Letting Red Ryder Write A Procedure For You

The **Write A Procedure For Me** menu command under the **Service** menu can be used to write Auto-logon Procedures, Procedures to be called while inside a service, or even full session unattended Procedures. It basically monitors incoming and outgoing data and generates the proper Procedure commands to navigate in a mirror image fashion of your actions. Of course, this presumes that the host will react in a consistent manner from session to session. If it doesn't, a small amount of fine tuning may be necessary.

After selecting the **Write A Procedure For Me** command, you will be prompted to enter the resulting filename for the Procedure. It'll be saved as a Procedure file, rather than as a TEXT file. After specifying the name, you'll be asked whether or not you wish the Procedure to begin by intializing the system to all current terminal settings. If you answer affirmatively, all of the Procedure commands (such as COMM, SLOW ON, CONTROL1, etc) applying to settings parameters will be generated. It will also include a short sequence for initializing a Hayes compatible modem:

```
TYPE AT^M
PAUSE
TYPE AT^M
PAUSE
TYPE AT^M
PAUSE
```

This matches baud rates and prepares the modem for a dialing command (you can edit out this sequence or modify it appropriately if you don't have a Hayes compatible modem). You should answer Yes to this prompt only if your Procedure will begin by dialing a service. For procedures that will be executed while already inside of a service, you would not want all of the intialization stuff to occur.

For this reason, you must have all settings the way you want them before you choose the **Write A Procedure For Me** command. Once the Procedure generation has begun, clicking on the baud rate (for instance) parameter will **not** be recorded in the Procedure file. A small number of menu command selections are supported during Procedure generation, they're discussed below.

A good number of people (like me) have gotten into the shortcut habit of just typing the modem dialing command, rather than by using the **Dial Or Redial A Number** menu command.   This habit must be broken for use with the **Write A Procedure For Me** command. It is absolutely essential that you use the **Dial Or Redial A Number** menu command for dialing a service when generating a Procedure, or the resulting Procedure will most likely not work properly.

The **Write A Procedure For Me** command saves uninterrupted typing sequences, and then generates TYPE Procedure commands for the sequence when it's interrupted. A typing sequence is interrupted by a carriage return, either incoming from the host, or outgoing from the keyboard. If it's outgoing from the keyboard the letters ^M are appended to the end of the TYPE command to show that you typed a RETURN. When it's interrupted, Red Ryder looks at the line you were typing on to determine whether you were typing in response to a prompt from the host. If your typing began on the first column of the line, no PROMPT statement is generated. Otherwise, up to 10 characters preceding the first character you typed are used to generate a PROMPT command (which is followed by a PAUSE command).

The following menu command actions will be saved in the Procedure file:

• Load Macro Keys
• File receives
• Manual closing of an ASCII file receive.
• File sends
• Print TEXT File
• Delete A File

    When you choose one of the above menu command actions, Red Ryder will again look at the most recent line received, if the line is empty, the appropriate Procedure command for the Menu choice will be placed immediately after the last command in the Procedure file. If the line isn't empty, Red will want to know if you did that menu action in response to a prompt from the host.

    Let's look at an example of both methods. Before you used a **Dial Or Redial A Number** menu command, you might want to load in a set of macro keys from a file. Since you didn't do that menu command in response to any prompt from a host (you aren't even connected to a host yet!), you wouldn't want a PROMPT command generated before the menu action command.

    However, opening a receive file to capture all new messages probably would be in response to a prompt from the host, and you would want such a PROMPT generated in the Procedure file.

    For those menu command actions that require the selection or creation of a file, the Procedure generation routine will ask you to type in the **filename** of what you just selected or created. If that sounds redundant, just realize that Red Ryder is a bit stupid in this regard, but that information is needed to properly complete the generation of such Procedure commands as MACRO and RECA (amont others).

    Hints And Tips

    1) The **Write A Procedure For Me** menu choice turns into **Stop Creating The Procedure** while Procedure generation is active. Choose it to finish generating the Procedure file.

    2) While generating a Procedure file, type slowly and deliberately. Typing errors, backspacing, etc. will be repeated verbatim for the next billion years (or however long you continue to use that Procedure).

