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Getting started

Terminal Setup

The Terminal Setup is probably the trickiest operation in working with SlipKnot.   Luckily, it need be done only once.

The following steps should guide you through this initialization process (keep this help screen up while you are changing the Terminal settings for the first time, or print these topics on your printer):

1. Check the settings in the Setup/Communications screen.
    Setup/Communications

2. Set or change the Terminal font and colors.
    Terminal font and colors

3. Set up your Host characteristics.
    Host

4. Try logging in to your host (Connect).
    Connecting

5. Test file transfer
    File transfer

6. Activating SlipKnot's WEB browser
    The WEB browser

SlipKnot WEB

First of all, for SlipKnot features, display the "Features and Hints" document -- there is a link to it built into the SlipKnot Local Home Page.

Configuration Options for SlipKnot Web: (using the menu item: Configure) WEB Configuration

SlipKnot WEB buttons: WEB buttons

What can you do with documents? (pressing the "File" menu item on a document window):Doing things to documents

Terminal Features

1. VT-100 or ANSI emulator allowing you to have full access to screen-intensive UNIX programs.
2. File upload/download capabilities (press the menu item: Communications).
3. Changeable fonts allow you to size the Terminal to fit your screen and eyes.
4. Copy and Paste (Ctrl-F1 and Ctrl-F2) from and to the Terminal window.   Paste actually sends the characters to you UNIX host.
5. Capture the screen text, capture incoming data.
6. Function Key Macros

WEB Features

There is a list of SlipKnot WEB features in the document: "Features and Hints".   To display it, retrieve the SlipKnot Local Home Page (press the button with the shareware-looking house), and inside, you will find a link to the "Features and Hints" page.

[Saving documents](#)

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Setup communications

This screen sets up serial communications with your modem.

If you are not using a modem, but rather connecting to your UNIX machine (or intermediate communications server) directly via the serial port, then choose the "direct connection" option.   In this case, most of the parameters below are not relevant, because they are concerned with modem characteristics.

Note: Check any other communications program that you are successfully using to help set these options.

Port: choose the COM port that your modem is connected to.

Tone/Pulse: choose Tone if you have Touch-Tone service.   Otherwise, choose Pulse if all of your telephones are rotary dial type.

Modem Reset: Choose the modem command that will reset your modem (ATZ^M by default).   You can erase this if your modem does not respond to any reset command or doesn't need one.

Modem Initialization: These are the characters that are sent to your modem to insure that it is working properly.   Check with your other communications programs for this setting.

The default SlipKnot settings are:
         AT   &F   E1   V1   L1   S0=0

The meanings for these special modem "incantations" are:

AT   means "attention".   All Hayes-compatible modems start with this command

&F   means reset all modem options to default factory settings.

E1   means "echo commands".   Your modem will send back any commands your computer sends, so that they may appear on the screen and be seen by SlipKnot.

V1   means "verbose".   Your modem will respond with words instead of numbers when an event occurs.

L1   means "set speaker to middle volume".

S0=0   means "set auto-answer off".   Your modem will not pick up the phone when it rings.

Modem Hangup: These are the characters sent to your modem to request it to hangup the phone.

BUSY string: This is the response from your modem when it detects that the line is busy. SlipKnot will look for this string to detect a bbusy line and try again.

Connect string: This is what your modem responds with when it connects with your host's modem.

Disconnect string: This is what your modem responds with when the host's modem decides to disconnect.

Terminal font and colors

Terminal Font

Choose the Terminal font type (typeface) and size according to the resultant size of the terminal window.   If you choose too large a size, the terminal window will not fit on your screen.   If you choose too small a size, you will not be able to read the characters easily. Experiment.   Each time you choose a font and size, the terminal window will adjust in size.

<u>Note</u>:   Choose a typeface that is "monospaced".   These are typefaces where all characters have identical width (the "i" is the same size as the "m").   If you will be using any programs on your UNIX host that do a lot of screen manipulation, those programs will expect same-sized letters on your screen, and will show strange effects if your typeface is not monospaced.   Typical monospaced typefaces are: <u>Courier</u>, <u>Courier New</u>, <u>FixedSys</u> and <u>Terminal</u>.

Terminal colors

Our only advice here is to make sure you do not pick the same color for both text and background.

<u>Next step: set up Host characteristics</u>

Host

Note: First step: check to see if your host is already configured: look at the drop-down list of Host names.   Is there already one there that looks like the name of your UNIX service provider?   If so, most of your work is already done!

Note: If your host's name is SAMPLE (the default host provided by SlipKnot), please make a copy of this host (press the "Make Copy" button) before you do anything else.   Do not change the characteristics of the SAMPLE host -- it is meant to serve as an example only.

Creating a new host

Press the "Make Copy" button.   Assign a new name to the host (up to 8 characters, no punctuation!).

System Type

UNIX shell (default): If you are subscriber to a UNIX system with any of the standard UNIX shells (sh, csh, etc.), and if you have generally unrestricted access to that shell, then this is the correct choice.

BBS/Freenet SNSHELL: This is a special shell for BBS and freenet users.   This is often provided as a menu choice (for instance, the SlipKnot menu item) in a menu-based BBS or freenet.   If your BBS or freenet specifically mentions SlipKnot by name, then this is probably the correct choice.   To confirm this guess, you can log on to your BBS or freenet, choose the correct SlipKnot or World Wide Web option, and when at a command line, execute the command:

     __snshell__

(there are 2 underscores before and after the word snshell).   If the system responds with something like: %SNSHELL% %1.0% then the BBS/Freenet SNSHELL is the correct choice here.   If you get an error message, then you should probably choose UNIX shell (default) instead.

Comment...

...as a short description of the host.

Phone number

Remember to use the "1-" prefix if you are calling outside your own area code.

Note: Users with the "Call Waiting" feature: in some areas you can dial a short number (like "*70") to disable call-waiting for the duration of an outgoing call.   If you want to do this, type the prefix, then add a comma, then the host phone number.

Note: If your host has more than one telephone number that you want to try, you can get

SlipKnot to try several telephone numbers sequentially.   Suppose that your host has 3 telephone numbers: 555-1111, 555-2222 and 555-3333, then you can type all three of these numbers in separated by a "|" character:

555-1111 | 555-2222 | 555-3333

This will ask SlipKnot to try the first, and if it cannot connect to it, then try the second, then the third and then the first again.

Terminal Emulation

Choose the type of terminal emulation expected by your host.   Choose VT-100 if in doubt.

Speed, data bits, stop bits, parity

Choose the maximum speed that your modem is capable of and your host accepts.   If in doubt about data bits: choose "8"; about stop bits: choose "1"; about parity: choose "None".

Send/Get Protocol

You have many choices: 3 variants of Xmodem, 2 of Ymodem, Zmodem and Kermit.   Best bet: try Zmodem first, since it is the fastest, then others if Zmodem does not work.   You can choose different protocols for uploading and for downloading, in case one does not work well for both.

Get file from UNIX

This is the command to request a file from your UNIX system.   After you have chosen a protocol, if you don't know what this UNIX command is, check online using "man xmodem" or "man ymodem" or "man zmodem", or ask other users or your system administrator.   If in doubt, use the default choice provided by SlipKnot.

Note: If you are not using the SlipKnot-provided default, be sure to include the "{filename}" string in the correct place inside your command.   Otherwise, SlipKnot will not understand how to compose the actual command when communicating with UNIX.

Note: If using Zmodem and having trouble, try changing the Get File Command from sz -b {filename} to sz -beL 1024 -l 1024 {filename}.   This will force Zmodem to acknowledge every packet, and though slowing it down a little, will make is less suseptible to errors.

Send file to UNIX

The same suggestions apply here as in the "Get file" above.   If you are using any variant of the Xmodem protocol, you must include the "{filename}" string somewhere in this command.

UNIX Interrupt

This is the key to press on your UNIX system to interrupt an executing command.   The two most common ones (Control-C and DEL) are available in the drop-down list.   You may

choose another by typing it in.

File Timeout

When SlipKnot retrieves a file from your UNIX host, it will count this many seconds to wait for incoming communications traffic.   If the host doesn't respond in this amount of time, SlipKnot will conclude that something is wrong and start the transfer again.   <u>This should be set to at least 30 seconds</u> (50 seconds or more is better, especially if your UNIX host tends to get loaded down and slow).

Tickle host every minute

Some hosts will hang up if you do not made a request periodically.   If you check this box, SlipKnot will ask the host for a new prompt -- by automatically sending a carriage-return or an interrupt -- every minute (while you are in the SlipKnot WEB renderer) to prevent the host from hanging up due to inactivity.   This activity places almost no demands on the host, but succeeds in informing it that you are still alive.   While you are using the SlipKnot Terminal, however, you are on your own in preventing your host from hanging up on you.

World Wide Web program on UNIX

Your UNIX system must have either the "lynx" or "www" programs available for your use. Choose "lynx" if both are available.   To find out which you have available, log on to your UNIX system, and try either the lynx or www commands from the prompt.

Try the:
        lynx -version
command.   If successful, it will also report the version of lynx.   SlipKnot can work with version 2.2 or later, although version 2-4-2 or later is preferred (or version 2.4-FM).   With these later versions of lynx, SlipKnot can make use of many more features (such as automatic Page redirection and authentication, and in the future, native forms).

