



# SPRYNET INSTALLATION AND CONFIGURATION GUIDE

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# SETTING UP AND REGISTERING YOUR SOFTWARE

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Immediately following SPRYNET installation, you'll be asked to specify information about your modem. These initial settings are used for your modem when registering; if you need to perform additional modem configuration in order to use SPRYNET, you will be able to do that after you register, using the Account Creation Utility.

## Setting Up Your Communications Port

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The Communications Port Setup dialog appears once the installation is complete.

### Port

Choose COM1, COM2, COM3, or COM4. When you choose an option, the dialog will tell you whether the COM port you have selected is available, along with other information. If you're not sure which COM port your modem is on, this indicator may help you narrow down the choices. When you select the COM port, if it displays the message "unavailable," that COM port is probably not being used by your modem. If it is "available," then it may be your COM port.

The Port Status message indicates which ports are available. If you have a PCMCIA card, or if multiple COM ports are in use, this message may not indicate the correct COM port status.

When you first set up your modem, we recommend that you set your modem speed to 9600. This will produce the least amount of complications during the registration and configuration process. Then, once you have ensured that your applications are working correctly, you can increase the COM port speed to the highest speed (bps) your modem can achieve (using the Communications Port Setup dialog). Choose Port in the Connection Setup dialog of the Configuration Utility, or Port Setup in the Modem menu of the Dialer, and change this dialog.

**Note...** If you are unsure of your modem speed, choose 9600.

General guidelines for choosing your COM port speed are shown below.

- If your modem is 9600 bps, choose 9600.
- If your modem is 14,400 bps, choose 19,200. (Note: there is no option for 14,400.)
- If your modem is 28,800 bps, choose 38,400.

If your modem does not initialize at the recommended speed, try a slower setting.

## Set Up Your Modem

In this dialog, you will be asked to choose the make and model of your modem, as well as the type of phone line you will be using. The Modem Type field contains a drop-down list of popular modems. If you find your modem in the list, select it.

If your modem is not listed, you will need to choose a compatible modem from the drop-down list. Your modem documentation may indicate other modems that are compatible with yours; if so, try to find one on the drop-down list and select it. If you are unsure, try Hayes Optima 144 + FAX144 (this will work with most modems).

The Modem Type you choose will be used for the software registration and the configuration.

### Phone Line Type

Choose Tone for touchtone phones (the default), or Pulse for pulse dialing phones.

Click OK when you have finished filling out the Modem Setup dialog.

## Register Your Software

Following the Modem Setup dialog, you will see the Software Registration dialog. The First Name, Last Name, Address Line 1, City, Country/State, ZIP Code, and Day Phone fields must be completed.

Registering your SPRYNET software will ensure efficient technical support and timely upgrades. You must fill out the Software Registration dialog to proceed with the SPRYNET configuration.

SPRYNET uses SPRY RAMP (Remote Account Maintenance Protocol) technology to automatically register your software. The RAMP process will take place later in the configuration.

If you choose SPRYNET as your Service Provider (either a Local Instant Access Account or a Toll-Free Instant Access Account), the information in this dialog will be used as the billing address for your SPRYNET access account.

## Specify Dial Modifiers

When you have finished filling out the Software Registration dialog, you will see the Dial Modifier dialog.

The Dial Modifier fields are optional. They are provided for the following reasons:

- You may need to dial a code to get an outside phone line (as with PBX phone systems).
- You may want to disable call waiting so that incoming calls do not interrupt your SPRYNET sessions. If so, enter \*70 for touchtone phone lines or 1170 for pulse phone lines.
- You may want to set up a calling card for use with SPRYNET. The registration will take place over a toll-free number, but you may have to dial a toll number to reach your Internet Service Provider.

You should add a pause (delay) to this field by adding a comma (,) to the number. In other words, if your phone system requires you to dial 9 and then takes a few seconds to give you a dial tone, you might specify 9, and then the number; e.g., 9,555-9292. (For additional delays, add more commas; e.g., 9,,555-9292.)

### Disabling Call Waiting

If you have call waiting on your telephone, an incoming call will usually disconnect you from SPRYNET (or any telecommunications application). To suppress call waiting, type \*70, in the Before: field (if you have a pulse dial telephone, type 1170,).

Fill out any other Dial Modifiers your phone system requires, then click OK.

## Configuring for Your Internet Service Provider\_\_\_\_\_

### Select a Pricing and Access Option

Before you select a dialup number, you will need to select a pricing and access option. SPRYNET will dial INTERSERV over a toll-free phone line, to download SPRYNET's account pricing information. You will then be able to choose a pricing package from multiple options. Regardless of the pricing options offered by SPRYNET, you will always have the Manual Configuration option, which allows you to configure SPRYNET for use with an independent Internet Service Provider.

To continue with the configuration process, in the Select a Pricing and Access Option dialog, choose one of the SPRYNET pricing packages or choose Manual Configuration. For more information on any of the options in the Select a Pricing and Access Option dialog, select an option and click on the More Info button.

## Choose an Access Number

You will choose your SPRYNET dialup number in the Wizard Lookup dialog — this is the number you will dial to access the Internet.

This screen will show the toll-free and local Instant Access numbers in your area. Note that there is an hourly surcharge for toll-free access.

Verify that the area code displayed in the Area Code box is correct; if you will be dialing from a different area code, enter that number in this field and select an access number from the list that appears.

Choose an access number from the list box on the left. This list displays a toll-free number and, if available, a local access number.

### Guidelines for Choosing an Access Number:

Try to select a local access number, if one is listed. Select the fastest baud rate available.

If you live in an outlying location, there may be no local access numbers available. If so, select the Long Distance check box and add a long-distance prefix (such as a 1 or 1-206) in the Long Distance field.

Make sure your Long Distance field entry is correct. Some phone companies require that you dial the area code for all long distance calls (both within and outside of your area code), while others require an area code only for long distance calls outside your area code.

Due to the cost of long distance telephone service, it may be more economical for you to create a Toll-Free Instant Internet Access account. To create a toll-free account, choose the CompuServe 800/US access number. Remember that toll-free access carries an hourly surcharge in addition to normal usage rates (as indicated previously in the Choose a Pricing and Access Option dialog box).

## Fill Out the Account Application

You will see the Secure Account Application Form dialog, asking you to specify a credit card for your connection charges. (Your name and address information from the Software Registration dialog will be used for a billing address.)

Specify which credit card you want to use for your Internet access fees: Visa, MasterCard, or American Express. You must also specify the expiration date and the name used on the card. Your mother's maiden name is also requested for verification of your identity.

When you have completed the Account Application Form, click the Register button.

## Choose an e-mail Name

You will now see the Select an e-mail Username dialog.

In this dialog, you can make up to three requests for your e-mail name. Some guidelines for selecting an e-mail name follow:

- Be sure the name is something that will help others remember you — you could use your initials, a nickname, or some combination of letters in your name, for example.
- Be sure your selection is in good taste. A name deemed in poor taste by the SPRYNET system administrators will be changed to a random e-mail name.
- There are thousands of subscribers on SPRYNET. Be sure that your second and third choices are unique — you might include a combination of numbers or other special characters, to ensure you don't request an e-mail name chosen by another user.

