



**Configuration Reference**  
**for the**  
**FriendlyNET ISDN**

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## Configuration Commands

<b>Overview</b> .....	<b>1</b>
Range of Assigned IP Addresses .....	2
Example .....	2
Subnet Mask Formats .....	2
Additional ISDN Provider Information .....	3
Characteristics .....	3
Provisioning Parameters .....	4
Frequently Asked Questions .....	6
General Questions .....	6
Special Application and Local Server Questions .....	7
Expanding your Network .....	9
Using AUI to 10Base-T .....	9
Detailing the Pinouts and Cables .....	10
Configuring using a Command Line Interface .....	12
Setting Up a Terminal Connection for Windows 95 .....	13
Explaining Configuration Commands .....	14
General Commands .....	14
DHCP Commands .....	16
Remote Commands .....	17
Local Servers (Port Mapping) Commands .....	17
Internet Visible Computers (NAT) Commands .....	18
Special Application Support Commands .....	18
thelp .....	19
cleardhcp .....	19
clearlog .....	20
divertport .....	21

dropcalls	22
enableappsupport	23
enabledhcp	24
enableipportmap	25
enablenetbios	26
exitwr	26
logoutwr	26
resetwr	27
saveconfig	28
setappinfo	28
setcustomkey	29
setdefaultroute	31
setdhcp	32
setdhcpexclude	33
setdhcpfree	34
setdhcpinclude	35
setdhcpreserve	36
setdhcpopts	37
setfactorydefaults	38
setinauthpasswd	38
setipportmap	38
setisdn	40
setlocalip	41
setmp	42
setnatip	43
setoutauthpasswd	43
setpots	45
setpotsbump	45
setppp	46

setwanip	48
setwrpasswd	48
showall	50
showappinfo	51
showcustomkey	52
showdhcp	52
showdhcpopts	53
showdivertport	54
showiproutes	55
showippportmap	55
showisdn	56
showlocalip	56
showlog	56
showpots	56
showpotsstats	57
showppp	57
shownatip	58
showstats	59
showstatus	59
showversion	60
showwanip	61
testisdnloopback	61
testisdnnumber	62
testping	63
testring	64

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# Configuration Commands

## Overview

The following lists the information contained in this chapter:

- Understanding ISP provided information
- Additional ISDN provider information
- Expanding your Network
- Frequently Asked Questions
- Configuration Commands
- Understanding ISP Provided Info

Your ISP provides information needed to configure the FriendlyNET ISDN and the computers on your local network. This section explains how the provided information translates into your local computers TCP/IP configuration and to the FriendlyNET ISDN/Internet worksheet. *Please note that terminology used by ISPs vary!*

### Range of Assigned IP Addresses

The range of IP Address assigned to your network consists of:

- A reserved address that represents the network (the first address in the range),
- A reserved broadcast address (the last address in the range),
- And a set of remaining addresses that should be assigned to the FriendlyNET ISDN and computers on the network. Typically the first address in this range is assigned to the FriendlyNET ISDN.

#### Example

If the ISP assigned the IP addresses 205.164.124.128 through 205.164.124.159 they should be used in the following manner:

- 205.164.124.128** is the reserved network address,
- 205.164.124.159** is the reserved broadcast address, and
- 205.164.124.129** would typically be assigned to the FriendlyNET ISDN.
- 205.164.124.130** through **205.164.124.158** can be assigned to computers on the network

### Subnet Mask Formats

Sometimes a subnet mask is given as a single number that follows an IP Address (e.g. 199.2.80.2 / 24 indicates 24 is the subnet mask). The FriendlyNET Wiz and most TCP/IP software needs the subnet mask entered in IP address format. The third column of the table below shows the number of assignable addresses for a network with a given subnet mask. The table below shows the possible subnet masks in both number and IP Address format.

Subnet Mask as a Number	Subnet Mask in IP Address Format	Number of available IP Addresses for Computers
24	255.255.255.0	254
25	255.255.255.128	126
26	255.255.255.192	62
27	255.255.255.224	30
28	255.255.255.240	14

Subnet Mask as a Number	Subnet Mask in IP Address Format	Number of available IP Addresses for Computers
29	255.255.255.248	6
30	255.255.255.252	2
31	255.255.255.254	-
32	255.255.255.255	-

### **Additional ISDN Provider Information**

You may need to refer to the additional FriendlyNET ISDN-supported features and attributes outlined in this section when discussing your ISDN service needs.

#### **Characteristics**

- Supports 2B+D BRI service
- Voice/data, 64 kbps to 128 kbps
- Two phone ports
- Built-in NT-1 that connects directly to the ISDN U Interface

### Provisioning Parameters

The following tables list the ISDN switch parameters supported by the FriendlyNET ISDN. This information also exists on the ISDN/Internet worksheet and can be faxed to your provider.