If the command above does not work, try:
        www -version
<u>If this reports that you are using the </u>lynx program, then make sure that this setting is set to lynx and not www, and see the next section for the ability to find the lynx program even though it is called www.

Location/Name

This is a new feature in version 1.13j and later.   It allows you to specify exactly where the lynx (or www) program can be found, and what its name is.   If your lynx program has been given a different name (than lynx), or there is more than one version of lynx on your system, you can now specify which version (by location) to use.

If you are not sure where your copy of lynx is, you might want to leave this setting at its default setting (lynx).

If you <u>do</u> want to know which directory lynx lives in, you can execute the UNIX command:
        whereis lynx
which will find all of the copies of lynx in the PATH (as well as the documentation, if it exists, in the man directories).

Note: After changing and saving this setting, you should press Setup/Initialize Host while online to make sure that this setting is sent to your UNIX system.

Example 1: Suppose that the lynx program on your UNIX system has been given the name: newlynx.   Then simply put that name in this setting, and SlipKnot will now that the whenever it needs to run the lynx program, it should execute newlynx instead.

Example 2: Suppose there are two different copies of lynx on your UNIX system.   One inside your personal (HOME) UNIX directory, and one in the /usr/local/bin directory.   To use the version of lynx inside your HOME directory, set Name and Location to:
        ./lynx
If you want ot use the one inside the /usr/loca/bin directory, then set it to:
        /usr/local/bin/lynx

Manual vs. Script-based Login

You can get SlipKnot Terminal to negotiate the entire login process for you -- sending all the right characters, including your login ID and password, to get you to your UNIX host's prompt, ready to go.   To do this you will have to write a login (and logout) script in SlipKnot's script language.   There is plenty of help to do this inside the sample script (see Help under "scripts").

On the other hand, you can tell SlipKnot that you'd like to login manually, thank you very much.   In this case, SlipKnot will simply dial for you, and then make sure that the modem on the other side responds.   And then you can type whatever else is necessary to complete the login process.

You might choose this (manual login) option because: 1) it's simpler than trying to create a login script for the first time; or 2) your UNIX system displays different things each time you log in (for instance, it might display a Message-Of-The-Day that is longer than the screen and you need to type a Carriage-Return when this happens, but not when the Message is shorter -- and therefore your responses each day may be different, which is difficult to do in a login script).

It is probably best to start with the Manual Login option checked.   And then when things are running smoothly, create your own login and logout scripts to automate the process.

Note: If you are using SlipKnot with a BBS or Freenet, and youve set the System type to BBS/Freenet,   then it is best to use Manual Login, rather than Script-based login.   This is because it is traditional to end a login script with the recognition of the UNIX prompt, and, unless you will get the script to negotiate all the way to the SlipKnot shell, you will not easily reach the prompt during login.   However, if you are clever, you need not end the login script with a search for the prompt, and so you can end the script at whatever stage in the login process you please.

Note: If you choose to use Script-based login, you can interrupt the script, as it is running, by pressing any key on the keyboard.

Manual connect timeout

This is the amount of time that SlipKnot allows for the modem at your Host's system to respond with the appropriate "Connect" signal.   SlipKnot will look for the right connect

signal -- the one in the Connect String box in Setup/Communications.

Login ID

This is your UNIX service provider login ID -- not necessary if you are using Manual Login.

Set Password

(Not necessary if you are using Manual Login).   SlipKnot will ask for your UNIX password twice to make sure you have typed correctly.   It will keep this password in encrypted (secret) form on disk, so other people with access to your disk files will be unable to read it.

UNIX Prompt

This allows SlipKnot to recognize your UNIX prompt.   For instance, Bourne shell users will probably use "$"; while C-shell users may choose "%".

Note: Use only the constant part of your UNIX prompt.   For instance, if you are using the C-Shell, part of the prompt may change each time you log in, or each time you execute a UNIX command.   In this case, use only the part of the prompt, like "%" that doesn't change.   If this is not set correctly, SlipKnot will be unable to execute commands on your UNIX system because it will not recognize the prompt.

Retry if Busy

If checked, this will cause SlipKnot to try again (forever) if it cannot connect to the target system.   In practice, you can stop this repeated process by pressing the "Disconnect" button.

Mail Setup

This button will setup up and test the outgoing mail connection.   We strongly recommend that you get SlipKnot working (successfully logging in, successfully using the World Wide Web) before setting up this outgoing mail connection.   Once you have done so (gotten SlipKnot working in other ways), see: Mail for setup and usage information.

Next step: (unless you've chosen Manual Login) writing login and logout Scripts

Connecting

Having gone through the exercise of setting up all of the communications, terminal and host characteristics, we now come to trying to connect to your host.   Press the "Connect" button, and you should see the commands that SlipKnot is feeding your modem.   Eventually, your modem should dial the correct number and your host should answer.   Then the login script should take over (watch the status box on the bottom of the terminal window).

Note: You will have succeeded in fully connecting to your UNIX host when the login script finishes and the status box on the bottom of your Terminal window flashes for a moment.

Problems:

Note: if you have any problems connecting, press the "Disconnect" button and you should be able to disconnect almost immediately.

- **I don't see any commands in the Terminal window**.   Possible causes: wrong COM port specified; your modem's init string does not ask your modem to echo commands (E1 and V1); your modem is not on.
- **I see garbage on the screen when the modems connect**.   Possible causes: the modems are connecting at the wrong speed or there is line noise: trying disconnecting and connecting again.
- **Everything connects fine, but SlipKnot doesn't flash the status box when I finally get a prompt**.   SlipKnot is not recognizing your UNIX system's prompt: make sure that your have entered it correctly (in the Setup/Host menu).
- **It appears to connect but then times out after approx. 45 seconds.**   This can be caused by a number of different things: but the fact is that SlipKnot does not believe that it is really connected.   One possibility is that your modem sends a "Connect" string when the other modem answers, but SlipKnot is looking for a different one (it is looking for the one in Setup/Communications).   Alternatively, if you are using script-based login, then one of the script commands has failed to complete (the commands are displayed as they are executed in the status line at the bottom of the screen).

Next step: **Test file transfer**

What is a host?

The host is the name of your UNIX service provider.   The host setup screen records the characteristics of your host service.

Login and Logout Scripts

These are the commands that SlipKnot will follow to dial your UNIX system and log in, or log out once your session is finished.

To create a new script, press the "Edit Login script" button.

For the list of possible commands (the SlipKnot scripting language), look at the sample script in the SAMPLE host: select SAMPLE as your host and press the "Edit Login script" button.

If you need to embed special characters in your scripts, see the   Function Key Macros section for special characters.

Note: Make sure your Logout script completely logs off from your UNIX system, by going through all of the commands to shut down your session.

File overwrite problem -- Special Note: Many UNIX C-Shell accounts, as well as BASH and TCSH and KSH, are configured to disallow overwriting of files without confirmation.   This feature prevents you from inadvertently deleting the information in a file when you wish to create another file by the same name.   Unfortunately, SlipKnot needs to do this (overwrite its own files) frequently, and will be stymied if this option is in effect.   This is called the "noclobber" option, and leads to complete failure on the part of SlipKnot in transferring files (which is essential).   See: Shell's 'noclobber' option

Test file transfer

Note: when SlipKnot is retrieving WEB documents, your default directory on UNIX <u>MUST be writable</u>.   Normally, when most people log into their UNIX accounts, they are automatically connected to their home directories, into which they can write to their heart's content.   But if you travel around amongst directories, make sure you end up in one that is writable before activating any type of file transfer or retrieving WEB documents.

The most important operation that SlipKnot performs is downloading (retrieving) files from the Internet (via your host).   To test this operation, you should use a small file that is in your directory on the host machine and whose contents you know.

To create a small test file, if you don't already have one, you can use UNIX's date command.   This displays the current date, but we can save that information in a file called "sliptest.tmp".   To do this, execute the following command at your UNIX prompt:
        date   >sliptest.tmp
To check the file, execute:
        cat   sliptest.tmp

Now download your test file by activating the "Communications/Get file from host" menu item.

<u>If that fails</u>, one reason may be that the "noclobber" option is set.   See the discussion under [Login and Logout Scripts](#)

The WEB Browser

When you press the "World Wide Web" button for the first time, SlipKnot will attempt to check that your host has a couple of small script files that it requires.   If your host does not, then SlipKnot will attempt to upload these files to your host.   This operation may take several seconds, but once it succeeds, SlipKnot will not need to initialize your host again.

If you want to re-initialize your host because you have made some changes to the host settings, choose the "Setup/Re-initialize host" menu item.

Note: If this operation does not succeed, try it again.   There are many reasons (including the possibility that your UNIX directory is not writable) for failure, but once it has succeeded, SlipKnot will not need to go through this process again unless you change a Host setting.

SlipKnot WEB

Registration

The Why and How of registration:

<u>First of all, the cost:</u>
- $29.95 for all commercial users everywhere
- $29.95 for all non-commercial users in the U.S., Canada, Japan and Western Europe
- $20.00 for non-commercial users elsewhere (outside the U.S., Canada, Japan and Western Europe)
- <u>If your service provider has negotiated a site-license agreement with us</u>, then please indicate this on the registration form, as well as the site-license price.

We have established this price difference (between $29.95 and $20) because we expect that earning US$29.95 is (somewhat) more difficult for users in, say, Africa and Asia, if for no other reason than the exchange rates.

<u>Why register</u>?