If all of your e-mail name requests have been previously chosen by other SPRYNET customers, the automatic registration process will create an e-mail account for you by using your first choice from the Select an e-mail Username dialog, and adding a random number at the end. For example, if your e-mail requests are already chosen, and your first choice of e-mail name is yolanda, your e-mail name will be yolanda001 or something similar.

Click OK when you have entered your e-mail name requests. You will be asked to review the dialog. When you have ensured that your entries are correct, click Confirm, or click Go Back to go back

and change your information. Your e-mail username will be given to you at the end of the registration process, along with additional account information.

## Autoregister and Create Your Instant Access Account

SPRYNET will register your software and set up your account at the same time.

During the registration process, you will see an Initializing Modem dialog. If you have specified the correct modem settings, your modem will begin dialing. A variety of messages will appear in the Connection Status dialog, and the Dialer icon will appear at the bottom of your screen.

When the connection is made, you will see a Connected! dialog, and you will be presented with a Registration Complete acknowledgment.

If you cannot register with SPRYNET for your access account for some reason, try again by clicking on the Try Again button — in some cases, registering again will take care of the problem. You will not have to retype any of the information you have already provided. If after subsequent attempts you still can't register, you should wait a while and register again. You can restart the registration process by opening the Account Creation Utility.

## Record Your Account Information

When the registration is complete, you will see a dialog containing your account information for SPRYNET. This dialog will contain your login ID and password as well as your e-mail username, password, hostname, and address.

You will need to know the information in this dialog to use your Internet access account and your e-mail account. Make sure that you write down this information or print it by clicking the Print button. You can save the information in this dialog to a file by clicking the Save button; the information will be saved to the file PASSWORD.TXT in your \NETSCAPE\DATA directory.

**Note...** Be sure to record your password information before leaving this dialog. You will be asked to verify your login and e-mail passwords after you exit this dialog.

Record this information now, and click OK.

## Security Issues

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SPRYNET is configured for an automatic connection. This means all you need to do to connect to SPRYNET is double-click an application icon (e.g., SPRY Mail, Internet, NetScape Navigator™ etc.). SPRYNET's automatic login feature can save you time by entering your login information for you automatically; however, it poses security risks. Because your login is automated, anyone who has access to your computer also has access to your SPRYNET account.

If your computer is at home or located in a secure area, a fully automated login may not concern you. However, if many people have access to your computer, you may want to reconfigure SPRYNET to include security features, limiting who has access to your SPRYNET account. You can reconfigure your login to prompt you for your username and password when connecting, as described below.

### Reconfiguring SPRYNET for Increased Security

In the SPRY Dialer, click Network then Login Setup. You will modify the auto login process that the Login Setup dialog contains.

You have two options for increased security: manual login, or a modified auto login.

**Note...** The “None” login option will not work with SPRYNET.

#### Manual Login

To set up SPRYNET for manual login, click the Manual Login radio button. Choosing this login option will require you to enter all login commands in the main Dialer window as you are prompted by SPRYNET. This requires that you have your SPRYNET account login information available (your hostname username and password).

#### Modified Auto Login

To modify SPRYNET's auto login, click the Auto Login radio button and click OK. You will then see the Auto Login dialog. Edit the Password auto login event by selecting it and clicking Edit. This will open an Auto Login Event dialog. Change the selected option



in this window from “send response, do not prompt,” to either “prompt with response shown” or “prompt with response encrypted.”

If you work in a busy office where people can watch over your shoulder, you may not want your password displayed on screen; to increase security even more, choose the “prompt with response encrypted” option. If you choose this option, your response will not be shown on screen; instead, you’ll see an asterisk for each character you input.



# USING THE SOFTWARE

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Once you have successfully connected and logged in to SPRYNET, you can use any Internet application.

Until you disconnect SPRYNET, your SLIP/PPP connection will be active. Note that connection charges may occur as long as your applications are open.

**Note...** A complimentary copy of CompuServe's WinCIM (Windows CompuServe Information Manager) application was included with the SPRYNET software, as a service to our customers. For more information about using this application, see the online help for WinCIM.

# Using the Dialer

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The Dialer, which is used to make your SPRYNET connection, is a stand-alone application. You can use the Dialer independently to start a SPRYNET session, if you want, or use it when you are running SPRYNET to monitor the session activity.

You can open the Dialer by double-clicking the Dialer icon or the Dashboard icon when Dialer is minimized during a SPRYNET session, or you can start it by double-clicking the Dialer icon in the SPRYNET program group. The Dialer screen will appear.

## Dialer Menu Options:

### File Menu

New Profile	This option allows you to create a new communications profile consisting of all your modem and network settings.
Open Profile	This option allows you to select and open a communications profile. The default SPRYNET profile is titled "Default."
Delete Profile	This option allows you to delete a profile from a list of all the profiles you have created. Be sure you want to delete a profile before doing so; deleted profiles cannot be restored.
Capture Session	This can be used to capture all of the activity on your Dialer screen to a file. If you check this option, the activity for your current session will be copied by default to the file AIRDIAL.LOG in your \NETSCAPE\DATA directory. This file is overwritten for each new session.
Exit	This option allows you to exit and close the Dialer application.

## Edit Menu

Clear Window	This option removes any text that may appear in the Dialer screen.
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## View menu

Toolbar, Status Bar	These items are used to display or hide the Toolbar (the bar at the top of the screen displaying buttons) and the Status Bar (the bar at the bottom of the screen displaying status messages). Checking these items will display them, and clearing them will hide them.
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## Modem Menu

Setup	This option will bring up the Modem Setup dialog, allowing you to configure basic and advanced modem settings.
Custom	This option will bring up the Custom Modem Settings dialog, allowing you to create and configure a custom modem.
Initialize	This command will initialize the modem, using the initialization string associated with the modem you have set up in the Modem Setup dialog.
Dial	This command will dial the modem, using the phone number specified in the Dialer Setup dialog.
Hangup	This will hang up the modem.
Port Setup	This option will bring up the Communications Port Setup dialog.

## Network Menu

Dialer Setup	This option brings up the Dialer Setup dialog, allowing you to easily enter important Dialer information: access account phone number, dial modifiers, and network settings.
Login Setup	This option brings up the Login Setup dialog, allowing you to set up the method that is used to login to your Internet Service Provider. You can set up an Auto Login, enabling your login to take place automatically without input from you. For more information on Login Setup, see the “Login Options” section later in this chapter.
Interface	This option allows you to specify whether you use SLIP or PPP to connect to your Internet Service Provider, and allows you to specify settings for SLIP and PPP.
Trace	This brings up the Trace application, which can be used to get detailed statistical information about your current SLIP/PPP connection. See the online help in the Trace application for information on using Trace.
Start Packet Mode	Use this option to initiate Packet Mode in the Dialer, if necessary.

## Options menu

Toolbar Style	This option can be used to change the appearance of the Toolbar buttons. You can choose Text only, Picture and Text, or Picture only.
Timers	This option brings up the Timers dialog, allowing you to determine values for how long the Dialer waits before connecting and disconnecting.

