offline
15	Local	Offline
16	Local	Offline
17	Local	Idle
18	Local	Idle
19	Local	Idle
20	Local	Idle
21	Local	Local mode
22	Local	Idle
23	Local	Idle
24	Local	Idle
25	Local	Offline
26	Local	Offline
27	Local	Offline
28	Local	Offline
29	Local	Offline
30	Local	Offline
31	Local	Offline
32	Local	Offline
33	Local	Idle
34	Local	Connected
35	Local	Idle
36	Local	Idle
37	Local	Idle
38	Local	Idle
39	Local	Idle
40	Local	Idle
41	Local	Offline
42	Local	Offline
43	Local	Offline
44	Local	Offline
45	Local	Offline
46	Local	Offline
47	Local	Offline
48	Local	Offline
49	Local	Idle
50	Local	Idle
51	Local	Idle
52	Local	Idle
53	Local	Idle
54	Local	Idle
55	Local	Idle
56	Local	Idle
57	Local	Offline
58	Local	Offline
59	Local	Offline

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60	Local	Offline
61	Local	Offline
62	Local	Offline
63	Local	Offline
64	Local	Offline
65	Local	Idle
66	Local	Idle
67	Local	Connected
68	Local	Idle
69	Local	Idle
70	Local	Idle
71	Local	Idle
72	Local	Idle
73	Local	Offline
74	Local	Offline
75	Local	Offline
76	Local	Offline
77	Local	Offline
78	Local	Offline
79	Local	Offline
80	Local	Offline
81	Local	Idle
82	Local	Idle
83	Local	Idle
84	Local	Idle
85	Local	Idle
86	Local	Idle
87	Local	Idle
88	Local	Idle
89	Local	Offline
90	Local	Offline
91	Local	Offline
92	Local	Offline
93	Local	Offline
94	Local	Offline
95	Local	Offline
96	Local	Offline
97	Local	Idle
98	Local	Idle
99	Local	Idle
100	Local	Idle
101	Local	Idle
102	Local	Idle
103	Local	Idle
104	Local	Idle
105	Local	Offline
106	Local	Offline
107	Local	Offline

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108	Local	Offline
109	Local	Offline
110	Local	Offline
111	Local	Offline
112	Local	Offline
113	Local	Idle
114	Local	Idle
115	Local	Idle
116	Local	Idle
117	Local	Idle
118	Local	Idle
119	Local	Idle
120	Local	Idle
121	Local	Offline
122	Local	Offline
123	Local	Offline
124	Local	Offline
125	Local	Offline
126	Local	Offline
127	Local	Offline
128	Local	Offline

Enough stuff, huh? Well, we've got MORE news. If you're going to poke around L-Net, the following numbers into L-Net have been known to be dead (i.e. CONNECTED, but no response): 40499, 40507, 40482.

And here's an update on VTHack #2's list of Net numbers:

40600-40615	No Answer
40625-40656	Originate Only
40657	Not Accessable
40658	No Answer
40659-40686	Not a Dataline
40687	No Answer
40688-40690	Not Accessable
40691	1200 baud line
40692	No Answer
40693-40699	Not a Dataline
40700-40723	Connection Failed
40724	No Answer
40725-40799	VM/XA VT
40800-40817	VM/XA VT
40818-40833	Originate Only
40834-40837	Not Accessable
40838-40839	Originate Only
40840-40899	Not a Dataline

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40900-40999 Not a Dataline

And what about the other 55 thousand L-Net addresses we didn't try? Hey, why don't YOU try them, and then share the news...? We're already moving on to brighter futures in hacking, so stay tuned on your local BBS or pass-the-disk network for: VTHacker #4 - Viruses, reader response, Telenet, and more updates on previous info...

Downloaded From P-80 Systems 304-744-2253