

Frequently Asked Questions about NetWare 3.12, 4.1X and 4.2

This FAQ document is valid for the following LSI Logic

Chips

SYM53C810, SYM53C810A, SYM53C815,
SYM53C825, SYM53C860, SYM53C875,
SYM53C876, SYM53C885, SYMC895, SYM53C896

Boards

SYM20810, SYM22801, SYM22802, SYM8600SP
SYM8750SP, SYM8751SP, SYM851SPE, SYM8751D,
SYM8951U, SYM8952U, SYM21002, SYM22910

Many NetWare installation problems are due to drivers not being installed properly, or the SCSI BIOS being out of date. The subsequent sections will guide the reader through common setup steps to get NetWare to run properly.

If you have an OEM card that is being used then read the following steps below to ensure that a proper IRQ is being set to the host adapter.

System CMOS setup hints:

The following section describes setup steps to take with 3 common System CMOS's.

These are general procedures, since each Mother Board Vendor modifies the BIOS to configure their Mother Board. To get the best results it is best to set Network cards to IRQ 9. This can be done via the software that comes with the card. Also set Sound cards to use IRQ 5. For detailed instruction for CMOS setups contact the Mother Board Manufacturer.

Award BIOS

- 1) While in the CMOS setup pick the "PCI Configuration Setup" or "PnP and PCI Configuration" menu. Change the settings for the slot number in which the Symbios Host Adapter Boards (HAB) is located if this option is available from "Auto Detect" to "INT A" or to an IRQ such as 10, 11, 12 or 15, leaving all other slots set to Auto. If there are no Slot options available then use the "MANUAL" setting. This will show all of the IRQ's and will list them as either "Legacy ISA" or "NO/ICU" or "PNP/PCI" or "Yes/ICU". What you will do is set all IRQ's below 9 to either Legacy ISA or NO/ICU. IRQ's 10, 11, 12 and 15 will be set to PNP/PCI or Yes/ICU.
- 2) The "Available IRQ" settings should be modified to 1st = 10, 2nd = 11, 3rd = 12, and 4th = 15. Ensure that any other device in the system (i.e., sound card or LAN card) are not set to the same IRQ's as the Symbios Logic HAB. For example, if the LAN card is using IRQ 11, remove IRQ 11 as the 1st available IRQ in the CMOS setting and shift all of the available IRQ's up one level.

- 3) Some versions have a statement that will say "PCI IRQ Activated by" set this to Level. Some versions have a statement that will say "PCI IDE MAP to" set this to ISA or Absent.
- 4) Save the configuration and reboot the system.

AMI BIOS

- 1) While in the CMOS setup pick the "Chipset" or "Advanced" menu.
- 2) Some versions of the CMOS setup allow for the setting of IRQ's referenced to the slot location of the Symbios Logic HAB. Other versions of the CMOS setup only allow for the IRQ to be set to "PCI/ISA" or "Used/Available". In any case, make sure that IRQ 9 is set to "Used", "not available", or "ISA". Keep IRQ's 10, 11, and 15 free.
- 3) Save the configuration and reboot the system.

Phoenix BIOS

If you have the version of the Phoenix BIOS, that has only 2 pages to the CMOS setup, and the only option for the SCSI is to enable or disable it. There is not much that can be done. The system will do an Auto settings on its own. There is NO work-around to fix the problem. The only solution is to go to another SCSI card.

Most OEM cards that use our chipsets are not "TRUE" plug and play PCI-SCSI Host Adapters, that is why the manual settings of the IRQ's in the system is required.

If you have an OEM Host Adapter, then you should contact the OEM first before contacting LSI Logic. You can find OEM number at the following URL.

<http://www.lsillogic.com/products/contact.html>

OEM SCSI HAB's with Symbios PCI-SCSI chips

All OEM HAB's that have jumpers for the setting of INT A, B, C, D must be set to INT A. This is generally pins 1&2.

LSI Logic sells the controller chips to other vendors. Problems that we have encountered with specific vendor HAB's are listed below.

All of these old OEM cards, while they may still be compatible to LSI Logic software, may not be compatible to newer versions of NetWare. It is recommended that you upgrade to a PnP style PCI-SCSI card.

MS-3805 HAB:

JP2 comes default as INT A Edge pins 2&3. Change JP2 to INT A Level, pins 1&2.

GA-410 HAB:

JP3 is a setting for 1st controller and 2nd controller. The card comes default as pins 1&2. Change JP3 to pins 2&3, and the system will register the IRQ.