Dialing Status	This option indicates where the current Dialer status messages (e.g., “Initializing,” “Connecting,” etc.) will be displayed. By default, Dialer status messages are displayed in a Connection Status dialog in the middle of your screen. If you clear this option, the Dialer status will be displayed in the Dialer Status Bar if the Dialer is open, or will be indicated by changes in the Dialer icon or the Dashboard icon if the Dialer application is minimized.
Icon Always On Top	With this option, you determine whether or not the Dialer or Dashboard icons stay on top of your other applications when you minimize the Dialer. These icons give you quick access to common Dialer functions by clicking them. The disadvantage to having the icons on top is that they may cover up information shown in the Status Bar (for instance, URL information showing in Netscape Navigator’s Status Bar) and could impede your work.
Dashboard Icon	When you minimize the Dialer and have this function selected, you will see the Dashboard icon rather than a minimized Dialer icon. The dashboard icon gives you information about your current session, including modem status, transfer rate, and connection status.
Save Settings on Exit	This option, if checked, will save any changes you’ve made to Dialer-specific settings. It will save the current Dialer size and position, the Capture Session value, Toolbar and Status Bar state, and the Dialing Status value. If it is not checked, any changes you make to these settings will take effect only for the current session.

**Note...** The following Dialer functions can be accessed without opening the Dialer: Restore, Close, Dial, Hangup, Trace, and About; just click the minimized Dialer or Dashboard icon once and choose an item from the Windows® System menu.

## The Dashboard Icon

The Connection Status icon will change to reflect the current status for the Dialer, as described below.

Connection Status Icons	Indicates
Hung-up phone	On hook (modem line is hung up)
Modem with stethoscope	Initializing modem
Phone off hook with lightning bolt	Modem is dialing
Key	Authenticating
Shaking hands	Negotiating
Phone off hook with lightning bolt	Connected
Modem with stethoscope	Disconnecting

**Note...** The Connection Status Icons seen on the Dashboard icon are the same icons you will see in grey status windows in the middle of the screen when you initiate a SPRYNET session.

The Time indicator above the Indication Lights indicates how long you have been connected to the remote SLIP or PPP site. This will serve as an accurate indicator of your connect time, which can be useful information if you are paying for your connection.

## Dialer Status Indicator Lights

These four lights indicate the status of your modem—critical information for troubleshooting your communications settings.

Indicator Light	Indicates
RX	Receiving data
TX	Transmitting data
CD	Carrier detect (indicates a proper connection has been achieved)
CTS	Clear to send (indicates the modem is ready to send information)



The CTS indicator can be of great help when troubleshooting your communications setup. If this is not lit up, it indicates something is wrong with your modem hookup. If you are using an internal modem, no CTS light means your modem is probably not configured properly (most likely the wrong Com port has been selected). See the “Troubleshooting” chapter for more information about troubleshooting your modem.

The Bytes/S indicator displays the current data throughput rate (sending and receiving data); this can range from 0 through 8192K.

The two status bars represent the send and receive throughput rates, as a percentage of the total possible throughput. A colored bar will display in the top status bar when data is being sent; this bar will move from left to right. When data is being received, a colored bar will display in the bottom bar; this bar will move from right to left. When the throughput is 90% or higher, the bars will turn red, indicating that your connection is performing well.

## Using the Phone Book

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As a service to our customers, SPRYNET includes a handy Internet Access Phone Book, which allows easy configuration for all U.S. and Canadian access numbers, should you need to change access numbers.

### Changing Your Access Number Using the Phone Book

To change your access number using the Phone Book, double-click the Phone Book icon in the SPRYNET program group. You will see the Wizard Lookup dialog. To select your access number, change the Country and/or Area Code information as necessary. Then select an access number from the choices in the window.

**Note...** If there are no access numbers available in your local dialing area, you may have to use a long distance dialing prefix. If you do not wish to incur long distance calling charges, you may want to use a toll-free 800 access number.

## Login Options

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Using the Login Setup option (found under the Connection option in the Configuration Utility or in the Network menu in the Dialer program) allows you to set up how you want to log in to your Service Provider.

You can set up Auto Login to automatically provide information to the Service Provider, so that you do not have to type it in manually. (If you chose SPRYNET for your provider during the initial configuration, you are already set up for automatic login.) For added security, you can edit the Auto Login script to prompt you for your password and/or login name.

There are three options for Login Method:

**None** This option is used temporarily during the SPRY RAMP registration process. If your Internet Service Provider does not require you to log in, or uses an authentication method such as PAP for your connection, you will use this option.

**Manual** This is the default login option used if you have chosen a Service Provider other than SPRYNET. When you log in and connect to a host using this login method, the Dialer screen will appear and will prompt you to type some information in order to connect.

**Auto** This method can be used to automatically log in and connect to your Internet Service Provider. (This method is already being used if you have chosen SPRYNET as your Service Provider.) You must provide some information about what prompts are provided by your Service Provider to set up Auto Login.

Choose the option you want to use to log in by checking the appropriate option in the Login Setup dialog.

### Auto Login

Before you use Auto Login to automate your login, you should use Manual Login a few times, to familiarize yourself with the events that occur during your login/connection. Note the prompts you are provided, and what you type as a response.

A good way to be sure your login information is correct is to capture your login session. Before using the Dialer application to connect to your Service Provider, select the Capture Session option in the

Dialer's File menu. The Dialer will then create a text file (called AIRDIAL.LOG, stored in your \NETSCAPE\BIN directory) containing a record of everything that appears on your screen during a SPRYNET session — including prompts from your Internet Service Provider as well as your responses. Print this file to use as a reference when creating an Auto Login.

For example, suppose user Mozart logs in and connects to his Service Provider as follows:

At the prompt Username: types mozart

At the prompt Password: types figaro

At the prompt cicdg1-cs types ppp

Then he sends a Packet Mode Command to the Service Provider by clicking the Pkt Mode button on the Toolbar.

In order to set up auto login, you must define the steps you perform when manually logging in to the host. You do this by setting up events that occur during login. You first define the text that appears on the Dialer screen, and then your response to that text.

Your login/connection procedure will vary depending on your Service Provider. Typically, when you connect to a Service Provider, three “events” will occur:

- a prompt for a Login or Username
- a prompt for a password
- a prompt for you to start SLIP/PPP

And, as in our example above, you may also need to send a Packet Mode Command to the service provider. The procedure to set up Auto Login is described below.

## Setting Up Auto Login

### Open the Login Setup dialog

To create an Auto Login to connect to your Service Provider, click Connection in the Configuration Utility, and in the Connection Setup dialog click Login Setup. In the Login Setup dialog, choose Auto. The Auto Login portion of the Login Setup screen will open up, displaying your current Auto Login information. If you haven't set up an auto login script yet, the lower portion of the window will open blank.

## Create a New Auto Login Event

Set up an Auto Login event by clicking the New button, or double-clicking the line to which you want to add an event. You will see the Auto Login Event dialog, prompting you to add one Auto Login event.

**For Wait For:** Specify the first prompt that your Service Provider will provide. In the previous example, you would type Username: for the Wait For: text.

**Note...** You must match the text of the prompt exactly. If the text prompt ends in a colon (:) or greater than () symbol, for instance, be sure to match it in the Wait For text.

**For pause:** Supply the amount of time you want to wait before sending your response. The default of 1 second should work for most cases. You can go back and adjust this value if your response seems to be sent too quickly.

**For Response:** Specify what you want to type when the Wait For: text is provided. In the previous example, you would type mozart for the Response:.