1. Because with shareware it's the right thing to do.

2. Your support will fund our efforts to improve the product.

3. To get rid of those (*#?@!) annoying registration reminders.

4. One registration fee covers all versions between 1.0 and 1.99.

5. The knowledge that 10% of SlipKnot registration fees are donated to <u>Refugee Relief organizations</u>

6. SlipKnot knows if it is registered or not (we will send you a special registration code to install).   So certain features in the product will only be accessible to registered users:
- In version 1.1, for instance, Gopher links can only be retrieved by registered users.

<u>How to register:</u>

If sending the Registration form **by mail or FAX**:

1. In SlipKnot Terminal, click on Register/Fill-out-registration-form
2. Fill out the form on the screen (be sure to use a personal name -- we do not register to company names).
3. Print it or save it to a file
4. Send the form, with your check, money order, International Postal Order or credit card information to MicroMind (to the address or FAX number on the form).
5. Within a few days, we will send you a registration name and number by email
6. When you have received it, click on Registration/Install-Registration-name-and-number and enter the name and number we have sent you.

Here is the address and FAX information:
MicroMind, Inc.
417 W. 120 St., Suite 6B
New York, N.Y. 10027
U.S.A.
FAX: (212) 864-0436

If sending the registration form **by email**:

1. In SlipKnot Terminal, click on Register/Fill-out-Registration-form
2. Fill out the form on the screen (be sure to use a personal name -- we do not register to company names).
3. If you are concerned about sending your credit card information over the Internet in readable form, press the "Encryption" button -- this will convert your form into unreadable text (but readable by us at MicroMind when we receive it).
4. Save the form to a file.
5. Upload the file to your UNIX system (you can use the Communications/Send-file-to-Host menu item).
6. Email it to: slpstaff@micromind.com (on most UNIX systems, this is easily accomplished from the shell prompt using the command: "mail   slpstaff@micromind.com <filename" where the filename is the name of the file you uploaded).
7. Within several days, we will send you a registration name and number by return email.
8. When you have received it, click on Registration/Install-Registration-name-and-number and enter the name and number we have sent you.

Here is our shareware evaluation policy.   After you have displayed more that 100 documents, we figure that you are a real user (and are no longer just evaluating the software), and the (annoying) reminder message changes.   After 200 documents (at typical usage, probably 1-2 months), we will give you 30 days to register, and another additional 21 days (when "the check is in the mail") if you start the registration process by filling out the form and printing or saving it.   After the evaluation period elapses (probably 3-5 months altogether), SlipKnot Web will no longer be accessible (sorry).   Of course, as soon as you register and receive and install the registration number we send you, SlipKnot will be back in business.

Troubles

Besides the topics below for troubleshooting information, you should also look at the **SNTFAQ1.TXT** file included in your \SLIPKNOT directory.   It is an ASCII file and can be read using an editor like Windows NotePad or Windows Write.

[SlipKnot Terminal troubles](#)

[SlipKnot Web troubles](#)

[If all else fails...](#)

SlipKnot Terminal troubles

Terminal is not responding: If you can type on the keyboard but no characters show up the
    screen, then:
1. Try the menu item: Debug/Unfreeze Keyboard
2.   You may have to Disconnect from your Host, then exit SlipKnot altogether, and start
SlipKnot up again.

First of all: mysterious errors, files not found, etc.: It is very important that the original
SlipKnot distribution file was downloaded correctly (without errors) and unzipped with no
errors.   **If you had unzipping errors** (typically CRC errors), DO NOT try to fix up the errors
(using programs like PKZIPFIX).   There is something wrong with the file, and trying to fix it
up will cause more problems.   Best bet, read the SlipKnot FAQ file (it should have been
inside the distribution file as SNTFAQ.TXT).

Trouble in downloading documents or files, or trouble retrieving pictures.   This can be due to
    several causes.
1. If you are using telnet to log into your target UNIX system, then this could be the
    problem.   Telnet has been known not to transmit certain binary characters which can
    foul up file transmissions.   If possible, instead of using the command "telnet hostname",
    try using "rlogin -8 hostname".
2.   Sometimes the problem has to do with "hardware handshaking" with your modem.   If
you have a modem manual, try to figure out what command to send to your modem to turn
on hardware handshaking.   Then include this command inside the modem initialization
string in the screen: Setup/Communications.
3.   There may be SlipKnot patch files available to fix certain problems.   Using
anonymous FTP, look for SlipKnot patch files at the host site: interport.net, in the
directory: /pub/pbrooks/slipknot.   The patch files are named "snt110f.zip", "snt111g.zip", or
etc.   In general, patch files start with snt and have the version number and patch letter -- so
snt111d.zip is the patch file for users using Version 1.11 and this is the d patch.   **Do not use
a patch file for a different version of SlipKnot!**   Find the latest patch file, retrieve to
your PC, unzip, move the contents to your \SLIPKNOT directory, and after logging in to your
UNIX host, be sure to press the menu item Setup/Initialize Host.   There is also a FAQ
(Frequently Asked Questions) file inside this patch file for diagnosing problems.

If you get the error message: "UNIX system not responding or directory is not writable":
Possible causes:
1. SlipKnot does not get the UNIX prompt that you specified in the Setup/Host screen.
    Make sure that the UNIX prompt that you told SlipKnot about is the one your UNIX
    system responds with.   If your UNIX system gives you a complicated or changeable
    prompt, use only the part of that prompt that does not change.   For instance, if your
    prompt gives you the time of day "11:05 PM>" , then use only the char ">".
2.   If you are using the C-shell, or Bash or Tcsh or Ksh and have the "noclobber" option
set (or if it is automatically set without your knowledge), then SlipKnot will not be able to
transfer files.   See: Shell's 'noclobber' option
3.   If you have changed to a UNIX directory other than your home directory, it may not
be writeable.   Change back to your UNIX home directory.

Lynx version is older than version 2.2.   SlipKnot checks the version of lynx that you are
using because versions prior to 2.2 had difficulties with binary file retrieval from the Internet
(hence SlipKnot would have difficulties in retrieving pictures).   To find out the version of lynx
on your UNIX system, execute the UNIX command: "lynx -version".   If SlipKnot complains
that your version of lynx is out of date, but you know that it is not, then simply ignore
SlipKnot's warning. If your UNIX system has an older lynx version than 2.2, then please ask

your system administrator to upgrade lynx to a more recent version.   Alternatively, you may check to see if the other program called "www" is available on your UNIX system (simply execute the UNIX command: "www" -- if it's not available, then you will get an error message).   If it is available, then in SlipKnot Terminal's Setup/Host screen, specify "www" instead of "lynx" and your World-Wide-Web UNIX program.

File transfer failed.   Possible causes:
1. If the failure is in downloading files, see the possibilities in the Trouble in downloading documents paragraph above.
2.   If the failure is in uploading files (sending from your PC to your UNIX system), then try a different file transfer protocol.   To do this, bring up the Setup/Host screen, and change the choice in the Send (upload) protocol drop-down box.   Try to make sure that the new protocol you are choosing is available on your UNIX system, and that the command for it is correct. For instance, if you are choosing the Kermit protocol, SlipKnots default uploading command (which you can see as soon as you choose Kermit), is: kermit -i -r.   If you know that your UNIX system has Kermit, but that its uploading (receiving) command is NOT kermit -i -r, then you can change the command by overwriting it.   This is also true of any other protocol you choose -- namely you can edit SlipKnots default command.
3.   The UNIX transfer commands in the Setup/Host screen   (in the fields: "Get file from UNIX" or "Send file to UNIX") refer to programs not available on your UNIX system.   Ask your system administrator for the appropriate commands to activate Xmodem, Ymodem, Zmodem or Kermit   file transfers, and then install one of them in the Setup/Host screen.
4.   Your UNIX system is not responding quickly enough (SlipKnot allows several seconds for data to start flowing).
5.   If you are using Zmodem with the default download command (in Setup/Host) sz -b {filename}, then try switching to: sz -beL 1024 -l 1024 {filename}.

If all else fails...

The Shell's 'noclobber' option

What is the effect on SlipKnot?   SlipKnot will be unable to receive files from your UNIX system, and will print an error message each time you attempt to do this.

How can you tell if the "noclobber" option is set?   Try to overwrite a file using "UNIX I/O redirection".   Here is an example: suppose you have a file called "mytest" in your UNIX home directory.   If you execute the command: "cat <mytest >mytest2", you should succeed in creating the new file "mytest2".   Now try the same command again (attempting to overwrite "mytest2").   If it fails the second time, then "noclobber" is set, and you need to unset it.   You should also be able to see this option "noclobber" when you execute the UNIX "set" command by itself.

Unsetting noclobber temporarily: If you are using the C-Shell, execute the command "unset noclobber".   Then try overwriting a file (should succeed).   If you are using Bash, or Ksh, then try executing the command: "set +o noclobber".   Also, try downloading a file using SlipKnot menu item: Communications/Get File from Host.   Hopefully, this should now succeed.

Unsetting noclobber permanently: There are a number of ways to do this.

If you have already figured out (and tested) a way to remove the noclobber option termporaily (see above), then you can put that command into the file that is executed whenever you log into you UNIX system.   For the C-shell it is the file: ".cshrc".   For the other shells (Bash or Ksh or Tcsh) it is another file, possibly: ".profile", or ".bash_profile or ".bashrc" or ".kshrc".