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5ESS Parameters	Custom
Terminal Type	A
Point to Point / Multipoint	Multipoint
# Call Appearances*	3
# Channels for Circuit Switched Voice (CSV)*	1
# Channels for Circuit Switched Data (CSD)*	2

---

---

5ESS Parameters	National ISDN-1 (NI-1)
Terminal Type	A
# Call Appearances*	3
Circuit Switched Voice (CSV)	1
CSV Limit*	3
CSV Notify Busy Limit (NBL)	2
CSV Additional Call Offering (ACO)*	Unrestricted
Circuit Switched Data (CSD)*	2
CSD Limit*	2

---

5ESS Parameters ( <i>Continued</i> )	National ISDN-1 (NI-1)
CSD Notify Busy Limit (NBL)*	1
CSD Additional Call Offering (ACO)*	No
Electronic Key Telephone System (EKTS)	No
Conference Feature Button	60
Transfer Feature Button	61
Drop Feature Button	62
DMS-100 Parameters	Custom NT-1 (Pre NI-1)
Signaling	Functional
TEI Assignment	Dynamic
Protocol Version Control	1
Max # of Keys	9
Release Key	No
Ringing	No
# of Call Appearances*	3
Notify Busy Limit (NBL)*	2
Additional Call Offering (ACO)*	Yes
Electronic Key Telephone System (EKTS)	No

---

DMS-100 Parameters ( <i>Continued</i> )	Custom NT-1 (Pre NI-1)
Call Appearance Call Handling (CACH)	No
Conference Feature Button	60
Transfer Feature Button	61
Drop Feature Button	62

---

\* Per directory number

## Frequently Asked Questions

### General Questions

Will the FriendlyNET ISDN work without the DHCP?

Yes, DHCP can be disabled in the FriendlyNET ISDN wizard, and the computers that will be using it for access should manually configure Internet parameters such as: IP address, Gateway address, and the DNS server addresses (typically provided by ISP).

Will the FriendlyNET ISDN work with a proxy server?

Yes, the LAN computers would send Internet traffic to the Proxy server, which in turn would use the FriendlyNET ISDN to send and receive traffic from the Internet. The FriendlyNET ISDN would be the proxy server's gateway.

### **Special Application and Local Server Questions**

**Q: When do I use Local Servers?**

**A: When you are hosting a local server (such as Web or email) that needs to be accessed from the Internet.**

**Q: When do I use Special Applications?**

**A: Typically only when directed by the FriendlyNET ISDN support site. This is an advanced feature and should be used only if have in-depth knowledge of how an application uses TCP/IP ports to connect to its server.**

**Q: When do I use Visible Computer?**

**A: If the Internet application you are using does not seem to work, and you do not have enough knowledge of the application to create a Special Application entry. This feature can also be useful in receiving incoming Internet phone calls or incoming Video Conferencing calls.**

**Q: I have a Web Server running on a Visible computer but outside users are unable to access it?**

**A: Verify that in the Visible Computer that "Divert Web requests to FriendlyNET ISDN" is unchecked. If there is a Local Server entry for a Web Server, it will take precedence and should be deleted from the Local Server table. Verify that outside users are using the correct IP Address in trying to contact your Web Server (they should use the IP address associated with the modem that corresponds to the Visible Computer - this address is displayed in the Status page as the Local IP address).**

**Q: I have a Local Server entry for a Web server running on a LAN computer but outside users are unable to access it?**

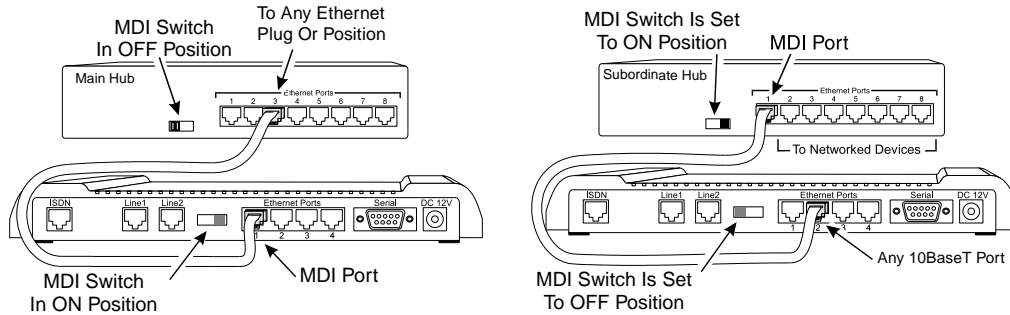
**A: Verify that the Local Server feature is enabled. Verify that the entry in the Local Server table has the correct LAN IP address of the computer hosting the Web server. Verify that outside users are using the correct IP address in trying to contact your Web server (they should use the IP address associated with Modem 1 - this address is displayed in the Status page as the Local IP address).**