    3) When a menu command and typing action are to take place after the same prompt from the host (like opening a receive file and then typing the command to list all new messages), choose the menu action first if possible (so that the PROMPT command will be placed before the menu action command, followed immediately by the typing sequence). A typing sequence must never be interrupted by a menu command action - do one before or after the other only. However, if you're going to be sending or receiving a file using Kermit or XMODEM, you'll find that the keyboard is locked out after the menu command is executed, so in this case the typing sequence would come first, followed by the menu action.

    4) The logic for this command was derived by observation, and there's always room for improvement and added utility. Please pass along any comments or suggestions to me so I can incorporate them in future versions.

5) Break signals, VT100 status bar and numeric keypad sequences, and automatic VT100 cursor key positioning are not yet supported in Procedure generation (but will be). Typing sequences are limited to normal ASCII alphanumeric and control keys.

<u>Why Would I Want To Edit A Generated Procedure?</u>

CompuServe is a good example of a inconsistent host. The first menu you may see after logging on is unpredictable - it may be either the top level command menu or the electronic mail menu if you have messages waiting. On the dark side, the prompts for these two menus are quite different, so a generated Procedure may get "hung up" because it expects the prompt for a menu that never arrives. On the bright side, since both menus use an exclamation point ("!") as the last character in the prompt, the generated Procedure can be easily edited to look for only that character in the first menu PROMPT command. The ability to generate Procedures with self-modifying commands for conditional routines never seen before is certainly feasible and forthcoming.

Procedure Examples

  Examples of every Procedure command would cause this documentation to swell to an unpractical size. However, it is hoped that the examples below will get you started, and the examples that have already begun circulating by user groups and BBS's will further your education. The chances are very good that a user's manual devoted solely to Procedures will be constructed and distributed to registered users (if this not already the case by the time you are reading this).

Let's start with something simple.

Example #1: I want to call Big Bob's BBS using 1200 Baud, NO Parity, 7 Data Bits, 1 Stop Bit, and FULL Duplex. The number is (000)555-1212.   I'm using a Hayes compatible modem. Please note that this is a bogus phone number.

COMM 1200-N-8-1-FULL
DIAL ATDT 1 000 555 1212

Example 2: Here's how I log onto CompuServe (using a CIS node - not Telenet!). I have a Macro Keys file named CIS MACROS on the disk named MYDISK that I want to load in, also.

COMM 1200-N-8-1-FULL
(Set the communications parameters)
MACRO MYDISK:CIS MACROS
(Load in my Macro Keys file)
DIAL ATDT 555-1212
(Now dial my local access number)
PROMPT NECT
(I'm waiting for the last part of the message CONNECT from the modem)
RESET
(reset my elapsed timer to 00:00:00 so I know how long I've been on)
PAUSE
(hang loose a second for the connection to get established solidly)
TYPE ^C
(need to send them a CONTROL-C to get started)
PROMPT ID
(CompuServe asks me for "User ID:")
PAUSE
(Always use a PAUSE after a PROMPT!)
TYPE 73176,61^M
(Type in my user ID with a carriage return at the end)
PROMPT word
(Now CIS asks me "Password:")
PAUSE
(Give the line a chance to settle down)
TYPE MY/SECRET^M
(I type in my password now)
PROMPT !
(This is the character CIS uses for a command prompt, so I tell them:)
PAUSE
(Getting the hang of this PROMPT/PAUSE routine, now?)
TYPE GO PCS-23^M
(Onward to MAUG!)
BELL
BELL
BELL
BELL
(Hey human, ol' Red did all the work! Wake up! Wake up!)

Example 3: I've just downloaded a neat program called FEDIT, put it on a disk called GREAT UTILITIES and three of my buddies want a copy. I just hook up my modem to answer the phone, tell them to give me a call, type in the secret password GOOBER, and my Mac will send the file XMODEM.   I'm going to put this Procedure on that same disk and call it BUDDIES PROCEDURE. Of course, while one guy's online, the other two have their Red Ryder's set up for redialing.... **Remember that in order for this to work, all of your buddies have to call in using 300-N-8-1-FULL parameters.**

COMM 300-N-8-1-FULL
(Always one guy in the crowd who slows everybody down!)
PROMPT GOOBER
(I can ignore everything else until my secret password comes in!)
SENDX GREAT UTILITIES:FEDIT 2.0
(Send that file, Red!)
DO GREAT UTILITIES:BUDDIES PROCEDURE
(Start this procedure over again for whoever's left.)