SCSI-810P HAB:

J1 comes default as INT B, pins 2&3. Change J1 to INT A, pins 1&2.

Model P810 HAB: or

PCI-SCSI 21-050020-11 HAB:

This card will not allow an IRQ setting to be enabled for the Symbios Logic controller. There is no work around for this card in NetWare.

HSB KW801V10 HAB:

This card will not allow an IRQ setting to be enabled for the Symbios Logic controller. There is no work around for this card in NetWare.

* Note: The HSB card does allow IRQ's to be enabled if the host system is an Intel P5-66, a FIC P5-66, or a HSB motherboard. We were able to get the chip to see an IRQ on an old Intel Batman system P/66 and a P566 FIC Mother Board. HSB also has informed us that their Mother Boards also allow for an IRQ setting.

If the Symbios PCI-SCSI chip is embedded onto the mother board, then you need to contact the mother board manufacturer for support on all issues related to hardware and software.

General Questions And Answers

Q: The SYM8XXNW.HAM driver will not install. I am running NetWare 3.12. How do I get the driver to run properly?

A: In order to run the .ham driver with NetWare 3.12 the Symbios SCSI BIOS has to be version 4.10.00 or higher. This is the 3rd line of the Symbios banner that you see during boot up. Also the 3.2 upgrade must be added in order for the driver to load. You can obtain the upgrade at Novell's web site.

Q: I have a mother board that has the Symbios SCSI embedded. (Note this can be our 53C876, 53C895 or 53C896 chipsets). NetWare 3.12 will not install or run properly.

A: In order to run NetWare 3.12 with the .dsk drivers you must

first, in the DOS partition load the DOS ASPI8XX.SYS driver. No memory managers can be loaded. After the driver is initialized, then load the server. This must be completed manually. You will not be able to use the auto-startup or the startup.ncf to load the drivers. Load the SDMSNET3.DSK and then the NETASPI3.NLM if this is needed for devices such as tape. If the server goes down you will have to manually load the drivers again. The system has to be brought up in this manner in order for the drivers to work and load properly.

Q: I am installing NetWare 5, and I need drivers for it. Where can I get the drivers for NetWare 5?

A: Drivers for NetWare 5 are bundled with the O/S. These are the drivers that should be used. Contact Novell for installation instructions.

Q: I need an ASPI driver to function devices outside of the hard drive?

A: For ASPI support under NetWare NWA, you must load NWAASPI.CDM, which is written and provided by Novell.

Q: What driver do I load for an NCR Computer that has a built-in 53C700 SCSI interface?

A: If you are experiencing problems, call NCR/AT&T at 800-774-7406.

Q: Which driver do I use for a Compaq System with a Symbios PCI-SCSI chip embedded?

A: We do not support the Compaq Systems. Compaq writes their own drivers for our chipsets. You need to either load their driver or contact them for any updated driver. If NetWare is not supported then you need to get another platform.

General Notes

- 1) The 53C810 HAB's DO NOT have a BIOS on the card. They rely on the System BIOS for SCSI BIOS support. If you do not see a banner during boot up then your system does not properly support SCSI BIOS support for this chipset and you will not be able to boot up from it.
- 2) The Current NetWare driver can be downloaded from either the BBS at (719) 533-7235 or at the Web site <http://www.lsillogic.com> click on the Symbios Driver Info located on the left hand side of the page. Then click on the Download PCI-SCSI Drivers and Software. Go to the bottom of the License Agreement and agree

the to terms of the software to proceed. The file name is **NETWARE.ZIP**. If you are using just DOS then download the .zip package and be sure to have a program such as PKUNZIP to extract the files. If you are using pkunzip to unzip the package, make sure to use the -d switch.

- 3) If you are using a SCSI HAB that has 3 SCSI ports, you can only use 2 ports at one time. If you are using all 3 ports and experiencing problems, then you need to remove the devices from one of the ports and hook those devices up to another controller.

LSI Logic Technical Support

If you are still experiencing problems with NetWare, you can contact the Technical Support Staff by calling us at (719) 533-7230 or fax us at (719) 533-7271 or go to our web page at:

http://www.lsillogic.com/products/symio_ts.html

and leave us an e-mail.

Hours of operation are 7:00am to 4:00pm MST Monday - Friday. We are closed on weekends and holidays. Messages can be left to the Technical Support at any time by pressing 2 at the start.