**Q: Why can't I run a Special Application on more than one computer at the same time?**

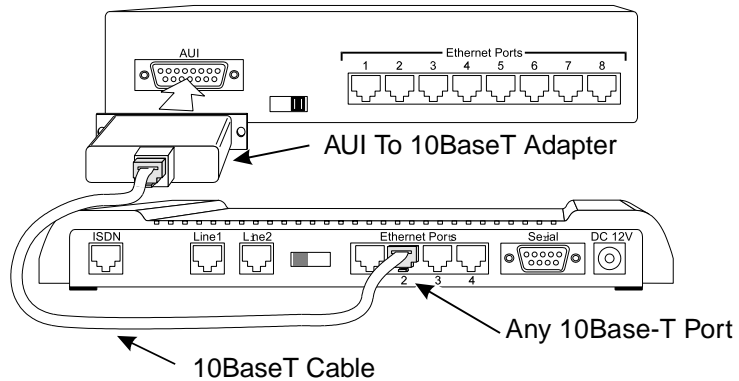
**A: Only one computer at a time can use a particular special application. If a second computer tries to use the application, its connection request will be disconnected. This can be overcome by setting up multiple visible computers and disabling this particular special application.**

## Expanding your Network

The FriendlyNET ISDN can be operated as either the main hub in an expanded network or as an additional hub in an existing network.

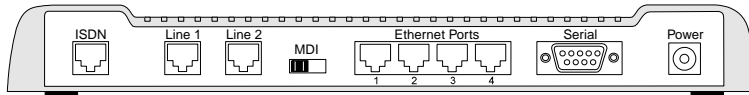


## Using AUI to 10Base-T



## Detailing the Pinouts and Cables

FreindlyNET ISDN Rear Connectors



ISDN - RJ-45

Pin	Function
4	Line in 1
5	Line in 2

10BaseT - RJ-45

Pin	Function
1	TD+
2	TD-
3	RD+
6	RD-

Serial - DB-9 (female)

Pin	Function
1	CD
2	TD
3	RD
4	DSR
5	Gnd
6	DTR
7	CTS
8	RTS
9	RI

---

## Configuring using a Command Line Interface

The following sections explain how to configure your FriendlyNET ISDN using a Command Line Interface (CLI) commands instead of the FriendlyNET ISDN Configuration page. All FriendlyNET products can be configured, monitored and customized using *commands*. A command is a set of instructions that tells the computer what to do.

To use these commands, you must have a “terminal” software application installed in your computer, such as Telnet, HyperTerminal or Zterm. To send commands from your software application to your FriendlyNET ISDN, you simply connect a serial cable (DB-9 male) to one of your communication (COM) ports on your computer and connect the other end of the cable (DB-9 female) directly to the FriendlyNET ISDN's Console port.

- △ If you are using Macintosh computer, you must purchase a 8-pin mini DIN male to DB-9 female serial cable to connect to the FriendlyNET ISDN's Console port.

## Setting Up a Terminal Connection for Windows 95

If you are using Windows 95, your Accessories program group should have HyperTerminal already installed. If HyperTerminal is not installed, open the Control Panel, double-click on Add/Remove Programs and then select the Windows Setup tab. Double-click Communications, select HyperTerminal and click OK to install the application. Depending on how your computer was originally configured, you may need the Windows 95 CD to install HyperTerminal.

- Verify the serial port's baud rate is set to 9600 with 8 data bits, 1 stop bit, no parity and Xon/Xoff flow control
- To Telnet to the FriendlyNET ISDN, use *192.168.1.1* as the IP address and logon as **supervisor**(with the password **supervisor**).
- If you are using the FriendlyNET ISDN in an existing network (with IP addresses already assigned), use the IP address you assigned to access the FriendlyNET ISDN.

The following example shows established communication with the FriendlyNET ISDN using Telnet.



## Explaining Configuration Commands

This section lists the available commands, divided by functionality.

### General Commands

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Command	Description
"help"	Lists all available commands if used without arguments. For help with a specific command, type help "command name"
"clearlog"	Clears all log entries
"dropcalls"	Forces the existing calls to be dropped
"enablenetbios"	Enables or disables Netbios packets
"exitwr"	Exits an open Telnet session for FriendlyNET ISDN configuration
"logoutwr"	Logs out of the FriendlyNET ISDN using the serial port
"resetwr"	Power cycles the FriendlyNET ISDN and retains the configuration information
"saveconfig"	Saves the FriendlyNET ISDN configuration in Flash memory
"setcustomkey"	Sets the custom calling features
"setdefaultroute"	Creates a default route for either ISP or Remote Office
"setfactorydefaults"	Resets the FriendlyNET ISDN's current configuration to its factory default settings
"setisdn"	Sets the ISDN switch type, phone numbers and SPIDs