Another way (if you are using script-based login) is to change your SlipKnot login script to unset noclobber each time you log in: at the end of your login script (after the 'waitfor prompt'), put the command: 'send "unset noclobber^M"' or 'send "set +o noclobber^M"'. In other words, send the command that you tested above to your UNIX system as the last action in your login script.

WEB Configuration

1. Colors: You can set the background color (we find gray, yellow and white to be best on our monitors), as well as the "link" color, which is the color of the characters that you can click on to retrieve another document.

2. Screen and printer fonts: The documents you retrieve are written in a language called HTML (HyperText Markup Language) which assigns to the text of a document one of several "tags".   These tags control the appearance of the text.   Tag types include: Title, Header1, Header2, List-Item, Monospaced, etc.   You can change the way SlipKnot paints the text on your screen by changing the screen fonts and colors for these tags.   Easiest way to experiment: display the "Test Screen and Printer Fonts" document (there is a link to it in the SlipKnot Local Home Page).   Then: 1) remove the document (you cannot change fonts while there is a document displayed); 2) change one or more screen fonts and colors; 3) use the History button (the one with the circular arrow) to redisplay the Test page and see the results.   You can do the same sort of experimentation with printer fonts (printing the page each time).

3. "Viewers" -- these are external helper programs that allow you to "view" documents that are not in HTML format.   For instance, pure pictures and sounds, as well as movies can be retrieved and "viewed" with SlipKnot Web if you provide helper programs (two are already included with SlipKnot).   For a longer explanation, search the Help topics for "The Viewers".

The following are SlipKnot Preferences:

4. Retrieve embedded graphics?   Pictures are nice but they take time to download.   By turning this option off, you are telling SlipKnot not to get the pictures included in documents, and retrieving documents will be much faster.

5. Black background?   This makes the busy SlipKnot WEB screen look manageable, but you can no longer click on other Windows programs.   Turn this on or off as you prefer.

6. Paint Home page on startup?   If you get tired of seeing the SlipKnot Local Home Page each time you enter SlipKnot WEB, turn this off.   But make sure that you periodically retrieve the SlipKnot What's New Page from the Internet (there's a link in the Home Page), because it will inform you of: new versions and how to upgrade, SlipKnot news, access to SlipKnot's "Starting Points on the Web" Page, etc.

7. Number of Windows   allows you to choose (between 2 and 10) the number of documents you can display simultaneously.

8. Retrieving Pictures: allows you to tell SlipKnot NOT to retrieve the pictures embedded inside incoming documents -- this will make each retrieval faster.

9. Order of Display: you can tell SlipKnot to display the text of an incoming document as soon as it has been retrieved, and then get the pictures, and display them.   Or you can wait for the complete document to come in before displaying any part of it.

10. Low Memory Warning: See Low Memory Guard

Low Memory Guard

When you have many document windows open (remember, you can have up to 10), and many of the documents have pictures, SlipKnot may be depleting Windows memory resources by keeping that many documents on the screen.   Therefore, SlipKnot allows you to set a Low Memory Warning to prevent Windows from running out of its resources; this is independent of the amount of physical memory (RAM) that you have on the machine.

This setting is in Configure/Preferences.   The lower you choose this value (say, 3%), the more memory (Windows resources) you allow SlipKnot to use up.   If you make this value too low (say, 2%), then Windows may become unstable (your screen may do strange things). The higher you make this setting (say, 15%), the earlier SlipKnot will start taking evasive action to make sure that the current document can be painted.

If the actual memory used dips below the value you set, then SlipKnot will close other documents to free up some memory for this one.   All of these automatically closed documents are still in your History Folder, and can be re-displayed from there at any time.

Tip: When using Get All Links, you might want to check the <To History, do not display> checkbox.   This will cause tell SlipKnot to get the documents, and place them into the History Folder, but not to display them automatically as they come in.   You can then go to the History Folder whenever you are ready (and finished with reading the currently displayed documents) and display what has come in.   Be sure NOT to try to display a document that is currently being retrieved.

WEB buttons

At the top of the screen, there are 8 shortcut buttons:

1. The "House" button will display SlipKnot's Local Home Page.   The most important link inside is the one to retrieve SlipKnot's What's New Page -- the key to obtaining upgrades and news and access to interesting starting points for world-wide exploration.
2.   The "circular arrow" button displays a list of all of the documents from this session and past sessions (unless you periodically delete this history).   Each time you launch SlipKnot WEB, you will be asked whether you wish to delete these documents.
3.   The left-arrow button will display the previous document in your History Folder.
4.   The right-arrow button will display the next document in your History Folder.
5.   The "folder" button opens access to your folders, wherein you can save documents.
6.   The Retrieve Graphics button will turn the retrieval of embedded pictures On and Off.
7.   The "web with arrow" button is a shortcut to retrieving documents whose location (URL) you know.   This will also allow you to search for a document in your folders.
8.   The Stop button will stop the retrieval of a document or its pictures.

Doing things to documents

Saving documents to folders:

> You can save any displayed document inside one of your folders.
>
> Folders are like directories with long names (in fact, they <u>are</u> simply directories).   If you are curious where these folders are located, bring up the folder list, highlight one of the folder names, and press "Show directory".
>
> To create a new folder: press the "folder" button or the Documents/Folders menu item, and press "New" in the dialog box.
>
> To view a list of the documents in your folders: press the "folder" button, and double-click on one of them.

Saving documents as bookmarks:

> Bookmarks are a fast way of saving just the location of a document that you will retrieve later.

View as HTML source:

> If you want to take a look at how this document is actually written in the HTML language, use this option to bring up an ASCII editor with the HTML document inside. There is no better way of learning HTML than to see how other people use it.   To so this, you will have to have installed an editor or text viewer for .TXT files.   See the menu item Configure/Viewers for doing this -- pick an installed viewer in the display, and press the EDIT button to see how the installation works.   We recommend the use of the Windows programs: WRITE and NOTEPAD for TXT viewing.   Once a TXT file viewer has been installed, you will be able to activate the "View as HTML source" menu option in the document window.

Save as Text File:

> The document displayed can be saved as pure text (all of the HTML coding will be stripped out).

Copy URL to Clipboard:

> If you want the save the URL of a displayed document, copy it to the Clipboard, and then go to another Windows program (for instance, a word-processor) and paste it there.   This option is included because URLs can be long and obscure and must be correctly spelled (including capitalization).   This may also be useful for transporting the URL to SlipKnot Terminal in the Windows Clipboard and pasting it there (for some reason).

Print:

> You can print a displayed document, including the pictures.

Retrieval Actions

> <u>Retrieve Again!</u>
> This option is very useful in two different circumstances:

1. Suppose you are normally surfing the WEB with the option "Retrieve embedded graphics" turned off (for fast document retrieval), and you've retrieved a document (with no pictures, of course).   If you want to see the same document, but with the pictures included, turn the "Retrieve embedded graphics" option back on, and press "Retrieve Again!".

2. If you are developing your own document (on a PC, it should have the suffix: ".HTM") in another Windows program (a text editor or special HTML document editor), then use SlipKnot to see your progress with the document.   Display the document, find the errors visually, switch back to your editor to correct them and save the document, switch back to SlipKnot and press "Retrieve Again!".

Get Unretrieved Pictures

Allows you to get the pictures you had previously chosen not to get inside a document.   Reasons for missing pictures:
1. You pressed the Stop button in the middle of a retrieval
2.   You had the option Retrieve Graphics turned Off when you got the document.

Get Document Links

SlipKnot WEB limitations

In decreasing order of importance:

1. SlipKnot will not yet support many <u>HTML 2.0 or HTML 3.0</u> constructs within documents.
2.   SlipKnot will not support <u>WAIS</u> links.   This, too, can be activated on your UNIX system in the Terminal window.
3.   SlipKnot will not process fill-in forms.   See Forms

SlipKnot Web troubles

If SlipKnot Web crashes: We hope this never happens, but no program is perfect.   If it does, then SlipKnot Terminal should still be alive (it is a different and independent program).   To bring up SlipKnot Terminal, press on Ctrl-Esc and choose "SNTERM".   If the keyboard is locked, there is a menu item: Debug/Unfreeze Keyboard. Then simply go back to SlipKnot Web in the usual way.   The documents you displayed in this session should still be there, waiting for you (in the History window).

Some pictures are not visible:
1. Either you have asked SlipKnot NOT to retrieve pictures at all -- in which case you will probably see a black border where the pictures would be, or
2. SlipKnot has temporarily run out of memory (special Windows resource memory), in which case, see Low Memory Guard

If SlipKnot Web says: waiting for a while: This may be due to an unsuccessful termination of your previous command to abort a retrieval.   Here is a workaround:
1. Press the Stop button.
2.   Exit SlipKnot Web back to SlipKnot Terminal.
3.   Press the Debug/Unfreeze Keyboard menu item.
4.   Press the Enter key a few times to make sure that your Host system is responding.
5.   If it is not, you will have to press the Disconnect button and log in again.
6.   If the Host system is responding, then go back to SlipKnot Web again, and try the retrieval.

If, suddenly, you lose access to your Folders: use the menu item: Documents/Folders to bring up the Folders dialog box, and try pressing the "Find lost folders" button.

"Unable to retrieve: -----":   Either the Internet is busy or SlipKnot Terminal is not responding.   Try the retrieval again.