**Notes...** If your Service Provider instructs you to include additional line feeds or carriage returns in your auto login, you can enter command codes in these dialogs, as well. For instance, if your response should include a carriage return or a line feed, you can enter the command character values in the Wait For or Response fields. To enter your username followed by a carriage return, type your username followed by ^m or \13. For a line feed, use ^j or \10.

You do not have to provide a response in the Response field; instead, you can choose to have a prompt appear at this point in the connection, prompting you for the response. (You might do this, for instance, if you don't want your password to be passed on automatically, for security reasons.) You do this by changing the response option at the bottom of the dialog from None (the first option) to one of the other two options, Prompt with response shown on screen (SHOW), or Prompt with response encrypted on screen (ENCRYPT). These two options will both cause a dialog to appear on your screen, prompting you to supply information, but the Prompt with response encrypted on screen (ENCRYPT) option will not show on screen what you type; it will appear as \*\*\*\*\*. If you choose either of these options, you can provide a brief on-screen

message for the prompt. For example, if you want to be prompted for your password on screen, you might type “Enter Your Password Now.” This will make any displayed portion of your automatic login easier to understand.

The last option, Start Packet Mode after \_\_ Seconds, allows you to start Packet Mode in this event. You need to use this option only if you have to start packet mode when you manually log in to your Service Provider. If you have a SLIP account with your Service Provider, you should always use this option. Checking this option is equivalent to clicking the Pkt Mode button on the Toolbar or choosing Start Packet Mode from the Network menu during a manual connection.

You should check this option only during the last Auto Login event. In the previous example, Mozart is required to type his login name, password, and “PPP” at the prompts provided by his Service Provider, and then has to click the Pkt Mode button on the Toolbar in order to complete his connection. In his Auto Login script, he would create events for the login name and password, and then, in his last event, the one that contains the “PPP” command, he would click the Start Packet Mode option in order to start packet mode.

Once you have filled out the Auto Login Event dialog, click OK. The event you defined will be added to the list of Auto Login events.

### **Create Additional Auto Login Events As Needed**

Click New to create additional events. You should create an event for each prompt that you encounter when connecting to your Service Provider.

When you have finished creating all the events necessary for automatic login, there is some additional information shown in this dialog that you may want to supply, described below.

**Initial Carriage Returns** This allows you to specify whether to send a few carriage returns to the Service Provider when you first connect. Some Service Providers will not immediately provide you with a prompt until they receive some carriage returns (the equivalent of hitting Enter). The default is 0, or no carriage returns. If you did not have to hit the Enter key after you connected during manual login, do not change this value.

**Timeout** This value dictates how long (in seconds) the Auto Login routine will wait for all of the Auto Login events to occur before disconnecting. The default is 30 seconds.

**Attempts** This value dictates how many attempts the Auto Login routine will make to connect to the Internet Service Provider. The default is 3 attempts.

Click OK to save the Auto Login information. The next time you log in or connect to your Service Provider, your connection will be automated to the extent you specified. To disable Auto Login, choose another login method in the Login Setup dialog.

## Editing or Deleting Events

If you wish to edit any of the events you have created, double-click on that event, or highlight the line containing the event, and click the Edit button. You will see the Auto Login Event dialog for that event. Make any appropriate changes, and click OK.

You can also delete events by selecting the events and clicking the Delete button. The Event line you deleted will be replaced by a blank line; you can add another event in that position. When you exit the Login Options dialog, any blank lines will be removed.

## Timer Options

---

You can use the Connection Timer Settings dialog to set how long the Dialer waits before redialing, how many times it redials, and how long SPRYNET will wait after the applications are closed or inactive before disconnecting (the automatic disconnect feature). You can reach this dialog by choosing Timers from the Dialer Options menu, or by clicking the Timers button in the Dialer Setup dialog.

Default values for Timer options have been provided for you; you may want to change these options once you have become familiar with SPRYNET.

You can set the options in this dialog as described below.

## Dial Options

Attempt to redial: __ times	Specifies how many times to attempt to redial the Service Provider when the provider is busy or not available.
Timeout after: __ seconds	Specifies how long to wait for a connection when dialing the Service Provider.
Redial after: __ seconds	Specifies how long to wait before redialing the Service Provider after receiving a busy signal or no answer.

## Hangup Options

Never disconnect	By default, the Dialer will disconnect automatically when applications are inactive or closed. If you choose this option, the Dialer will not disconnect unless you close it manually (the other Hangup options in this dialog will be disabled when you select this option). This option may be useful if you want to keep your connection active for a long period of time.
Prompt before reconnecting	Most of the SPRYNET applications have the ability to automatically reconnect to the Service Provider. If you have a SPRYNET application open, and close the Dialer, or get disconnected from your Service Provider, you can restart your connection in most of the SPRYNET applications by simply continuing to use the application. If you want to receive a prompt asking you whether you should reconnect (instead of automatically reconnecting), select this option.

When any dialup application is open but inactive, hang up after:	If all of your current applications are inactive (not in use), SPRYNET will hang up after the amount of time you specify. This value can be set between 0:00:00 (immediately disconnect) and 9:99:99 (disconnect after 9 hours, 99 minutes, and 99 seconds). Note that this may occur if you are merely reading information from the application; for an application to be considered active, you must either be searching for or receiving information (see Inbound and Outbound activity, below).
Prompt on hangup	For the option above, this value specifies whether a dialog will appear, telling you that you are about to be disconnected from your Service Provider, and giving you a chance to continue your connection.
Inbound activity	This option, when selected, indicates that the Timer will consider SPRYNET applications active when they are performing Inbound activity, such as retrieving a file, returning results of searches, or receiving SPRY Netscape Navigator home pages, SPRY Gopher menus, or SPRY News articles, etc.
Outbound activity	This option, when selected, indicates that the Timer will consider SPRYNET applications active when they are performing Outbound activity, such as sending out a file via Network File Manager, searching for information on Netscape Navigator, or sending a mail message.



When all dialup applications are closed, hang up after:	When all of your SPRYNET applications are closed, the Dialer will, by default, disconnect you after the amount of time you specify in this field.
Prompt on hangup	For the option above, this value specifies whether a dialog will appear, telling you that you are about to be disconnected from your Service Provider and giving you a chance to continue your connection.

## Profiles

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You can create profiles containing SPRYNET settings (Dialer Setup, Default Hosts, Timer, Modem, and Login settings), and quickly configure SPRYNET by choosing the profile you want to use.

Profiles contain the information needed to establish a connection: your Service Provider's phone number and access account number, modem information, timer information, auto login information, and default host information.

Some reasons you might want to use profiles:

Several people are using SPRYNET. You can set up a different communications profile for each person who uses SPRYNET, containing individual account information and preferences.

You have different environments in which you use SPRYNET. You might, for instance, use SPRYNET on a laptop at both work and at home. You could create a special "work" profile which includes a dial modifier of "9" so that SPRYNET will automatically access your outside phone line at work when dialing your Service Provider. Or, if you travel often and use a SPRYNET access account (which covers more than 90% of the United States), you may want a communications profile for each city in which you need to access your SPRYNET account.

You use more than one Service Provider. You can set up communications profiles for different accounts you have with different Service Providers.

You can save as many profiles as you like. You can work with Profiles by choosing Save Profile and Open Profile from the File menu in the Dialer.

## Creating Profiles

You can create a communications profile that saves the Dialer modem and network settings under a name you specify. You can then choose from a list of communications profiles, to quickly configure SPRYNET for use with multiple communications configurations.