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<b>Command</b>	<b>Description <i>(Continued)</i></b>
"setlocalip"	Sets the local IP address
"setmp"	Sets the Multilink PPP parameters
"setpots"	Sets the phone port configuration
"setpotsbump"	Sets the call bumping options
"setppp"	Sets the PPP parameters
"setwanip"	Sets the WAN IP address
"setwrpasswd"	Sets and confirms the FriendlyNET ISDN's administrative access password
"showall"	Displays all configuration information
"showcustomkey"	Displays the custom calling options
"showdivertport"	Shows the status of services
"showiproutes"	Shows the existing IP routes
"showisdn"	Displays the ISDN parameters
"showlocalip"	Displays the local IP address and subnet mask
"showlog"	Displays event log messages
"showpots"	Displays the phone and fax port setup as well as the data call bumping options
"showpotsstats"	Displays the status of the phone line
"showppp"	Displays the PPP parameters of a given profile
"showstats"	Displays the number of packets received or transmitted

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Command	Description <i>(Continued)</i>
"showstatus"	Displays the FriendlyNET ISDN status
"showversion"	Displays the FriendlyNET ISDN firmware version, along with the model name and physical (MAC) address
"showwanip"	Display the WAN interface configuration information
"testisdnloopback"	Tests the ISDN loopback
"testisdnumber"	Tests the ISDN phone number
"testping"	Issues a Ping request to a specified IP address
"testring"	Rings the phone on Line 1 or Line 2

#### DHCP Commands

Command	Description
"cleardhcp"	Clears all DHCP entries
"enabledhcp"	Enables or disables the DHCP server functionality
"setdhcp"	Sets the starting IP address and number of IP addresses used for DHCP
"setdhcpexclude"	Excludes one or more addresses from the list of available addresses, assigned by the DHCP server
"setdhcpfree"	Releases the addresses previously assigned and moves them into the free list of addresses
"setdhcpinclude"	Moves one or more previously excluded IP addresses from the excluded list into the free list

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Command	Description <i>(Continued)</i>
"setdhcpreserve"	Reserves an IP address for a specific computer, assigned by the DHCP server
"setdhcpopts"	Sets the value of the DNS server addresses, domain name and the gateway address in the DHCP server
"showdhcp"	Displays the DHCP options and current assignment of the IP address to the MAC address of the Macintosh on the LAN
"showdhcpopts"	Displays the current settings of the DHCP options. This is used to check if the DHCP server is enabled or not enabled.

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#### Remote Commands

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Command	Description
"setinauthpasswd"	Sets the incoming authentication password
setoutauthpasswd	Sets the outgoing authentication password
"setppp"	Sets the PPP parameters
"showppp"	Displays the PPP parameters of a given profile

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#### Local Servers (Port Mapping) Commands

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Command	Description
"divertport"	Enables or disables special services
enableippportmap	Enables or disables portmapping

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<b>Command</b>	<b>Description</b>
setippportmap	<b>Configures internal servers hosted on the LAN</b>
showippportmap	<b>Displays the current portmapping table</b>

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#### **Internet Visible Computers (NAT) Commands**

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<b>Command</b>	<b>Description</b>
divertport	<b>Enables or disables specific services on the FriendlyNET ISDN</b>
setnatip	<b>Enables or disables NAT profile and set the NAT IP address</b>
showdivertport	<b>Displays the status of services on the FriendlyNET ISDN</b>
shownatip	<b>Displays NAT entries and status</b>

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#### **Special Application Support Commands**

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<b>Command</b>	<b>Description</b>
enableappsupport	<b>Enables or disables special application handling features</b>
setappinfo	<b>Enables or disables support for a special application</b>
showappinfo	<b>Displays the current applications table</b>

---

### **thelp**

The **thelp** command displays a complete list of commands.

Format

```
thelp "command name"
```

Example

```
thelp "showall"
```

### **cleardhcp**

The **cleardhcp** command clears all DHCP entries.

Format

```
cleardhcp
```

## **clearlog**

The clearlog command clears all log entries.

Format

```
clearlog
```

## divertport

The divertport command is used to enable/disable certain services on the FriendlyNET ISDN. If a service is enabled on the FriendlyNET ISDN, all the inbound traffic for that service will go to the FriendlyNET ISDN. If the service is disabled on the FriendlyNET ISDN, all the inbound traffic to the FriendlyNET ISDN will be diverted to the NAT computer.

Current services on the FriendlyNET ISDN are telnet and HTTP (Web). If telnet service is disabled on a particular profile, remote configuration will not be possible through telnet (on that profile).

### Format

```
divertport "-s <service number> -e <enable/disable>"
```

### Options

- s Service number. 1=Telnet
- e Values are 1=enable, 0=disable

### Examples

```
divertport "-s 1 -e 1"
```

## **dropcalls**

The dropcalls command forces all calls to be dropped.

Format

```
dropcalls "-n <port id>"
```

Option

**-n** Port ID. Values are 0=All Modems, 1=Modem 1, 2=Modem 2, 3=Modem 3

Example

```
dropcalls "-n 2"
```

### **enableappsupport**

The **enableappsupport** command is used to enable/disable special application handling. The status of the application is displayed by the **showappinfo** command.

Format

```
enableappsupport “-s <[on/off]>”
```

Option

**-s**     Values are **on=enable**, **off=disable**

Example

```
enableappsupport “-s on”
```

## **enabledhcp**

The **enabledhcp** command enables or disables the DHCP server functionality.

