

WANPIPE for Novell

Author: Nenad Corbic

Sangoma Technologies Inc

Introduction

Sangoma WANPIPE S514PCI/S508ISA adapters provide WAN and Legacy protocol/connectivity to the Novell Server. Sangoma device driver has been written as an HSM (Hardware Specific Module). It uses already existing Novell protocol TSMs such as Frame Relay or SDLC (NWSAA).

Obtaining Drivers

The latest Novell WANPIPE drivers are located on <ftp.sangoma.com> /NWSAA directory.

File List:

S514HSM.LAN : Novell WANPIPE LAN driver

S514HSM.LDI : Driver information file, used during installation.

Download the two files and copy them on a DOS formatted disk, then proceed with the installation instructions.

Installation

1. Insert the Sangoma S514PCI or S508ISA adapter into the Novell Server.
2. Load the Novell Server. Note that installation instructions vary from Novell version 4.2 and 5.x.
3. Insert the WANPIPE device driver floppy disk into the Novell Server.
4. Novell 5.x:
 - 'load nwconfig'
 - choose 'Driver options'
 - choose 'Configure network drivers'
 - choose 'Select an additional driver'
 - press 'Insert' key : to load from floppy
 - select the S514HSM.LAN driver and copy it to the server
5. Novell 4.2:
 - 'load install'
 - choose 'Driver options'
 - choose 'Configure network drivers'
 - choose 'Select an additional driver'
 - press 'Insert' key : to load from floppy
 - select the S514HSM.LAN driver and copy it to the server

6. Once the driver is copied to the Server, hit escape <ESC> until the command prompt is reached.

Configuration

To configure the WANPIPE drivers, use the **inetcfg** utility.

1. 'load inetcfg'
2. Select 'Boards' from the Main Menu.
3. press 'Insert' to obtain the list of all drivers
4. find the S514HSM driver and press <enter>
5. Board Configuration
 - Set the board name any name followed by the underscore and the device number. <NAME>_<Device Number>. For example the first device should be called S514HSM_1.
 - Choose between the ISA and PCI card.
 - For each option press F1 to obtain help.
 - PCI options: SLOT, CPU, CHANNEL
 - ISA options: INTERRUPT, IO BASE (PORT), MEMORY BASE
 - Once all options are set press <ESC> and save the board configuration.
6. Select 'Network Interfaces' from the Main Menu
7. Scroll down to the network interface name configured in Board configuration and press <ENTER>.
8. Choose a protocol: Frame Relay, SDLC, etc...
9. Configure each protocol according to the information provided by the ISP.
10. SDLC Network Interface Configuration
 - Physical Type: Determined by the cable connected to the WANPIPE adapter. Options are V35 or RS232.
 - Port Connection: Set to Hard-wired.
 - Interface Speed: Set to External, unless WANPIPE is supplying the clock.
 - Port Connection Type: Set to Full Duplex (double check with ISP).
 - Data Encoding: Default is NRZ; however, check with ISP.
 - Select Expert Configuration:
 - i. User Data Size: Set to the maximum allowed packet size. Check with the ISP.
 - ii. Send Queue Limit: Leave as default.
 - Press <ESC> and save the network configuration.

11. The SDLC configuration is now complete. For any other protocol, proceed to the binding information to configure IP or IPX protocols.
12. Once the configuration is complete select 'Reinitialize System' to start the WANPIPE driver and the configured TSM.

NWSAA

Once the S514HSM driver is loaded, proceed to configure the NWSAA using the NWSAA administrator on the Client Side. Please refer to the NWSAA documentation on how to setup NWSAA. To start NWSAA 'load nwsaa' from the command prompt.