

Frequently Asked Questions



1. What operating systems and drivers can SNAsim be used with?

SNAsim is a DOS application and can be run with DOS, Win95/98*, and WinNT* (*run from the DOS box). The required drivers and supported protocols are shown below:

<u>OS</u>	<u>SDLC Driver</u>	<u>LAN Driver</u>
DOS 6.x	Internal	IBM LAN Support Program
Win95/98	Internal	MSDLC32 with NDIS adapter driver
WinNT	--	DLC with NDIS adapter driver

2. What hardware and software do I need for SDLC?

- IBM SDLC Adapters (Part #42H4332, 73G7099, 1501205, or 1502090), Multi-Protocol Adapter (Part #6450348) for the Model PS2, or the MicroGate Digital Service Adapter (DSA) (Part #142000-0001) for High Speed SDLC Communications
- Synchronous Modems or Modem Eliminator
- Full DB25 modem cables
- A 3270 and/or 5250 client to communicate with or SNAsec.

Note: 19.2K and 56K SDLC Communications Kits are available from ACT, which include an SDLC adapter, modem eliminator, and cable.

3. What hardware and software do I need for LAN?

- LAN is Ethernet or Token Ring
- Ethernet or Token Ring Adapter with 802.2 LLC or NDIS drivers (see 11 and 12 below)
- Multi-Access Unit (Token Ring), Hub (Ethernet), or crossover cable (Ethernet)
- A 3270 and/or 5250 client to communicate with or SNAsec.

4. I have the correct hardware and software but I can't get SDLC to work.

Check:

- SDLC data link addresses on both units
- NRZI non-NRZI settings on both units
- Make sure there are no Serial Mouse drivers loaded or Sound Blaster conflicts

Note: The SDLC card uses Interrupt 3 and I/O Addresses 380-38F.

5. I have the correct hardware and software but I can't get LAN to work.

Check:

- MAC and SAP addresses of both units
If you get the message: "s38 LAN Init Error 11 22", the Implementation Under Test (IUT) is not online or you have an incorrect MAC address in the SNASIM.SYN file.
- Make sure the correct .SYN file entry for the IUT is selected from the Configure/LAN Options/Select SYN Name Menu.
- Make sure the Destination SAP Address is the same as the IUT Source SAP Address.
- Check IUT MAC Address in the SNASIM.SYN file. Ethernet addresses may need the address bits swapped, depending upon the driver settings. Use the Swap Address Option on the Adapter Options menu.
- If you have more than one LAN adapter make sure the correct adapter number is selected (0 or 1).
- Check the MAC Address setting on the IUT.
If you get the message: "Making contact with xxxx", the address is correct but the XID is not being answered. Make sure the IUT is ready and has the correct SNAsim MAC and SAP addresses.

6. How do I configure for 5250?

Set the SNAsim Node type to 2.1 and configure the IUT with the following names:

<u>Name</u>	<u>SNAsim (Remote Node)</u>	<u>5250 (Local Node)</u>
Net Name	NETWORK	NETWORK
PU Name	SDTFPU	DUTPU (May be called CP name)
LU Name	SDTFLU	DUTLU
Partner LU	DUTLU	SDTFLU
Mode Name		NORMAL

7. Ethernet does not work.

- Make sure the same Ethernet type (IEEE or DIX) is used on both nodes. (Refer to your LAN driver documentation for information on selecting Ethernet types).
- Use LLCPING to ping both yourself and the partner node. If you can PING yourself and not your partner node, then the two nodes are using different Ethernet types (IEEE or DIX).
- See 5, above

8. Token Ring does not work.

- Use LLCPING to ping both yourself and the partner node.
- See 5, above

9. 3270 does not work.

- Examine the Log/Trace file

10. 5250 does not work.

- Make sure you have configured the 5250 IUT names in item 6, above.
- Examine the Log/Trace file

11. How do I trouble shoot

- SDLC
 - Use the SDLC Trace
- Ethernet or Token Ring
 - Use the LAN Trace
- 3270 or 5250
 - Use the SNA Trace

12. How do I set up the LAN (802.2 LLC) drivers in Win95/98?

A. Open windows control panel. Double click on Network.

B. Check the configuration panel for DLC protocol.

C. If it does not exist add the protocol.

Click on add and choose protocol

Select Microsoft and choose Microsoft 32 bit DLC

Click on OK or press enter

Note: If the Microsoft 32 bit DLC does not appear as an option, follow the steps below for Retrieving Microsoft DLC32 and begin again.

D. Verify that it is bound to the correct network board

Right click on network board and choose properties

Click on bindings tab and verify that DLC is checked

E. Configure MSDLC

CCB1 = 1

CCB Adapter Num = 0 or 1

Note: If you continue to have problems after following these steps, retrieve the latest MSDLC module from Microsoft, then try again.

Retrieving Microsoft DLC

A. Go to Microsoft's Web Site at <http://www.microsoft.com>

B. Click on the search box at the top of the page.

C. Type MSDLC32.EXE in the entry box and press enter.

D. Look for the Hyperlink that says Availability of MSDLC32 and Support Boundaries.

- E. Look towards the bottom of the page for the MSDLC hyperlink.
- F. Click on MSDLC32 hyperlink to download.
- G. When the file is done downloading, go to windows explorer and double click on MSDLC32.EXE to expand.
- H. Open the README.DOC in a word processor for instructions on installing the DLC module.