Format

```
enabledhcp “-s <on/off>”
```

Option

**-s**     **Values are on=enable, off=disable**

Example

```
enabledhcp “-s on”
```

### **enableipportmap**

The `enableipportmap` command is used to enable/disable portmapping. The status of portmapping is displayed by the `showipportmap` command.

Format

```
enableipportmap "-s <on/off>"
```

Option

**-s** Values are on=enable, off=disable

Example

```
enableipportmap "-s on"
```

### **enablenetbios**

The **enablenetbios** command modifies filtering of NetBIOS based TCP/IP packets. By default, these packets are blocked. If no arguments are entered, **enablenetbios** displays the current status.

Format

```
enablenetbios "-s <on/off>"
```

Option

**-s** Values are **on=block** Netbios packets, **off=allow** Netbios packets

Example

```
enablenetbios "-s on"
```

### **exitwr**

The **exitwr** command logs out of a Telnet session (if you are using Telnet to configure your FriendlyNET ISDN).

Format

```
exitwr
```

### **logoutwr**

The **logoutwr** command is used to logout from a serial session.

Format

```
logoutwr
```

△ This only logs out of the FriendlyNET ISDN and is not the same as **logout** for Telnet.

## **resetwr**

The **resetwr** command restarts the FriendlyNET ISDN without effecting the configuration settings.

Format

```
resetwr
```

### **saveconfig**

The `saveconfig` command saves the FriendlyNET ISDN configuration in permanent memory. After all information is configured, you must then save it.

Format

```
saveconfig
```

### **setappinfo**

The `setappinfo` command is used to enable/disable support for a particular application entry, configure the control and data port ranges for an application and change the name of an existing application.

The maximum number of ranges that can be configured (control + data) is 10. The maximum size of a name is 10 characters. The name cannot contain a space, hyphen or minus. The start port and end port should be separated by either a colon or a space.

Format

```
setappinfo "-a <action> -e <enable/disable>  
           -n <name of app> -N <new name>  
           -c <control protocol tcp/udp> <start port> <end port>  
           -d <data protocol tcp/udp> <start port> <end port>"
```

### Options

- a Action. 1=add, 2=delete
- e 1=enable, 0=disable
- n Name of application configuration is being supplied for
- N New name of application. Required only when the name of an existing application is modified
- c Control protocol information for current application. Information consists of a control protocol, control start port and data end port (for a range). Control protocol =tcp/udp
- d Data protocol information for current application. Information consists of a data protocol, data start port and data end port (for a range). Data protocol =tcp/udp

### Examples

```
setappinfo "-a 1 -e 1 -n MyApp -c tcp 100:200, udp 20 -d tcp 50"
```

Adds a new application "MyApp"

```
setappinfo "-a 1 -e 1 -n MyApp -d tcp 70:80"  
setappinfo "-a 2 -e 1 -n MyApp -d tcp 50"
```

Modifies an existing application

```
setappinfo "-n MyApp -N NewAppName"
```

Changes the name of the application "MyApp" to "NewAppName"

### setcustomkey

The setcustomkey command sets the custom calling features.

Format

```
setcustomkey "-t <transfer key> -c <conference key> -d <drop key>"
```

Options

- t    **Transfer key**
- c    **Conference key**
- d    **Drop key**

Example

```
setcustomkey "-t 61 -c 60 -d 62:"
```

## **setdefaultroute**

The **setdefaultroute** command creates a default route for either ISP, remote office or local network.

### Format

```
setdefaultroute “-i [ISP] OR -r [remote office]  
OR -l <ipaddress of router on local LAN>”
```

### Options

- i **ISP**
- r **Remote office**
- l **IP address of router on local LAN**

### Example

```
setdefaultroute “-l 207.56.75.3”
```

## **setdhcp**

The setdhcp command sets the starting IP address and number of IP addresses used for DHCP. The number of addresses must be greater than zero.

### Format

```
setdhcp “-a <Start of Address> -n <Number of Addresses> -f -p”
```

### Options

- a** Starting IP address
- n** Number of IP addresses
- f** IP address to free
- p** IP address to reserve

### Example

```
setdhcp “-a 192.168.1.2 -n 50”
```

### **setdhcpexclude**

The `setdhcpexclude` command excludes one or more addresses from the list of available addresses, assigned by the DHCP server. Number of addresses must be greater than zero.

Format

```
setdhcpexclude "-a <Start of Address> -n <Number of Addresses>"
```

Options

- a** Starting IP address
- n** Number of IP addresses

Example

```
setdhcpexclude "-a 192.168.1.200 -n 10"
```

## **setdhcpfree**

The `setdhcpfree` command releases the addresses previously assigned and moves them into the free list of addresses. Number of addresses must be greater than zero.

### Format

```
setdhcpfree "-a <Start of Address> -n <Number of Addresses>"
```

### Options

- a**    Starting IP address
- n**    Number of IP addresses

### Example

```
setdhcpfree "-a 192.168.1.200 -n 10"
```

### **setdhcpinclude**

The `setdhcpinclude` command moves one or more previously excluded IP addresses from the excluded list into the free list. Number of addresses must be greater than zero.