"Lynx unable to retrieve start file: ": A couple of possible causes:
1. The document name is incorrect (refers to a computer or location which does not exist). This can happen even if the document location came from a built-in document link, because document links can contain errors (we are all human as document authors).   If you typed in the URL , make extra sure that the spelling AND capitalization are exactly correct.
2.   Your UNIX system cannot reach the one that the document is located on.   This occurs frequently during busy periods of the day, when Internet traffic is heavy.   In this case, try again some time later.

"Could not analyze incoming HTML document": Something is wrong with the document and SlipKnot cannot decipher it.   Remove the document from the History session list (press the circular arrow button, highlight the document and delete it), and try to retrieve again.

"Cannot copy file..." Perhaps your disk is full?

"No viewer for this type of file" The file you retrieved has a suffix that is not recognized by any of the viewers installed in SlipKnot.   For instance, if you retrieve a file with a suffix of ".abc", SlipKnot will not know how to display that file unless you have a viewer for ".abc" type files.   To see what installed viewers will recognize, go to menu item: Configure/"viewers".

"Viewer program   is not correctly set up":   each viewer that you install must have a string

on the execution line that reads: "{filename}".   See how the pre-installed viewers are set up.

"Cannot access SlipKnot Terminal"   This may occur when the Terminal is busy downloading files, or some other background operation.   Try the operation again.   If all else fails, try exiting SlipKnot Web.

"Error has occurred in routine: ...."   This is a nasty error.   Please report it to us, along with the circumstances that caused it (particularly if it is reproducible).   Thank you.

If all else fails...

URL:

Universal Resource Locator: these are document "addresses" which contain 4 parts:
(example: http://ftp.netcom.com/pub/pbrooks/slipknot/whatsnew.html)
1. how to get the document (in this case: use the http protocol)
2. the computer name: (in this case: ftp.netcom.com)
3. the directory: (in this case: /pub/pbrooks/slipknot)
4. the filename: (in this case: whatsnew.html)

If all else fails...

If things are just not working, and the error explanations in the Troubles section don't shed light on the matter...

1. Try to contact another SlipKnot user on your own UNIX system.   There's a good chance that they might already have come across the same problem and solved it.   And users on your own UNIX system know its particular characteristics better than we do.
2.   We have chosen the Internet newsgroup: comp.infosystems.www.users as the location we watch for SlipKnot discussions. Try posting a message there.

Nevertheless, If you need to contact us please give us several days to answer.

If you need to contact us

If you are having trouble transferring files, please send us your debugging log file: SLIPKNOT.DEB

You can contact MicroMind's technical support email address at: slpstaff@micromind.com.

Please be sure to include in your message: your system configuration (PC-type, processor, amount of of main RAM) and as well as the version of SlipKnot you are using.

We will be happy to try to help.

SLIPKNOT.DEB

Built into SlipKnot Terminal is a debug option that will track every command that SlipKnot sends to your UNIX host, and the host's responses.   If you are having trouble communicating with your host, or trouble with file transfers, then the best way to debug this problem is to turn on this logging feature.

SlipKnot Terminal has a menu item: Debug.   Turn on the "Log communications and debug info to SLIPKNOT.DEB" option.   Then try to transfer a file.   After the operation fails, turn off logging the same way you turned it on.

Now you have created a file called SLIPKNOT.DEB inside your \SLIPKNOT directory.   You can try to look at that file with an ASCII editor or by using the menu item: Debug/Show SLIPKNOT.DEB.   We admit that it is somewhat cryptic, but contains the relevant information for debugging.

Before sending us the file, make sure that it does not contain any information you might consider sensitive (like login ID and password).

Refugee Relief organizations

10% of the SlipKnot registration fees that MicroMind receives are donated to the following two organizations:

International Rescue Committee
122 E. 42nd St.
New York, N.Y. 10168
U.S.A.
Tel: (212) 551-3000
email: irc@irc.com

Founded in 1933 by Albert Einstein, IRC is one of the largest, most effective and most prominent refugee organizations in the world.

The Center for Victims of Torture
717 East River Road
Minneapolis, MN 55455
U.S.A.
cvt@maroon.tc.umn.edu

CVT is one of the largest centers in the world dedicated providing comprehensive psychological and medical care to survivors of politically motivated torture.

The folks here at MicroMind (one of whom is a refugee survivor) wish to thank you not only for helping to support us, but also for helping to diminish in a small way the pains of the world.

Upgrading

This SlipKnot version is not perfect (do we need to convince you?).   We are working on improving SlipKnot and every so often will release a new version.

One of SlipKnot major features is the <u>One-Touch Upgrade</u>.   It is meant to make upgrading practically painless.

<u>Use this Automatic procedure if SlipKnot WEB is successfully retrieving and displaying documents from the Internet</u> (otherwise use the Manual Upgrade procedure below):

<u>Automatic Upgrade:</u>
1. Display the SlipKnot Local Home Page (if not already visible when you enter SlipKnot WEB, then press on the "house" button).
2.   You will find one or more links to the SlipKnot What's New Page.   Retrieve that document from the Internet.
3.   In the What's New Page, you will find out the number of the latest version.   Compare it to the version number you are running (Press on the menu item: Help/About).
4.   If you want to upgrade, there are links in the What's New Page to retrieve the Upgrade file.
5.   When the Upgrade file has been downloaded, exit SlipKnot completely (log off and terminate the program).
6. In the SlipKnot Windows group, you will find the NEW icon.   Clicking on it will start the automatic upgrade process.

Presto. Changeo.   You should now have upgraded.

<u>Use the Manual procedure below instead if SlipKnot Terminal or SlipKnot WEB are encountering severe problems:</u>

<u>Manual Upgrade:</u>
1. Using FTP, or a similar program, obtain a directory listing of the files at the following site: machine name: "interport.net" in the directory: "/pub/pbrooks/slipknot"
2.   Look for upgrade files with the name: "snupxxx.zip" where xxx is the version number (for instance, Version 1.01 would correspond to the file: "snup101.zip") and find the lastest upgrade file.
3.   Check the version of SlipKnot that you are running (use the menu item: Help/About).
4.   If you are already running the latest version of SlipKnot (comparing your version to the file number), then there is no further upgrade available.   Check back in a few days.
5.   If you have found an appropriate upgrade file, download that file into your \SLIPKNOT\ UPGRADE directory.
6.   Terminate SlipKnot completely, if it was running.
7.   In the SlipKnot Windows group, you will find the NEW icon.   Clicking on it will start the automatic upgrade process.

If all goes well, you should now have upgraded SlipKnot to the latest version.

Important Note: If you choose not to use the upgrade mechanism above, but decide to install another version of SlipKnot from scratch, then we have some warnings.   There may be problems if you try to install a complete new version of SlipKnot into the same directory as the old SlipKnot version.   On the other hand, if you choose a different directory for the new version, you may lose access to your old folders and their saved documents.   In general, try to use the upgrade mechanism above to avoid problems.

Distributing SlipKnot

The best was to distribute SlipKnot is to pass on the .ZIP file which contains the entire setup.

<u>Making it easy for others:</u>

Having figured out the Host characteristics (the settings in the Setup/Host screen), you can easily pass on this information to others using the same UNIX system.

Here's how: Let's say you have create a host called "myUNIX".   You will find a file in your SLIPKNOT directory called: "MYUNIX.HST" which contains all the host settings, including the entire login and logout scripts.   However, for safety, it DOES NOT contain your login ID or your password (you can check, it is an ASCII readable file).   Simply give this file to your friends (or post it) and tell them to put this file into their SLIPKNOT directories.   It will then become one of the hosts that your friends can select, and therefore not have to go through the same testing process.

Saving documents

There are a couple of ways to save a visible Web document: either as a "document" or simply as an "HTML" file.

Saving as a document will package up the visible information, both text and pictures, and save all of the information into one of your folders.   And at the time you save, you can create a comment to make it easier to select and redisplay this document in the future.   In actuality, the visible document is saved as a collection of files: one for the text, and one each for the pictures, as well as an additional file (called a "Master file") which ties all of the other files together.   The Master file is given the suffix ".MAS".   Each of the files is given a file number that uniquely identifies it as belonging to the collection defining a single document.   While this is somewhat complicated, SlipKnot will take care of all the details when redisplaying the document.

Saving as an HTML file will save only the text portion (no pictures) of the document into a file with the extension ".HTM".   To do this, press the View as HTML source button to bring up a text viewer of the HTML file, and then save it from the editor into a file. HTML   is the form in which the document actually arrived to the PC from the Internet.   You might wish to do this if you are curious how these documents are written in the HTML language, in order to compose documents of your own.   If you save in "HTML" format, you can still ask SlipKnot to display the document (although it now contains no pictures) by using SlipKnot's "Navigate/Display-local-HTML-file" option.   Documents in HTML format are readable (and modifiable) using an ASCII editor.

You do not actually need to save your documents explicitly, since SlipKnot keeps them in its History folder until you decide to get rid of all of the documents inside the History folder. Each time you enter SlipKnot Web, you will be asked this question.   On the other hand, all documents in the History folder are removed at once if you that is what you desire.   And you should let SlipKnot clean out your History folder to free up disk space, because much information can accumulate there.

HTML = HyperText Markup Language

This is the language used by Web documents, and the language you need to master to write ones of your own.   It consists of the text that you see on the screen, as well as directives to paint the text in various "typefaces".   It also contains directions for retrieving the pictures and where to place them.