### Creating a New Communications Profile

You can create a new communications profile quickly and easily.

1. In SPRY Dialer, click File. You'll see three Profile options: Open, New, and Delete.

The New option allows you to configure a new profile.

The Open option allows you to select and open an existing communications profile.

The Delete option allows you to delete an existing profile.

2. Select New. You will see the New Profile dialog, which will prompt you to name the new profile. Use a name that will help you easily recognize the profile at a later date. Click the OK button when you have finished naming the profile. If you have any profiles that you would like to base your new profile on, select Copy settings from:, select one of your existing profiles from the drop-down list, and click OK. If you selected an existing profile, a new profile will be created with the same settings as the profile you selected. You can then edit these settings as described below.
3. Configure the communications settings as you are prompted; first you will see the Communications Port Setup dialog, then the Modem Setup dialog, the Dialer Setup dialog, and the Login Setup dialog.

## Opening a Communications Profile

1. In SPRY Dialer, click File. You'll see three Profile options: Open, New, and Delete. Select Open Profile.
2. You will then see the Open Profile dialog, with a drop-down menu containing a list of the communications profiles you

have configured. From the drop-down menu, select the profile you wish to use, and click OK.

3. Click OK in the Communications Profile dialog. The communications profile you selected is now the current profile and is ready for use.

## Deleting a Profile

You may find that you no longer need a communications profile you've created. For this reason, you have the option of deleting a profile.

### Deleting a Communications Profile

**Important...** Be very sure that you want to delete a profile. Once you delete a profile, you cannot restore it.

In SPRY Dialer, click File. You'll see three Profile options: Open, New, and Delete.

You will see the Delete Profile dialog. From the drop-down menu, select the profile you wish to delete and click OK. Once you verify that you want to delete the selected communications profile, it will be deleted.



# TROUBLESHOOTING

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## Troubleshooting Basics

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Troubleshooting anything Internet-related isn't as easy as saying "It doesn't work. What's wrong?" In light of this, we've designed this troubleshooting section so that it takes a general approach to solving your problem. Although you might not get an immediate answer, keep reading; it might save you time and money. Using the Internet involves transferring information between multiple hosts — inherently complex and somewhat unstable. You no longer have to rely on one workstation to function properly, but three, four, or even more. And if the problem is on the local host (Internet lingo for your computer), it's most likely due to incorrect modem or communications settings rather than your applications.

### Ask Yourself These Questions

There are three easy questions you must ask before solving your problems. They are very easy questions; don't be offended by how easy they are! In the heat of battle, you may forget to ask a few simple things.

#### When did it start?

When did the trouble begin? If you were able to perform a function yesterday that you can't perform today, then something must have changed. If the trouble began after you installed a new application or a new peripheral, you have a good idea of what may have caused the trouble.

#### What's changed?

If an application worked yesterday but doesn't today, something must be different. The physical troubleshooting steps described later in this section may be the first place to start:

- Have you installed or connected to a different modem?
- Have the cables between your computer and your modem been disconnected?
- Is the modem connected properly to the phone receptacle?

The physical connection between your computer and modem is always a good place to start troubleshooting. You never know when you may have jostled something out of place.

However, many changes occur on a system level, too:

- Have you changed service providers?

- Have you installed any new applications, changed any Windows settings, or deleted any files or directories?

In the ongoing process of keeping up to date, some of the important SPRYNET files may have been changed or deleted. Try restoring any Windows system files that may have been changed recently.

### **All, some, or none?**

The most important thing you can do when troubleshooting your connection is to determine the extent of the problem by narrowing it down. If you can't connect to all the Internet sites, find out whether you can connect to just some Internet sites, or if you can't connect to any.

- Using the application you are having trouble connecting with, try connecting to a different site. If you can, your original site is probably down or you have the Internet address wrong. Try again later, after you've verified the address.
- If you can't connect to a different site with the same application, try connecting to an Internet site with another application. For instance, if you cannot connect to anything with Netscape Navigator, try connecting to something using the SPRY Dialer. If you cannot connect to anything with another application, there is probably something wrong with your communications settings.

These three questions (When did it start? What's changed? and All, some, or none?) are good preparation for the next troubleshooting section, because they give you a set of possible reasons for connection problems.

## **Registration/Dialup Problems** \_\_\_\_\_

A number of factors can affect your registration and dialup. If you have a problem, check through the sections below. If you did not register properly, re-register by opening the Account Creation Utility.

If your modem doesn't initialize, or you're getting a "Dialer Communications Error: Your Modem Reports Errors when Using the Current Modem Settings" message:

- Were you able to select your modem in the modem list that appeared during installation? If your modem was not listed, select a compatible modem from the modem list (select Setup from the Dialer's Modem menu, choose the correct modem make and type, and then try registering or connecting again). If you do not know a compatible modem, try using the Hayes option. If you cannot find a modem option that works with your modem, you can define a custom modem.

If you are getting a "Dialer Communications Error: The Communications Port and/or Modem Is Not Ready for Use" message:

- Did you specify the correct COM port and speed for your modem? Choose the Port Setup menu item in the Dialer's Modem menu, and check the settings for your modem in the dialog that appears.

If your modem won't dial or connect, check the following:

- If your modem is external, is the power on? Is it properly connected to your computer?
- Is the modem connected to a phone line?
- Is the phone line plugged into the correct port on the modem?
- Is the phone line available?
- Did you choose the correct communications port (COM port) and speed for the modem?
- If you need to dial a special code before the phone number (e.g., dialing "9" before a call), did you enter it during the installation/configuration? If not, you can set it in the Dialer Setup dialog.
- Is the modem on the hook from any previous modem calls? If not, you can use the Hang up command in the Dialer to hang up the modem.
- Does the modem work with any other telecommunications programs (such as Windows' Terminal application)? If it



does, use the settings in that application for the modem and COM port settings in your SPRYNET configuration.

If you are getting the “Unable to Initialize WINSOCK.DLL” error:

- If you’re not using LANtastic’s Internet Gateway client, you may have multiple WINSOCK.DLL files on your system. Search your system for files with this name, and rename or delete any found outside of the /NETSCAPE/BIN directory.
- If you are using the LANtastic 7.0 Internet Gateway client, rename all but the one in Windows.

If you’re getting no answer, or a busy signal, when dialing your Service Provider:

- Are you using the correct phone number for the Service Provider? (If you’re using SPRYNET, you don’t have to check this.)
- Are you dialing any necessary codes before or after the phone number (such as long distance area code, or 9 to dial out)?
- Try again at a later time; the registration server or Service Provider may be temporarily busy or unavailable.

If you get garbage (random characters) on your Dialer screen, and do not connect:

- You may need to change the Auto Baud setting in the Advanced Modem Settings dialog to Off.

## Connection Problems

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If you can connect to the Service Provider, but cannot log in:

- If you are using Auto Login (i.e., the Dialer does not open during your login) to connect to your Service Provider, change to Manual Login using the Login Setup option, and try connecting again (you will probably need to provide a login name and password to connect).
- Are you using the correct login name and password? Are you following the right sequence of login steps? Check with your Service Provider.

- Check the Dialer Setup screen and compare it with your account information from your Service Provider; did you supply the correct values?
- You may have to send an additional Packet Mode Command to the Service Provider.