Format

```
setdhcpinclude "-a <Start of Address> -n <Number of Addresses>"
```

Options

- a** Starting IP address
- n** Number of IP addresses

Example

```
setdhcpinclude "-a 192.168.1.200 -n 10"
```

## **setdhcpreserve**

The `setdhcpreserve` command reserves an IP address for a specific computer, assigned by the DHCP server.

### Format

```
setdhcpreserve “-a <IP Address> -m <MAC Address>”
```

### Options

- a** IP address
- m** MAC address. Number of characters must be 12 and should be formatted [0...9, a...f, A...F]

### Example

```
setdhcpreserve “-a 192.168.1.200 -m 0A 2A FF 13 45 F2”
```

## setdhcpopts

The setdhcpopts command sets the value of the DNS server addresses, domain name and the gateway address in the DHCP server.

Format

```
setdhcpopts “-d <Domain Name> -g <Gateway Address> -n  
          <-i> <ith DNS Address>”
```

Options

- d    Domain name
- g    Gateway address (usually 192.168.1.1)
- n    Number. i=1, 2, 3

Example

```
setdhcpopts “-d mycompany.com -g 192.168.1.1”
```

### **setfactorydefaults**

The **setfactorydefaults** command sets the FriendlyNET ISDN configuration to the factory defaults.

Format

```
setfactorydefaults
```

### **setinauthpasswd**

The **setinauthpasswd** command sets the incoming authentication password for the given profile. User is prompted for the authentication password.

Format

```
setinauthpasswd “-n <t>”
```

Option

**-n** Profile ID. Values are 1=ISP, 2=Remote Office

Example

```
setinauthpasswd “-n 1”
```

### **setipportmap**

The **setipportmap** command is used to configure internal servers hosted on the LAN. The IP address of the internal server should reside on the FriendlyNET ISDN's local LAN network.

## Format

```
setipportmap “-d <Action> -n <Name of Server> -a <Server IP Address>  
-p <Protocol> -e <Server External Port Number>  
-i <Server Internal Port Number>”
```

## Options

- d Action. Values are 1=add, 2=delete
- n Name of server
- a Internal server IP address
- p Protocol. 1=TCP, 2=UDP
- e External port (visible to the outside world). Range is 1 to 65535
- i Internal port (typically the same as the external port). Range is 1 to 65535

## Examples

The following example adds a portmap entry for an internal FTP server with an external port of 21, internal port of 100, protocol of TCP and an internal IP address of 192.168.1.3.

```
setipportmap “-d 1 -p 1 -e 21 -i 100 -a 192.168.1.3”
```

The following example deletes the previously added portmap entry.

```
setipportmap “-d 2 -p 1 -e 21 -i 100 -a 192.168.1.3”
```

## setisdn

The setisdn command sets the ISDN parameters.

### Format

```
setisdn "-s <switch type> -i <isdn num1> -p <spid1> -I <isdn num2>
-P <spid2>"
```

### Options

- s **Switch Type.** Valid switch types are 2=AT&T Point-to-Point, 130=AT&T Multi-Point, 128=AT&T NI1, 129=DMS 100, 160=DMS 100 NI1, 192=Siemens NI1, 224=other NI1
- i **ISDN number 1**
- p **SPID 1**
- I **ISDN number 2**
- P **SPID 2**

### Example

```
setisdn "-s 2 -i 5551234"
```

### Notes

- AT&T Point-to-Point only uses a single ISDN phone number. The second ISDN number, SPID 1 and 2 are not used.
- If your switch type is DMS-100, AT&T Multi-Point or NI1, you need to enter both ISDN numbers and both SPIDs.
- If setisdn is issued on an already configured FriendlyNET ISDN, it prints the message "Save and Reset the FriendlyNET for these changes to take effect." Issue a saveconfig and resetwr.

## **setlocalip**

The **setlocalip** command sets the local IP address and netmask.

Format

```
setlocalip "-a <local ip address> -m <netmask>"
```

Options

- a IP address of the FriendlyNET ISDN
- m Netmask for the FriendlyNET ISDN

Example

```
setlocalip "-a 200.60.50.1 -m 255.255.255.0"
```

## setmp

The setmp command sets the Multilink PPP parameters.