The pictures are not actually contained within the HTML document itself.   The document simply tells the browser (SlipKnot) where on the Internet to find them in case they are desired.

Getting started

Welcome to SlipKnot.

SlipKnot is a communications program with the Internet through your UNIX host system.   To get started, you will need to set up several characteristics (communications parameters) in the SlipKnot Terminal screens.

So, prior to dialing up and connecting to your host UNIX system, you must click on the Setup menu item, and go through the various setup screens.... starting with: <u>Terminal Setup</u>

What is SlipKnot?

SlipKnot is a graphical World Wide Web browser (similar to Mosaic), but specifically designed for dialup (or direct serial connect) UNIX users.   It allows you to browse the Web (a service on the Internet) and retrieve documents, pictures and files.   <u>Here is what you need to use SlipKnot and get connected to the Web:</u>

1. You must have an account with an Internet Service Provider (for instance, a company or educational institution).
2.   The computer that you log into must be running some version of the UNIX operating system.   **Note: you cannot use accounts on some of the large proprietary services, like Compuserve, America Online, Prodigy or Delphi.**
3.   You must have a "shell" account on that computer -- that is, you   must   be able to type commands to it, and **not** be trapped inside a set of menus.   And you must have a directory on that machine that is writable -- in other words, you can put files there.
4.   The UNIX machine must have the progam "lynx" or the program "www" available.
5.   The UNIX machine must have a program to transfer files using either X-modem, or Ymodem, or Zmodem or Kermit (ask your systems administrator or another user if you are not sure about this).

New SlipKnot Features

These are the improvements to SlipKnot from the previous version (1.13):

<u>SlipKnot Terminal Features:</u>

1. <u>local printing</u> supported.   This means that other programs (like the Pine mailer) can direct SlipKnot to turn the printer on and off to print a message.
2. <u>Print Screen and Print Incoming Text </u>(Under the Edit menu)
3. Setup for outgoing mail (in Setup/Host: the Mail Setup button)
4. Outgoing mail dialog box (under the Communications menu)
5. You can now specify the name and location of your lynx or www program (in the Setup/Host screen).   This is important for those sites where there are multiple versions of the lynx program, and you wish to specify which one you want SlipKnot to use. Once the Host is initialized, the lynx version will appear in this screen (if you are using lynx).
6. Reduced wasted space at the bottom of the Terminal so that 24 lines will fit onto the screen at 640 x 480 resolution
7. Login scripts can now be interrupted by pressing any key, and SlipKnot will remain online

<u>SlipKnot Web Features:</u>

1. <u>Mailto: </u>is now supported (although you must have set up the mail facility in SlipKnot Terminals Setup/Host screen).
2. Automatic <u>Document redirection</u> is now supported (only if you are using lynx 2-4-2 or lynx 2.4-FM or later). Redirection occurs if a document has moved from its original location, and the Web server sends the new address.   Now SlipKnot will follow the path to this new address automatically.
3. <u>Authentication </u>is supported. (only if you are using lynx 2-4-2 or lynx 2.4-FM or later). Authentication occurs at those sites where are login id and password are required to access the documents.   If you have such an id and password, you no longer have to go back to lynx-interactive mode to get access to these documents.
4. The Delete History Folder question can be asked entering or exiting SlipKnot Web (or neither or both times).
5. Close All Windows menu item
6. Support for background colors as specified by the document author, and centering. Authors background colors can be turned off (under Configure/Preferences).

For Features in previous versions, see: <u>SlipKnot 1.13 Features</u>

SlipKnot 1.13 Features

For another list of some of these features, with examples, bring up SlipKnot's Local Home Page, and there is a link to a Features Page with Advanced Usage instructions.

New SlipKnot Terminal features

1. Scrollback Buffer: 100 lines of scrollback buffer, and the ability to change the foreground and background colors of the main terminal screen and scrollback buffer area independently.
2. Resizable Terminal screen
3. AutoZmodem download detection: SlipKnot Terminal will now automatically detect when your UNIX system is sending a file (or files) using the Zmodem protocol.   Therefore, you can simply tell your UNIX system (e.g.: sz -b george) to send a file and SlipKnot will wake up and automatically receive it (no need to use the Communications/Get File From Host dialog if you are using Zmodem).   You can also use this feature to download many files using a wildcard description (e.g.: sz -b foo*).   See Setup/File Download Directory to specify where to put these incoming files.
4. Zmodem and Kermit support: The Setup/Host screen now allows specifying Zmodem or Kermit as well as the variants of X and Ymodem.   Please note: the Kermit implementation is rather slow, so use it only if you have to.
5. BUSY redial: there is an option in the Setup/Host screen to call a host repeatedly in case the number is busy, or if SlipKnot fails to connect or log on.   In such a case, SlipKnot will put up a quick count of the number of times it has already attempted to call, and then call again.   You can cancel this repeated process by pressing the "Disconnect" button at the bottom of the screen.
6. Alternate telephone numbers for a Host: if your Host has more than one telephone number, you can now enter all of the numbers into a single Host screen.   If you then turn on the BUSY redial feature, then each of these numbers will be dialed in turn until there is a connection.   Example: suppose your Host has 3 telephone numbers: 555-1111, 555-2222, and 555-3333, then in the telephone number text box in Setup/Host, put the 3 numbers separated by the "|" (vertical bar) character: 555-1111 | 555-2222 | 555-3333.   If you've turned on the BUSY redial feature, then SlipKnot will try the first number, and if it fails, then the second and then the third, and then back to the first again.   Please note: all other characteristics of the host must be the same -- in other words, one telephone number cannot be for dialing at 2400 baud while another is for 9600 baud.
7. 57600 baud is now supported for those modems and computers that can handle this speed.   Note that even if your modem can handle it, Windows may not be able to and you might get random disconnections or other problems because Windows cannot keep up with the incoming traffic.   In such a case, you might have to replace your Windows serial driver with a faster one.
8. Copy and Paste: You can now highlight a section of the Terminal text and copy it into the Windows Clipboard with Ctrl-F1, and "paste" into the Terminal window (actually sending the characters to your host) with Ctrl-F2.   See the new Edit menu item for these options. This is very useful if there is a link, such as "mailto:", or "telnet:", in a Web document that SlipKnot Web does not support.   In such a case, click on the link anyway, and this will bring up the usual "Retrieve from Internet" dialog box with the URL in the text box.   You can copy this URL to the Windows Clipboard with Ctrl-C, cancel the dialog box, return to SlipKnot Terminal temporarily, type "telnet " and then press Ctrl-F2 to send the address to your Host (if it's a telnet link).
9. Screen capture: You can capture the contents of the current Terminal screen to a text file (see Edit menu).
10. Capture incoming text: You can turn text logging on and off, to start and stop capturing incoming text for a file (see Edit menu).

11.   Send a break signal: You can send a break signal by using the Communications menu, or by pressing Ctrl-F6.
12.   Direct connections: are now possible (option in Setup/Communications) if you do not have a modem.
13.   Dialing timeout parameter: previously set to 45 seconds for manual login, is now adjustable.   This is the time allowed to connect with the Host's modem.
14.   "Input [prompt]" command in login scripts: Some (rare) login procedures need the user to type in a string that changes from one login session to another.   There is a now an additional command for doing this.   If you place an "input" command as one of your login script commands, the script will pause when it comes to this command, and allow you to type in a string that will be immediately sent to your Host.   For   more documentation on this, change your Host to "SAMPLE", and look at its login script.
15. Change Terminal colors: you can change the foreground and text colors, using Setup/Terminal/Colors.

New SlipKnot Web Features

1. Get All Links: This allows you to ask SlipKnot to get all or some of the documents that the page you ar eviewing is linked to.   See Get Document Links   **Note: this feature is available only to registered users only.**
2.   Retrieve to History, do not display: Normally, incoming documents come up in a window and oscured the document you are currently reading.   When using the Retrieve From Internet dialog box, or the Get All Links feature, there is now a checkbox that gives you the option of asking SlipKnot to retrieve the document, but not to display it automatically -- the document will go into your History Folder, ready to be displayed from there.
3.   Save To Text File: saves the currently displayed as a pure text file -- with the HTML codes stripped off.
4.   Gopher support: In addition to "HTTP:" and "FTP:", SlipKnot Web now supports "GOPHER:" links. **Note: this feature is restricted to registered users only.**   If you are not a registered user, SlipKnot will warn you that it will not honor a gopher retrieval when you attempt one.   After registering with us, we will send you a special registration code that will allow this feature to operate.
5.   Forms support using the lynx program: when SlipKnot displays a document with embedded forms, it will allow you to switch to the lynx program to fill out the forms information and send it back to the requester.   For further information see Forms
6.   Telnet support: If a document has a link to a telnet address, when you click on that link, SlipKnot will automatically take you back to SlipKnot Terminal, and will launch telnet with that address.
7.   You can now display your own Personal Home Page (instead of our SlipKnot Local Home Page) on startup. **Note: this feature is restricted to registered users only.**   See Configure/Preferences for options.
8.   <ISINDEX> support: Many gopher items and some Web HTML documents allow the entry of a single search string (input string).   When SlipKnot detects that the document requests such a string from the user, it will put up a temporary notification message, and will provide a new menu item in the document window ("Input string") that will request such a string from you, and send it to the remote host.   Most commonly, these search strings will occur in gopher documents, in lines prefixed with the "?" character.
9.   View HTML source: You can now view the HTML source of an incoming document (new menu item in the document window: File/View HTML source).   This option will allow you to see exactly how a document is written by the author. To do this, you will need to install a TXT file viewer (we recommend Windows WRITE.EXE or NOTEPAD.EXE, but any Windows ASCII editor will do) using the Configure/Viewers menu item (for more information, search the Help topics for "The Viewers").   To install a text viewer, look at how the other

viewers are installed in Configure/Viewers (press the Edit button on an already installed Viewer).