If your applications disconnect when you don't want them to, giving you a disconnect warning:

- Use the Timers option to change the time that SPRYNET waits before disconnecting.

If the applications disconnect for no apparent reason:

- Be sure that you are not being disconnected by call waiting. You can disable call waiting by changing the Dial Before field in the Dialer Setup dialog to \*70 for touchtone or 1170 for pulse dial.
- Some phone lines tend to have a lot of line noise (crackling or whining sounds) that can also cause you to disconnect. Contact your local telephone company to register a complaint. Sometimes, slowing your connection to 9600 bps can help.

If your application will not make a connection:

- Try using another Internet application to see if the problem is with the particular application you are using. Try connecting to a different host using that application to see if the problem is with the host.
- Be sure that Flow Control (in the Dialer's Port Setup dialog) is set to Hardware.

## Verifying Your Connection ---

Most often, errors that occur in your SPRYNET software will be due to connection problems. Often, you will be able to establish a connection with your Internet Service Provider but not be able to connect to necessary Internet hosts.

1. Double-click an Internet application.

2. On Windows 3.x computers, the Dialer application launches and attempts to connect to your Internet Service Provider. On Windows 95 computers you must launch the Dialer first.
3. Assuming a successful connection to your Internet Service Provider, the application you have launched then attempts to connect to the target host:
  - If you have supplied a Fully Qualified Domain Name rather than an IP Address, the application will send a message to your Domain Name Server (DNS) asking for the numeric IP address. “Your computer” connects to the Internet Service Provider, and then sends a message to the DNS server.
  - The DNS Server returns the IP address.
  - Your SPRYNET application connects to the target host and begins the session.

Errors can occur at any stage in this connection process, but they occur most often between your computer and the DNS Server. This portion of the troubleshooting session will help you determine at what stage in the process your connection is breaking down.

If you aren’t able to connect to your Service Provider:

- If you can’t connect to your Service Provider, see the previous section, “Connection Problems.”

If you can connect to and log in to your Service Provider:

- If you are able to connect to your Service Provider, then you know your problems lie beyond the Service Provider. The following section will show you how to troubleshoot local problems (problems with your system).

If you can connect to your Service Provider, but receive a “Get Remote Host Information Failure” or “Failed DNS Lookup” error thereafter:

- Double check that you have entered the host name or Internet address correctly.
- Make sure you can connect to anything. For instance, if you’re having trouble connecting to a WWW home page, try connecting to another home page. You should try to connect to a home page that is stable, such as <http://artisoft.com>.

- Try another application to see if you can connect to anything else.
- If you aren't able to connect to anything using Fully Qualified Domain Names, there may be a problem with your DNS (Domain Name Server). Verify this by trying to connect to something using a numeric IP address (several numeric IP addresses are listed below — note, however, that IP addresses change often; the addresses listed may no longer be accurate). If you can connect to the host using the numeric IP address, you know that your connection problem is due to trouble with your DNS server. Contact your Internet Service Provider to request the server be repaired.
- If you cannot connect to anything using the numeric IP address, double check that your modem setting for Flow Control is correct (found in the Port Setup dialog). If this is not set to Hardware, change it so it is.
- If your Flow Control setting is correct, and you cannot connect to the host using a numeric IP address, the host is probably not functioning. Wait a while and try again.

## General Application Problems ---

If you are getting the message “APP2SOCK Connection Closed” while using an application:

- The host you are connected to has closed your connection. Try to reconnect two or three times by restarting the application you're using and reconnecting to the host. If you still can't connect, try again a few hours later, or the next day.

If your applications are getting “Get Remote Host Information Failure” or “Failed DNS Lookup” errors:

- You may have a problem with your Domain Name Server (DNS Server). Be sure that the Name Server address you are using is correct (in the SPRY Dialer click Network and then Dialer Setup, and check the value for Name Server). If this value is correct, your DNS name server may be unavailable. Wait a few minutes and try again.
- If the value is incorrect, reenter it so that it reflects an accurate Domain Name Server address. If you are trying to

connect to a nonexistent host, or the host name you are trying to reach is typed incorrectly, you will see the “Remote Host Information” or “DNS Failure” error message.

If you get a “No Socket Available” error:

- You may not have enough memory for all the applications you are currently running. Close any noncritical applications, and try again.
- You may be running too many Internet sessions. If you are running multiple Telnet sessions along with several other Internet applications, close any sessions that aren’t necessary and try again.
- The Dialer application may have disconnected. If so, click the Dial button.

If an application seems to be hung:

- Be patient. Wait long enough to make sure that the application is not just retrieving information.

## Troubleshooting SPRY Mail Problems ---

If you are getting the message “APP2SOCK: Get remote host information failure” when connecting to your mail server:

The APP2SOCK remote host error indicates that Mail has not been able to connect to your POP3 mail server. Several possible causes follow. See “Verifying Your Connection” earlier in this chapter for more information on the remote host error.

- You haven’t connected to your Internet Service Provider successfully.
- You have an incorrect setting in the Dialer application. Most likely, Flow Control (found in the Port Setup dialog) is not set to Hardware.
- You have entered the host name incorrectly in the Default Hosts, the Login Options, or in the Mail Login dialogs. Correcting the host name in any one of these dialogs will correct it in the others.

- Your Internet Service Provider doesn't have a POP3 server. You will need to change providers.
- Your POP3 server is down at the moment. You can wait a while (usually 30 minutes is sufficient) to see if it will repair itself. If not, you may want to contact your Internet Service Provider to report the problem.
- You may have the same value in both the Domain Name and POP3 e-mail Host fields in the Default Hosts dialog. If this is the case, delete the information in the Domain Name field.

If you are getting the message "POP3: -ERR Password supplied for '(your username)' is incorrect" when connecting to your POP3 e-mail server:

- You may have entered your username incorrectly.
- You may have entered your password incorrectly. You may have spelled it correctly, but most mail servers are case sensitive. Be sure you don't have the [Caps Lock] key on, and that you properly type each character in your password (i.e., upper- or lowercase).

If you are getting the message "POP3: -ERR Mail drop lock busy. Is another session active?"

The mail drop lock error indicates that you had a previous mail session which has either not ended or ended abruptly. If you end your mail session abruptly (e.g., through an application crash or by closing the Dialer without closing SPRY Mail first), your mailbox may not be reset. If you were cut off for some reason and are trying to log back in, you may get the mail drop lock error.

- Wait a while (30 minutes is usually sufficient). Some POP3 servers will unlock a connection automatically.
- Call your Internet Service Provider and ask that the administrator unlock your mailbox.

**Note...** The "Mail drop lock" error indicates a problem with your mail account, not with your SPRYNET software. Do not contact SPRY technical support to repair this problem unless you are using SPRYNET as your Internet Service Provider. Contact your Internet Service Provider administrator and request that they unlock your mailbox.

If you are getting the message "Synchronizing Folders" when exiting SPRY Mail:

Occasionally you will see the message “Synchronizing Folders” when exiting SPRY Mail. This message indicates that SPRY Mail is performing administrative functions on your mail folders. This can take some time, depending on the number of messages you have stored (and moved) in your mail folders. Be patient; the process will end soon. Do not force quit SPRY Mail while synchronizing folders — the process will begin again when you start SPRY Mail the next time.