### Format

```
setmp “-n <proflid> -i <isdn name> [-a add time] [-d del time]
      [-f second channel activation flag]”
```

### Options

- n Profile ID. Values are 1=ISP, 2=Remote Office
- i ISDN number to be called to enable the second channel. Typically, this is the same as the one used for the first channel.
- a Add Time. Second channel will be added if sustained data traffic exceeding a single channel bandwidth exists more than the Add Time value. Add Time is in units of 5 seconds. Valid values are 1 to 50.
- d Delete Time. Second channel will be disconnected if data traffic below a single channel bandwidth exists for more than the Delete Time. Delete Time is in units of 5 seconds. Valid values are 1 to 50.
- f Second Channel Activation Flag. Valid values are 0=never use second channel, 1=dynamically allocate second channel, 2=always allocate second channel
- t Add Threshold. 1 to 100% of channel bandwidth
- s Delete Threshold. 0 to 100% of channel bandwidth. 0=never drops

### Example

```
setmp “-n 1 -i 4567890 -a 4 -d 9 -f 1”
```

## setnatip

The setnatip command is used to enable/disable NAT on a profile and to set the NAT computer address. For each profile, a different NAT computer IP address needs to be specified.

Format

```
setnatip "-a <local PC ip address> -e <enable/disable>
```

Options

- a Local computer's IP address. Should be the same network as the FriendlyNET ISDN's local LAN address.
- e Values are 1=enable, 0=disable

Examples

```
setnatip "-n 1 -a 192.168.1.4 -e 1"
```

Sets the NAT computer's IP address to 192.168.1.4 and enables profile 1.

```
setnatip "-n 1 -e 0"
```

Disables NAT on profile 1.

## setoutauthpasswd

The setoutauthpasswd command sets the outgoing authentication password. Using this command prompts you for an authentication password (which is not displayed when typed). The following shows the format of the setoutauthpasswd command.

Format

```
setoutauthpasswd "-n <proflD>"
```

Option

**-n** Profile ID. Values are 1=ISP, 2=Remote Office

Example

```
setoutauthpasswd "-n 1"
```

## setpots

The setpots command sets the phone port configuration.

Format

```
setpots "-n <line number> -d <device type> -w <block call waiting>
        -f <block features> -o <bump on outgoing>
        -i <bump on incoming>"
```

Options

- n Line Number. 1=line 1, 2=line 2
- d 0=phone, 1=fax, 2=custom
- w 1=yes, 0=no
- f 1=yes, 0=no
- o 1=yes, 0=no
- i 1=yes, 0=no

Example

```
setpots "-n 1"
```

### Notes

- Options -w, -f, -o and -i are for custom option only.
- Default setup for phone option is "no" for block call waiting and block features (call waiting and custom calling features are enabled). Yes for bump on outgoing and bump on incoming.
- Default setup for fax option is yes for block call waiting (call waiting is enabled), block features (custom calling features are disabled), bump on outgoing and bump on incoming.

## setpotsbump

The setpotsbump command sets the call bumping options.

Format

```
setpotsbump “-c <bump data calls> -n <bump first>”
```

Options

- c 0=never, 1=one call, 2=both calls
- n 0=ISP, 1=Remote Office

Example

```
setpotsbump “-c 1 -f 0”
```

## setppp

The setppp command sets all PPP parameters.

Format

```
setppp “-n <profileId> -i <ISP Num> -T <Auth type>  
      [-c <header compression> -r <rate> -t <idle time>  
      -m <MRU> -a <out auth name> -A <in auth name>  
      -p <out auth passwd> -P <in auth passwd>”
```

Options

- n Profile ID. Values are 1=ISP, 2=Remote Office
- i ISDN phone number
- T Authentication Type. Valid values are 0=None, 1=PAP, 2=CHAP
- c Header Compression. Valid values are 0=None, 1=VJ compression. Default value is 0.
- r Rate. 0=dynamic, 1=64K, 2=56K, 3=speech

- t** Idle time (in seconds) before the connection is dropped. Values should be greater than 30 (default is 120). Range is 10 to 65535; 0=never drop.
- m** MRU (Maximum Receive Unit) value must be between 128 and 1524. Optional parameter if omitted, default value is 1524.
- a** Outgoing authentication name
- A** Incoming authentication name
- p** Outgoing authentication password
- P** Incoming authentication password

Example

```
setppp "-n 1 -i 2540708 -T 2 -a abcdxy -p abc123"
```

- △ Authentication passwords can be set separately using `setinauthpasswd` or `setoutauthpasswd` commands, if the password is not to be displayed.

## setwanip

The setwanip command sets the WAN side local and remote IP addresses and subnet masks for the given profile.

Format

```
setwanip “-n <profil> -a <remote WAN ipaddr>  
          -m <remote WAN netmask> -a <local WAN ipaddr>  
          -M <local WAN netmask>”
```

Options

- n Profile ID. Values are 1=ISP, 2=Remote Office
- a Remote WAN IP address (ISP’s IP address)
- A Local WAN IP address
- m Remote WAN netmask
- M Local WAN netmask

Example

```
setwanip “-n 1 -a 137.37.27.4 -m 255.255.255.0 -A 200.60.50.1  
          -M 255.255.255.0”
```

## setwrpasswd

The setwrpasswd command sets the administrator access password for the FriendlyNET ISDN. User is prompted for password. The following shows the format of the setwrpasswd command.

Format

```
setwrpasswd “[-p <password>]”
```

Option

**-p**    **Password**

## **showall**

The showall command displays configuration information. The following shows the format of the showall command.