Note: MSDLC32.EXE is a self extracting zip file which contains more than one file. It is a good idea to save it to an empty directory so when it is extracted, you know which files to use.

Installation of MSDLC32

- A. Create an installation disk or temporary directory on hard drive.
- B. Run MSDLC32.EXE to extract files
- C. Run - START-SETTINGS-CONTROL PANEL
- D. Select Network Icon
- E. Select ADD
- F. Select PROTOCOL
- G. Select HAVE DISK
- H. Specify path to DLC directory or drive (from step 1)
- I. Select OK
- J. Select Protocol
- K. Select Microsoft
- L. Select "Microsoft 32-bit DLC"
- M. The Installation utility will recopy the network files and copy over the DLC driver
- N. Manually copy the DLC32.HLP and DLC32.CUT files to the WINROOT\HELP subdirectory (i.e. C:\WIN95\HELP)

- O. Configure MSDLC
 - CCB1 = 1
 - CCB Adapter Num = 0 or 1

- P. Reboot the machine.

Troubleshooting

MSDLC32 includes a trace utility - TRCDLC.EXE. Run this utility to verify proper operation or to save a trace for future reference. The trace is logged to TRCDLC0.DAT and TRCDLC1.DAT. Trace Options:

- TRCDLC -S: Returns version number of DLC stack.
- TRCDLC -H: Help for command line options
- TRCDLC -C: Closes trace utility from another DOS box

13. How do I set up the LAN (802.2 LLC) drivers in WinNT?

- A. Install the adapter NDIS drivers
- B. Install DLC protocol

14. Where can I buy or find 802.2 and/or NDIS drivers for DOS operation?

You can purchase from ACT or try:

- LAN Support Program
<http://www.networking.ibm.com/nes/neslant.htm#lsp>
- IBM LAN Support Program updates to version 1.3X
Requires LAN Support Program version 1.30 or later be installed first.
[LSP138.EXE | Version 1.38]
- Users Guide for LAN Support Program v1.3X
[BOOKLSP.EXE | 4-27-97 | 804,704 bytes]
- IBM LAN Support Program Protocol manager update
Requires LAN Support Program version 1.30 or later be installed first.
[PROTUPDT.EXE]
- LAN Support Program Custom Diskette
[LSPCUST.EXE | Version 1.06 | 5-13-96 | 159,169 bytes]
- User Guide for LAN Support Program Custom Diskette
[BOOKCUS.EXE | 4-27-97 | 779,233 bytes]
- NDIS Support Files
http://infodeli.3com.com/infodeli/swlib/unsupported_adapter_files.htm

- DOS NDIS drivers for various adapters
[DOSNDIS.EXE | 6-16-95 | 86,892 bytes]

15. How do I set up DOS with the 802.2 drivers for Token Ring?

CONFIG.SYS (Native)

```
DEVICE=\LSP\DXMA0MOD.SYS 001
DEVICE=\LSP\DXMC0MOD.SYS 4000AC140002,C800
DEVICE=\LSP\DXMT0MOD.SYS ST=6 S=12 ES=2 EST=7 C=12
```

CONFIG.SYS (NDIS)

```
DEVICE=\LSP\PROTMAN.DOS /I:C:\LSP
DEVICE=\LSP\IBMTOK.DOS
DEVICE=\LSP\DXMA0MOD.SYS 001
DEVICE=\LSP\DXME0MOD.SYS 4000AC140002,20,0
DEVICE=\LSP\DXMT0MOD.SYS ST=6 S=12 ES=2 EST=7 C=12 O=N
```

PROTOCOL.INI

```
; ----- Protocol Manager Definition -----
[PROTOCOL_MANAGER]
DriverName=PROTMAN$
; ----- Protocol Driver Definition -----
[DXME0_MOD]
DriverName=DXME0$
Bindings=TokenRing
[TokenRing]
DRIVERNAME=IBMTOK$
RAM=0xC800
NETADDRESS="4000AC140002"
```

AUTOEXEC.BAT

```
\LSP\NETBIND
```

16. How do I setup DOS with the 802.2 drivers for Ethernet?

CONFIG.SYS (NDIS)

```
DEVICE=\LSP\PROTMAN.DOS /I:D:\LSP
DEVICE=\LSP\EXPl6.DOS
DEVICE=\LSP\DXMA0MOD.SYS 001
DEVICE=\LSP\DXME0MOD.SYS 400000000486,,1
DEVICE=\LSP\DXMT0MOD.SYS O=N ES=2 EST=2 ANR=Y
```

PROTOCOL.INI

```
; ----- Protocol Manager Definition -----
[PROTOCOL_MANAGER]
DriverName = PROTMAN$
; ----- IBM Ethernet Protocol Definition -----
[ETHERNET]
DriverName = DXME0$
; ----- Bindings Statement -----
Bindings = EXPl6
; Intel EtherExpress(tm) 16 Ethernet Adapter
```

```
[EXP16]
  IOADDRESS = 0x300
  DRIVERNAME = EXP16$
```

AUTOEXEC.BAT

\LSP\NETBIND