# ADVANCED SETTINGS

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This chapter focuses on advanced communications settings such as advanced COM port and modem settings as well as advanced SLIP and PPP settings.

## Advanced Modem Settings

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The Advanced options in the Modem Setup and Communications Port Setup dialogs allow you to configure advanced modem settings. You can also use the Custom Modem option to create a custom modem configuration. You can access these dialogs under the Modem menu in the Dialer application. To configure advanced COM port settings, click on Advanced button.

### Advanced Modem Setup

Options in the Advanced Modem Setup dialog allow you to configure advanced modem settings. Most likely, you will not need to change these settings.

**Note...** The current options in the Advanced Modem Settings dialog will work for most modems when using SPRYNET. Do not change the settings unless you are specifically instructed to do so by a technical support representative or by your Internet Service Provider.

### Auto Baud

The most important of these advanced settings is Auto Baud. Auto Baud specifies whether your modem rate is adjusted to match the speed of the Service Provider's remote modem. If Auto Baud is On (the default), your modem rate will be adjusted. In most cases, this setting will work well. If you see garbage on your Dialer screen when you connect, you may need to set Auto Baud to Off. This means that your modem will not adjust to the speed of the remote modem.

## Hangup Method

Hangup Method determines how the SPRYNET software hangs up your modem.

Hardware	The Dialer uses the Windows communications driver to send a signal to the modem's hardware that tells it to hang up.
Software	The Dialer sends the standard hangup string (such as +++ ) to the modem. The Dialer will use the hangup string defined in the modem definition; you can check that your modem hangup string is correct by using the Custom Modem Settings dialog.
Both	The Dialer will try both methods to hang up the modem.

## CTS (Control/Ignore Clear to Send Signal)

The Dialer waits for a signal from the remote modem before sending information, so that no information is lost in transmission. This signal is known as CTS, or Clear to Send.

The Dialer may not receive this signal from network modems. If you are using a network modem (i.e., the modem is not physically attached to your machine, but is accessed over a network), you may need to enable this option by checking the box.

## Advanced Communications Port Setup

The options in the Advanced Communications Port Setup dialog allow you to configure advanced settings related to your communications port. These options relate mostly to the flow or transmission of data. If you are having trouble connecting to remote hosts using SPRYNET, you may find your solution lies in changing your advanced communications port settings.

You can configure advanced communications port settings by clicking the Advanced button in the Communications Port Setup dialog.

Data Bits	Specifies the number of data bits in each packet of information.
Parity	Specifies the error-checking method used.

Stop Bits	Specifies the number of stop bits in each packet of information.
Flow Control	Specifies the method used to control the transmission, or flow, of data. The Hardware setting should always be used if your modem supports it. Check your modem manual to find out what flow control method is used.

**Important...** Flow Control is the most important of the advanced Communications Port Settings. It should always be set to Hardware if your modem supports it.

### Custom Modem Settings

The Custom Modem option allows you to define custom modem information for use with SPRYNET. This feature is provided in case you cannot find a compatible modem listed in the SPRYNET modem list and in case Hayes Optima 144 + Fax 144 (the recommended standby) does not work for your modem.

Creating a custom modem requires you to provide some technical information about your modem and to go through a number of steps to configure SPRYNET for your modem. You will need to have the documentation for your modem; familiarity with modem initialization strings is also helpful.

### Creating a Custom Modem

1. Choose Custom Modem from the Modem menu in the Dialer. The Custom Modem Settings dialog will appear.
2. You can use the Initial Modem Settings field to specify a modem that you want to use as the basis for your custom modem. You do not have to select a modem in this field, but it will probably be easier to start with a completed dialog and then make the changes that apply to your modem.  
  
If you know of a listed modem that is similar to yours, select it from the list; otherwise, Hayes is suggested as a good modem to use.
3. Now you need to set up your modem for use with SPRYNET by defining settings for the modem. You do this by typing modem commands in the Initialization String field. Specific modem commands that are required for your custom modem to work with SPRYNET are listed in the table that follows. The

“Common Commands” column shows you some initialization strings that are commonly used for these commands.

Mode	Recommended Setting	Common Commands
Auto Answer:	OFF	S0=0
Command Echo	ON	E1
Result Codes:	ON	Q0
Result Code Type:	Strings/Verbose	V1
Result Messages:	Include BUSY, NO DIALTONE	X4
DCD Control:	Follow Carrier	&C1
DTR Control:	Hang-up/Disconnect	&D2
Flow Control:	Hardware (CTS/RTS) ON (XON/XOFF OFF)	&K3, /Q3
Data Compression:	OFF	%C0

Look up the commands required for these settings in your modem documentation. You should then fill them out in the Initialization String: field, in the following format:

AT (Initialization String) ^M

For example, for a modem which uses the common commands listed in the table above, you should type the following for your Initialization String:

AT S0=0 Q0V1X4&C1&D2&K3%C0 ^M

Be sure to include spaces after the AT command and before the ^M (carriage return command).

**Important...** The initialization string is the most important modem configuration variable for SPRYNET. If you are using a custom modem, your modem will use the initialization string you specified to configure the modem before making a connection; you must initialize the modem correctly or it may not work with SPRYNET.

4. You should now fill out the additional modem settings displayed beneath the initialization field. Most modems will use the defaults, listed below. (These settings will already appear in the dialog if you chose an initial modem in the Initial Modem Settings field.)

Prefix	This is the command prefix that the modem recognizes, usually called the “attention” command. (Default: “AT”)
Suffix	This defines the command termination string, usually a carriage return. (Default: “^M”)
Tone	This defines the tone dialing command string. (Default: “DT”)
Pulse	This defines the pulse dialing command string. (Default: “DP”)
Reset	This defines the reset string used to perform a soft reset of the modem. (Default: “Z”)
Hangup	This defines the hang-up command string that will return the modem to ON-HOOK state. (Default: “H”)
Escape	This defines the escape string used to interrupt the modem when it isn’t in command mode. (Default “+++”)
CommandAck	This defines the acknowledgment string that the modem returns when successful. (Default: “OK”)
CommandErr	This defines the error string returned by the modem when error conditions arise. (Default: “ERROR”)
Connect	This defines the DTE (the error string returned by the modem when connecting). (Default: “CONNECT”)
NoCarrier	This specifies the string that the modem returns when no connection can be established. (Default: “NO CARRIER”)

NoAnswer	This specifies the string returned by the modem when the remote system doesn't answer. (Default: "NO ANSWER")
NoDialTone	This specifies the string that is returned from the modem when no dial tone is detected. (Default: "NO DIAL")
Busy	This specifies the string that is returned when the remote system's phone connection is in use. (Default: "BUSY")
Voice	This specifies the string returned by the modem when a human voice is detected when connecting. (Default: "VOICE")

- When you finish making all the settings for the custom modem, you need to give it a name. Fill out the Save Settings As: field with a name for your modem. You can save over an existing custom modem, if you wish.

- Click OK to save the custom modem information.

The custom modem you created will now be used automatically by SPRYNET, and the modem will now be shown in SPRYNET's modem list.

## Configuring SLIP and PPP

You can configure SLIP or PPP from the Network Interface dialog by selecting SLIP or PPP and choosing the Settings button.

The Network Interface dialog is presented during installation if you choose "Other Service Provider." It can be reached by choosing Interface from the Dialer's Network menu.