10.   <u>Viewing unknown file types:</u> if SlipKnot retrieves a file that it cannot display directly, and whose file suffix does not match those automatically handled by the installed viewers (for instance, .gif graphics files are displayed by LVIEW31, and .au sound files are played by WPLANY), then SlipKnot will now bring up a dialog box allowing you to specify manually the viewer for the file, or to save the file.

11.   <u>Retrieval job queue extended to 30 items:</u> you have always been able to click on several links, even before the documents are retrieved.   These requests are queued up in SlipKnot's "Job Que" and will be retrieved one-by-one.   This list will now hold 30 items. However, due to the time it takes to retrieve large items, if you queue up many requests, you might wish to leave for lunch, get married, have children, then return to see what SlipKnot has brought in.   There are also more commands to contrrol the job queue.

12.   <u>Oldest window retired:</u> Since SlipKnot (only) displays a maximum of 5 document windows, when calling for a sixth document, the oldest document is now automatically retired to the History folder, from where it can be re-displayed at any later time.   This allows the much larger job queue mentioned above to work automatically.

13.   <u>Job queue pause:</u> If you have queued up many requests, you can now pause the job queue (new option under "See Jobs!").   This allows you to bring up documents from other folders, or temporarily return to SlipKnot Terminal, and then resume the requests later.

Forms

If you have installed "lynx" as your UNIX World Wide Web program in SlipKnot Terminal's Setup/Host screen (most people have), then you should be able to process documents with forms.   If you are using "www" instead, then, unfortunately, SlipKnot is unable to provide complete forms support.

What are "forms"?
Forms are questions inside documents that you can answer, and then send the answer back to the computer that sent you the document in the first place.   That computer will then usually (but not always) respond with a new page which SlipKnot will display.

For instance, the Search Engines (like Yahoo, Lycos, AltaVista) will send you a document with a form to fill in.   You can enter the words to search for into the text spaces provided in the form, and then press a button to send your request back to the search engine, which will try to answer your question.

How does SlipKnot deal with documents containing forms?
It displays the forms inside the document and then, if the conditions are right, will send the information back to the source computer, which will probably return another Web page to display.

What can go wrong?
There are two types of Web pages with forms.   They can be called GET and POST.   There is no easy way to distinguish between these two types by appearance. SlipKnot should have no problem with GET-type forms.

However, for POST-type forms, SlipKnot will require that the UNIX system you are interacting with have **lynx version 2-4-2** or **2.4-FM** or later.   If you are using an earlier version of lynx, then SlipKnot, by itself, will not be able to send the information from a POST-type form back to the Web site from where it came.

To check which version of lynx you are using, go to SlipKnot Terminal, and look at the Setup/Host dialog box (with all of the host settings).   The lynx version will be displayed there, and if the version numbr is 2.42 or later, then you should have no problem.   If the version number is earlier (smaller), like 2.37 or 2.2 , then you will not be able to complete POST-type forms inside SlipKnot Web, and will have to use lynx itself to do so.   See below...

When SlipKnot receives such a POST-type document, and you are using a version lynx older (smaller) than 2.42, SlipKnot Web will allow you (though a menu item called "Forms") to go back to SlipKnot Terminal, and use the lynx program to fill in the answers to the document questions.

How does lynx work?
Click on the menu item Forms/Go to lynx.   This will take you back (temporarily) to SlipKnot Terminal, launch the lynx program and tell it to retrieve the document in question.   lynx will then allow you to fill in the answers and submit them to the machine that sent the document.   Once inside lynx, you will need to know how to control lynx using the keyboard (see below).   You can then browse the Web using lynx (it is a very fast text-based Web browser).   **Important:** If you come across a document using lynx that you would like to see in graphical form (because it contains images, for instance), there is a menu item in SlipKnot Terminal: Communications/Get Highlighted URL (**see below on getting lynx documents graphically**) that, when properly used, will take you back to SlipKnot Web and retrieve the document in graphical form.   Because SlipKnot was designed to provide both a terminal and a graphical interface, it can make use of the appropriate strengths of both to provide you

with internet information.

Controlling lynx:
Once you are inside lynx, here are some of the special keystrokes that control lynx:

q   quit lynx (you will need to exit lynx before coming back to SlipKnot Web)
h   help on lynx
space   next page in this document
up-arrow   go up to previous link or form entry
down-arrow go down to next link or next form entry
left-arrow   go back to previous document
=   shows a screen giving you important address information about this document
Ctrl-C   Terminate lynx if it is stuck in trying to retrieve

Getting lynx documents graphically
Having navigated around in lynx, you come to a document that you wish to view graphically
    in SlipKnot Web (because, for instance, it contains an image which lynx is not able to
    display because it is a text-based browser).   Here's how:
1. Press the "=" key to bring up the address information for this document
2.   Using the mouse, highlight the exact address of the document (usually starting with
"http://")
3.   Press the Terminal menu item: Communications/Get Highlighted URL
4.   Quit lynx by pressing left-arrow, then q, then y.
5.   Press the World Wide Web button to get back to SlipKnot Web
6.   SlipKnot Web will automatically start retrieving the document whose address you
highlighted.

Special note on "authentication":
Some documents will ask you for identification and password to be able to retrieve further
documents from the same source (wired.com and hotwired.com are examples of machines
that do this). SlipKnot now supports Authentication inside SlipKnot Web, if you are using lynx
version 2.42 or lynx version 2.4-FM or later.   If you do not know what version your UNIX
system has, go to your Setup/Host screen and SlipKnot should display the lynx version.   If
the version is earlier that 2-4-2, try to ask your UNIX system adminsitration to upgrade their
copy of lynx -- it is freeware from the University of Kansas.

The Viewers

If you ask SlipKnot to retrieve a document with a suffix (say, ".GIF"), when the document comes in, SlipKnot will search for a "viewer" for such a document.

SlipKnot already provides you with two viewers.   The first is LVIEW31, which is an excellent graphics viewer and manipulator from Leonardo Loureiro (see the reference to him in the SlipKnot-People page).   LVIEW31 will handle graphics files in numerous formats, including .GIF and .JPG as well as many others.   The second is WPLANY, which is a sound player (only useful if you have a Windows sound driver installed).

Note: If you haven't already, be sure to install a .TXT viewer -- it is important for various reasons.   A suitable TEXT viewer is the Windows program: WRITE.EXE.   After you install a TEXT viewer, you will be able to view the "HTML source" of incoming documents (this is a menu item under your document window's File menu), as well as retrieving pure text files and displaying them.

Installing a new viewer

First of all, you'll need the viewer program itself.   Viewer programs can be obtained from a whole variety of sources, including retrieved from Internet FTP sites, bulletin boards, and purchased on disk.

For the sake of the following installation example, let's suppose that you're interested in viewing movies from movie files on the Internet.   You happen to know that these movies are in "MPEG" format, and that the movies themselves are files with the suffix: ".mpg" or ".mpeg".   Then you will need to find a Windows program that displays these ".mpg" files.

You find and obtain a program that does this (let's give it a name: MOVIE.EXE).   For compatibility with SlipKnot, the program must be callable with the movie file as a command line argument.   For testing purposes, retrieving at least one test movie to view (let's say, TEST.MPG).   Then, first, test the movie program by using the Program Manager's File/Run menu item and give it MOVIE   TEST.MPG, and see if it will run the movie.

If it succeeds, then you can install (tell SlipKnot about) the MOVIE.EXE program by:

1.   In SlipKnot Web, bring up the Configure/Viewers menu item
2.   Pressing the New button
3.   Pressing the Browse for Program button and finding the MOVIE.EXE file, then double-clicking on it.   If there are an special command-line arguments that MOVIE needs, then add those.   Make sure that the string "{filename}" appears somewhere in the command line (SlipKnot will substitute the real movie filename in its place when it is activated).
4.   Entering: MPG,MPEG in the suffixes text box (to tell SlipKnot which files this viewer understands).
5.   Adding some comment
6.   Save

Then, the next time that SlipKnot retrieves a file with a ".mpg" or ".mpeg"   suffix, it will automatically bring up the MOVIE program to display it.

Function Key Macros

In SlipKnot Terminal, you can assign special character sequences or strings (macros) to the Shift-Function keys.   Having assigned these strings, whenever you press the appropriate Shift-Function key, the assigned string will be sent to your Host as if you had typed it yourself.

Example: suppose you find yourself typing the C-shell command: *history* followed by the Enter key frequently.   You can assign this string to Shift-F3 and then whenever you press the Shift-F3 key combination, the word: *history* followed by the Enter key will be sent (and the appropriate Host command exectued).   In this case, the string you would assigned to Shift-F3 would be *history^M*

You can assigned these macros in the Setup/Function Key Macros menu item screen.

Note: Shift-F1 has been pre-assigned to send your Login ID, followed by the Enter key, and Shift-F2 will send your password followed by the Enter key.

See the table below for embedding non-printable characters inside your macro.