Format

```
showall "-n <profile id>"
```

Option

**-n** Profile ID. Values are 1=ISP, 2=Remote Office

Example

```
showall "-n 1"
```

## showappinfo

The showappinfo command shows the current applications table.

Format

```
showappinfo
```

Sample

Name	Status	Control Information			Data Information		
		Protocol	Start	End	Protocol	Start	End
MyApp	enabled	tcp	20	30	udp	100	200
					udp	1000	1500
MyApp2	disabled	udp	70	70	udp	500	700
		tcp	70	70			

### **showcustomkey**

The showcustomkey command shows the custom calling features.

Format

```
showcustomkey
```

### **showdhcp**

The showdhcp command displays the DHCP options and current assignment of the IP address to the MAC address.

Format

```
showdhcp “-a <Start of Address> -n <Number of Addresses>”
```

Options

- a Starting IP address
- n Number of IP addresses

## **showdhcpopts**

The **showdhcpopts** command displays the current settings of the DHCP options. This is used to check if the DHCP server is enabled or not enabled.

Format

```
showdhcpopts “{ {-d} {-n} {-s} (-g) }”
```

Options

- d**    **Domain Name**
- n**    **DNS Addresses**
- s**    **Subnet mask ID**
- g**    **Gateway Address**

## **showdivertport**

The showdivertport command shows the status of services on the FriendlyNET ISDN.

Format

```
showdivertport “-n <proflid>”
```

Option

**-n**    **Profile ID. Values are 1 through 3**

Example

```
showdivertport “-n 1”
```

### **showiproutes**

The showiproutes command shows the existing IP routes.

Format

```
showiproutes
```

### **showipportmap**

The showipportmap command is used to display the current portmapping table, as well as the status of portmapping.

Format

```
showipportmap
```

Sample

**Portmapping Sta- Enabled  
tus:**

Server IP Address	Protocol	External Port Number	Internal Port Number
192.168.1.3	TCP	21	100

### **showisdn**

The showisdn command shows the ISDN parameters.

Format

```
showisdn
```

### **showlocalip**

The showlocalip command displays the local IP address and netmask. The following shows the format of the showlocalip command.

Format

```
showlocalip
```

Example

```
showlocalip
```

Sample Output

```
IP Address    200.60.50.1  
Subnet Mask  255.255.255.0
```

### **showlog**

The showlog command displays the event log messages.

Format

```
showlog
```

### **showpots**

The showpots command shows the phone and fax port setup as well as the data call bumping options.

Format

```
showpots
```

### **showpotsstats**

The showpotsstats command shows the status of the phone lines.

Format

```
showpotsstats
```

### **showppp**

The showppp command displays the PPP parameters of the given profile.

Format

```
showppp “-n <proflid>”
```

Option

**-n** Profile ID. Values are 1=ISP, 2=Remote Office

Example

```
showppp “-n 2”
```

## **shownatip**

The **shownatip** command displays the NAT entries and their status. Without any options, this command displays the status of all three profiles.

### Format

```
shownatip "-n <profile id>"
```

### Option

**-n** Profile ID. Values are 1=ISP1, 2=ISP2, 3=ISP3

### Example

```
shownatip "-n 1"
```

### **showstats**

The **showstats** command displays the combined number of packets received or transmitted on the modem side.

Format

```
showstats
```

Sample

```
Packets Received      : 6  
Packets Transmitted   : 6
```

### **showstatus**

The **showstatus** command displays the status of the FriendlyNET ISDN.

Format

```
showstatus
```

## **showversion**

The **showversion** command displays the current firmware version.

Format

```
showversion
```

### **showwanip**

The showwanip command displays the WAN IP address and netmask for a given profile.

Format

```
showwanip "-n <profile id>"
```

Option

**-n** Profile ID. Values are 1=ISP, 2=Remote Office

Example

```
showwanip "-n 1"
```

Sample Output

```
Profile ID           : 1 (profile ID number)
Remote IP Address    : 137.37.27.4
Remote Subnet Mask   : 255.255.255.0
Local IP Address     : 200.60.50.1
Local Subnet Mask    : 255.255.255.0
```

### **testisdnloopback**

The testisdnloopback command performs a loopback test.

Format

```
testisdnloopback
```

## **testisdnumber**

The testisdnumber command tests the given ISDN number.

Format

```
testisdnumber "-i <isdn number>"
```

Option

**-i**     **ISDN number**

Example

```
testisdnumber "-i 4567890"
```

## testping

The testping command “pings” the given IP address.

Format

```
testping “-a <ipaddress>”
```

Options

**-a** IP address to ping

Example

```
testping “-a 137.37.27.4”
```

## testring

The testring command causes the attached phone to ring.

Format

```
testring "-n <line number>"
```

Option

**-n**    **Line Number 1 or 2**

Example

```
testring "-n 1"
```

This example rings the device connected to Line 1. To end the test, place the phone off the hook and then on the hook.