**Note...** If you are using SPRYNET's InterServ for your Internet Service Provider, you shouldn't change any settings in this dialog.

The next three sections describe advanced PPP and SLIP settings, respectively.

### PPP Settings

The following options are now available for PPP. You will see only the first option, Authentication Protocol, at first; you can click the Advanced button to display additional advanced options. You can

change the options in this dialog to configure PPP for your particular host or Service Provider. Note that many of these options are advanced; changing them may produce unpredictable results. If at any time you want to set these options back to their original settings, click the Default button.

## Authentication Protocol

**None/PAP/CHAP** Some PPP hosts use authentication methods like PAP or CHAP to verify that you are a valid user of an account. Authentication may be used in conjunction with a standard login/password (known as “clear text login”) or as a stand-alone method that does not require you to log in to the host directly, but passes the authentication information directly to the host. If the only method you use when connecting to your host is an authentication method like PAP or CHAP, you should make sure the Login Method in the Login Setup dialog (found using Login Setup in the Dialer Network menu) is set to None.

The default setting for Authentication Method is None; you should always use this setting unless your host uses PAP or CHAP.

**PAP** (Password Authentication Protocol) is a popular method of authentication requiring a PAP username and password. These will usually be different from your login ID and password, if you have one. If you choose PAP, you can configure the PAP Username and Password by clicking the Settings button next to the PAP option. You will see the PAP Settings dialog. Fill out this dialog with your PAP username and password.

You do not have to fill out the username and password information here, but if you do not, you will have to provide it each time you log in. Filling it out here will result in a lower margin for errors when connecting, but you may wish to leave the password blank for security purposes.

## Active Open/Passive Open

This indicates what method is used to start PPP, Active Open or Passive Open. A PPP transaction is like a conversation between two computers; in this case, your computer and your Service Provider's PPP host. One of the computers has to initiate the conversation, and the other has to respond. The Dialer assumes that the remote Internet Service Provider is Active Open, meaning that it will initiate the conversation with the Dialer. In some cases, the



Internet Service Provider will be Passive Open, which means that they will not initiate a conversation (even if you type “PPP” or another command to initiate PPP, they still may not initiate it).

If this is the case, choosing Passive Open from this dialog will cause the Dialer to send an additional command (a Packet Mode Command) to initiate PPP on the remote host.

Most Service Providers you will encounter will be Active Open.

## Compression Method

PFC/ACFC/VJ The Compression section specifies several different methods of compressing data that will be sent over a PPP connection. These methods are PFC (Protocol Field Compression), ACFC (Address and Control Field Compression) and VJ (Van Jacobsen IP Header Compression).

The options above specify which parts of a PPP packet are compressed when sent. Some or all of these methods may be “understood” by your PPP host; whatever options are set here will be used.

## General Options

### MRU/ACCM/Magic Number Negotiation

MRU (Maximum Receive Units) indicates the size in bytes of data that is received in PPP packets. The allowable range is 128-1500. The default value for this option is 296.

**Note...** In cases where you are transferring multiple files or performing other operations involving large throughput, you may want to increase the size of the MRU to improve performance and increase speed. However, increasing this value will slow down interactive operations (like reading news articles or using Netscape Navigator).

ACCM (Asynchronous Control Character Map) indicates whether PPP will use the Asynchronous Control Character Map, and indicates a value to be used. A default value of FFFFFFFF is provided.

**Magic Number Negotiation** can be selected. This will allow use of a magic number, a unique number that is used to identify you by the remote host. This option is on by default.

## SLIP Settings

The following options are available for SLIP.

### Address Acquisition

You can now specify whether your IP address is Static or Dynamic. Static is the default method used.

Static addressing means that you are required to use one IP address which never changes. Dynamic addressing means that you are assigned a new IP address each time you start a SLIP session. Your Internet Service Provider will be able to tell you which method you will use. (Hint: if you are assigned a specific IP address for your account, such as 165.121.6.6, then you are using static addressing).

If you choose Static addressing, the address you provide in the Dialer Setup dialog will be used as your IP address.

If you choose Dynamic addressing, the address you should use will be sent back from the SLIP host when you connect, and the Dialer will extract it ("parse" it) from the host screen each session (it will change each session). Often, it is the first address that is sent back from the Dialer. In some cases, however, the SLIP host will send back several different addresses (such as an IP address and a gateway address). In those cases, you need to specify which address should be used as your IP address (check with your Service Provider if you are not sure). You should indicate which address on the screen should be used by selecting 1st, 2nd, 3rd, 4th, or 5th for the Parse the \_\_ IP Address sent from the remote host option.

### Compression

If the SLIP host you are connecting to supports CSLIP (Compressed SLIP transmission), you can have the Dialer use CSLIP. Click **Enable VJ CSLIP** to enable CSLIP compression. This will result in better, faster performance with your host; however, you do not have to enable it in order to work with a CSLIP host.

## Maximum Transmission Unit

The MTU (Maximum Transmission Unit) represents the size in bytes of data sent in SLIP packets. In most cases, you will not have to change this value; change it only if directed to by your Service Provider or Network Administrator. The default MTU used for SLIP is 1006.

## Technical Information

SPRYNET runs over a customized TCP/IP (Transmission Control Protocol/Internet Protocol) transport specially developed by SPRY, Inc. This transport was designed to work with the included Dialer application. SPRYNET should not be used over any other TCP/IP transport.

The SPRYNET TCP/IP transport can be configured for SLIP (Serial Line Interface Protocol) or PPP (Point-to-Point Protocol), and adheres to RFC 1055 (SLIP) and RFC's 1331, 1332, 1548, and 1661 (PPP) specifications for those protocols. SPRYNET also supports PAP (Password Authentication Protocol) and BOOTP, and adheres to the RFC 1334 and RFC 1048 specifications for those protocols.

SPRYNET uses SPRY's public specification, RAMP (Remote Account Maintenance Protocol), for software registration and for online account setup with InterServ.

## Changes Made by the Installation

The following directories are created:

\NETSCAPE\BIN directory:

- Executable application files and DLLs
- Application help files
- Transport-related files

\NETSCAPE\TCP directory:

- HOSTS file, PROTOCOL file, SERVICES file

\NETSCAPE\DATA directory:

- This directory is automatically used for SPRYNET data files.

\NETSCAPE\DOWNLD directory:

- This directory is intended for you to store files (e.g., image files and text files) that you download using your SPRYNET applications.

\NETSCAPE\SAMPLES directory:

- This directory contains sample REMOTE.INI, PROFILE.INI, MODEMS.IBX, AIRWIN.INI, and AIRMOS.INI files. These default SPRYNET files are provided for your information and can be used in the event that the files you use are corrupted or deleted.

The following files are added to your \WINDOWS directory:

remote.ini	This file stores your current SPRYNET information.
profile.ini	This file stores profiles, individual copies of configuration information, so that you can have multiple SPRYNET configurations.
modems.ibx	This file contains the list of modems used in SPRYNET. Any modems you add using the custom modem feature will also be stored in this file.
airwin.ini, airmos.ini	These files contain settings for the applications in SPRYNET.

**Important...** Do not edit any of the .INI files; all the settings in these files can be changed using the applications directly. If you contact SPRYNET technical support, you may be asked to print out and fax these .INI files.