Notes on non-printable characters: there are two ways to deposit non-printable characters inside your macro:
1. If you wish to send ASCII characters codes 1 - 26, then you can use the ^ symbol followed by the appropriate letter of the alphabet.   For instance *^A* will send ASCII code 1, and *^Z* will send ASCII code 26.   Note: to embed *^A*, enter the caret character ^ (above the numeral 6 on your keyboard) then enter the *A* (in other words, these two separate characters that yoiu type will be translated into a single character sent to your Host).
2.   You can send any of the 256 possible ASCII codes by using the \ character followed by the 3-digit ASCII code number.   For instance, \065 with send ASCII code 65, which happens to be the letter: A, and \013 send ASCII code 13, which happens to be the Carriage-Return (or Enter) key.

ASCII	^-notation	\-notation	Special meaning
0		\000	
1	^A	\001	
2	^B	\002	
.			
.			
7	^G	\007	Bell
8	^H	\008	Backspace
9	^I	\009	Tab
10	^J	\010	Linefeed
11	^K	\011	Vertical Tab
12	^L	\012	Formfeed
13	^M	\013	Carriage return (Enter)
.			
.			
26	^Z	\026	Ctrl-Z
27		\027	Escape
.			
.			
32		\032	Space
.			

```
34                              \034            double-quote
.
127                             \127            Del
128                             \128            high-bit char
.
.
255                             \255            high-bit char
```

Special key combinations:
To achieve visual effects, you may need to know the screen-control sequences for the
terminal emulation you have chosen (e.g. VT100, ANSI).   Most of these sequences start with
the ESC key, which which you can code as \027.

VT52 and VT100 terminals (the real ones from DEC), had 4 program function keys: PF1 - PF4.
Such terminals apparently, can be in one of two modes: VT52 and ANSI, and the character
sequences for these program function keys are different depending upon the mode.   Here
are the sequences:

```
Key     VT52 mode     ANSI mode

PF1     \027P         \027OP
PF2     \027Q         \027OQ
PF3     \027R         \027OR
PF4     \027S         \027OS
```

Folder Contents

Folders contain your saved documents and bookmarks (there is also the History folder, which contains the current and prior sessions documents).   To view you History folder, press the icon which looks like a circular arrow.   To view you personal folders, click on the icon that looks like a folder.

When you view the contents of a Folder, each of the <u>bookmarks</u> or <u>documents</u> is displayed in the listing.   Bookmarks are marked with Bk in the Type column, and documents are marked with Doc.   When viewing the History folder, you may see Scr associated with some of the items: that document is currently either on screen or minimized.   These Scr documents cannot be deleted until their windows are closed.

Every time you click on an item, you either select or deselected it.   A + will appear in the left column for selected items.   Selected items can be copied, moved or deleted in one step (using the Copy, Move or Delete menu items).

Use the Edit button to see all of the relevant information about an item, only some of which may be visible in the drop-down list.   The Edit button will also allow you to change the comments associated with an item.

(Bookmarks)

Bookmarks are the names of saved addresses.   When you create a bookmark -- either using the "New Bookmark" button when viewing the contents of a folder, or the File/Save as Bookmark menu item when viewing a document -- SlipKnot saves only the address of the document, not its contents.   Therefore, you have to be connected to the Internet to retrieve the document whose address is saved in the bookmark.   Bookmarks are similar to "hotlist" items used by other browsers.

(Documents)

A document is a completely saved item (stored in several files) containing all of the information needed to redisplay the document.   Since this information is on your own computer, you can redisplay a document at any time, even offline.   You can create a document by using the File/Save as Document menu item when viewing the document.

Get Document Links

This is a very powerful and advanced feature in SlipKnot.   It tells SlipKnot to go get some or all of the document references (links) on the page you were viewing. This screen shows all of the document links that SlipKnot has found on the currrent page, and lets you select which ones you want SlipKnot to retrieve. When you have selected all or some of these links in the list, and press the Retrieve selected button, SlipKnot will put all of these retrieval requests into the job queue and then actually go out to the Internet, and get those documents, one-by-one.

You can select all of them, or none, or select just those documents at the same site which this page came from.   Furthermore, by clicking on any of these links, you can select or de-select it (it will only be retrieved if it is selected).

If you check the To History - dont display checkbox, then SlipKnot will retrieve the selected documents into the History Folder, but wont automatically display them.   This is useful if you want to continue displaying documents selectively from the History or other folders, and not be disturbed when each document comes in and would normally be displayed.   You can then, of course, display each document, as soon as it has arrived, by looking in the History Folder in a normal fashion.

Suggestion from the MicroMind folks: Use this feature wisely.   You can easily load up the job queue with a large number of retrieval requests (and then go out to dinner or on vacation).   Be kind to the other folks also wanting to use the Internet communications channels, and select the documents you really want to get judiciously.

Limitations and tips:

1.   Some of the links inside the current document will not show up in the list (see note below).
2.   Suggestion: Turn off Get Pictures when getting a lot of documents.   (You can turn this option on and off on the Configure/Preferences screen or clicking on the icon that looks like a picture.)   Getting pictures slows everything down and on many pages, the pictures may not be interesting.   At the end of the process, you can always get the pictures on a page by displaying the page and using the menu item: Retrieve Actions/Get Rest of Pictures.
3.   The limit of the job queue is 50 jobs (as of this version), so you will not be able to more documents than can fit onto the job queue.
4.   Try to keep your History Folder small and clean, in general (and eat your vegetables). Operations will slow down as the History Folder grows.

Note: Not all of the links on the currently displayed page will show up in this Get-Document-Links listing.   For instance, most files from ftp:// sites will not appear (those with suffixes of .html or .htm will appear), and files with suffixes of .exe and .zip will also not appear.   Therefore it is not possible to simply go to an FTP site and get all of its files using this feature.

Note: There may be some duplications in the links shown.   This is because the author of this page provided more than one reference to the same document.   Dont worry.   SlipKnot will only retrieve one copy of any document (as soon as any document retrieval is started, SlipKnot will check to see if the document is already here in the History Folder).

Mail

Mail Overview

SlipKnot supports outgoing mail.   That is, if properly set up, SlipKnot will allow you to compose and send email messages.   SlipKnot <u>will not</u> support incoming mail -- it does not provide direct facilities for reading and filing you email.   To do this, you will have to use a mailer program on your UNIX system (like Pine or Elm, or any other facility provided by your UNIX system through SlipKnot Terminal).

Mail Setup

<u>Note: You should be reading these instructions if you have just pressed the</u> Mail Setup button in SlipKnot Terminals Setup/Host screen...

<u>Choosing a UNIX mail command:</u>

To use the outgoing mail facility within SlipKnot (including the mailto: directives in Web documents), you will need to know how to use the standard and simple UNIX mailer program that is on your UNIX system.   **This is NOT one of the fancy interactive mailing programs like Pine or Elm or a sophisticated version of Emacs**.   It is, rather, a simple UNIX program that, if provided with a file to mail and an address to mail it to, will send that file to that address, <u>using a command at the UNIX prompt</u>.

Most UNIX systems have such a simple program, and it is called mail or Mail (remember that UNIX commands are case-sensitive).

Therefore the job, once you have pressed the Mail Setup button, is to find this UNIX command, and test it out, by sending a message to yourself and see if that succeeds.

As preparation, you might try going back to the UNIX prompt and executing the following UNIX command:
    man mail
or
    man Mail
If the man command is working, it will tell you whether one of these UNIX programs is available and how to use it.   However, if the man command is not working, you will not be able to get information in this way, though such a mail command might still exist.   If the program is available for use, the next question is whether this command has an argument to allow the subject line to be sent.   Some mail commands do, and some do not.

The four most common configurations of UNIX mail commands are listed in the Mail Setup screen, in the drop-down box.   If   none of these is correct, you can type in your own variation.   Make sure, however, that your variation contains the {address}   and {bodyfile} strings so that SlipKnot will know where to place the address and the filename that contains the body of your message.

<u>The Subject:</u>
Some older UNIX mail programs did not allow for a subject line to be sent as part of the mail message.   However, those programs that do allow a subject line to be specified (on the command line) usually precede the space for that subject with some special flag, as in the -s argument below

ourmail -s this is the subject slpstaff@micromind.com   <message_body

To tell SlipKnot how to deal with this UNIX program, replace the UNIX program appearing in the drop-down list with:

ourmail -s {subject}   {address}   <{bodyfile}

<u>Your email address</u>:
This is only used for testing the mail command.

Try sending message:

SlipKnot wants you to test out the mail facility before you can confidently use mail inside SlipKnot.   The SlipKnot mail test is done in three parts:

1. So use this button (Try sending message) to send a message -- possibly to yourself. When you send the message, SlipKnot will capture any error message from your UNIX system as a result of trying to use the command youve chosen, and will display this error message for you.
2.   Then, go back to SlipKnot Terminal, wait for the message that you sent to arrive (if you sent it to yourself).   Use whatever mail reading program you are familiar with to read the message.
3.   Go back to this dialog box and check the Message successfully tested box.

If you did not get the message that you sent, then there is probably something wrong with the UNIX command youve chosen or entered in the Send mail command box.   Try getting information about the use of mail commands on your UNIX system.   If yoiu are using a Freenet, then ask your freenet sysop whether any mail commands are enabled for use with the SlipKnot shell (it is possible that all mail commands are disallowed while inside the SlipKnot shell).