Example 4: Here's my super-simple Hang Up The Phone procedure that I like to link through a Macro Key. Works only with Hayes and compatible modems.

TYPE +++
PROMPT OK
(Apple and USR modem owners can skip the following)
TYPE ATH^M

Example 5: I'm going to send a copy of Red Ryder 9.0 (?!?) to my buddy. On my computer, I execute the following Procedure:

PROMPT BEGIN
(His Procedure will send the string "BEGIN" when it's ready!)
SENDX Red Ryder Master:Red Ryder 9.0
SENDX Red Ryder Master:Red Ryder Documentation #1
SENDX Red Ryder Master:Red Ryder Documentation #2
SENDX Red Ryder Master:Red Ryder Documentation #3
SENDX Red Ryder Master:Red Ryder Documentation #4
BELL
BELL
BELL
BELL

And my buddy at the same time executes the following Procedure on his machine:

TYPE BEGIN
RECX Fresh Disk:Red Ryder 9.0
RECX Fresh Disk:Red Ryder Documentation #1
RECX Fresh Disk:Red Ryder Documentation #2
RECX Fresh Disk:Red Ryder Documentation #3
RECX Fresh Disk:Red Ryder Documentation #4
BELL
BELL
BELL
BELL

Example 6: I like to selectively turn on and off the capturing of certain information to my disk for later archiving and perusal. I want the archive file to be named "Stored Data" on the disk named "Data Disk" and the following Procedures will be on the disk named "Red Ryder"

1) Create the following procedure and save it on the disk "Red Ryder" with the name "Capture On".

QUIET
RECA Data Disk:Stored Data

2) Create the following procedure and save it on the disk "Red Ryder" with the name "Capture Off".

QUIET
CLOSE

3) Put the following string into Set #1, Macro Key #8

\Red Ryder:Capture On

4) Put the following string into Set #1, Macro Key #9

\Red Ryder:Capture Off

Give those two Macro Keys appropriate labels, while you're at it, (Capture On and Capture Off would be fine).

Now, when ever you select Macro Key #8 from Set #1, incoming data will be directed to the file "Stored Data" on the disk "Data Disk". Select Macro Key #9 from Set #1 to turn off this saving of incoming data. When you have the Macros Status Bar on the screen, you can turn the capturing on and off with a click of your mouse!

Example 7: I want to use Host Mode when I get home from work, but I don't want anyone else being able to get in except me. The following Procedure waits for the secret password "GAZORK" before letting me into the Host Mode. I'm going to name this Procedure "Password" on the disk "MYDISK".

TYPE Password protect installed. Hang up now...^M
PROMPT GAZORK
TYPE Now going to Host Mode. Type in the command^M
TYPE "DO MYDISK:Password" when you're done^M
HOST

Example 8: Redialing one service is fine, but let's get real clever and redial 4 services (or more if you wanted) in a daisy-chain fashion. When you get connected, Red rings like crazy till you push your mouse button (which aborts the Procedure). This procedure assumes that the communications parameters are the same for all four services, and have been set before this Procedure is executed. The two **ALERT** commands are used to trap the modem's "NO CARRIER" and "BUSY" messages, and the **PROMPT** is used to trap the "CONNECT" message.

(FIRST)
DIAL ATDT 555-1111
ALERT1 CARR/JUMPTO (SECOND)
ALERT2 BUSY/JUMPTO (SECOND)
PROMPT NECT
JUMPTO (ONLINE!)
(SECOND)
DIAL ATDT 555-2222
ALERT1 CARRIER/JUMPTO (THIRD)
ALERT2 BUSY/JUMPTO (THIRD)
PROMPT NECT
JUMPTO (ONLINE!)
(THIRD)
DIAL ATDT 555-3333
ALERT1 CARRIER/JUMPTO (FOURTH)
ALERT2 BUSY/JUMPTO (FOURTH)
PROMPT NECT
JUMPTO (ONLINE!)

(FOURTH)
DIAL ATDT 555-4444
ALERT1 CARRIER/JUMPTO (FIRST)
ALERT2 BUSY/JUMPTO (FIRST)
PROMPT NECT
(ONLINE!)
BELL
JUMPTO (ONLINE!)

Example 9: When you change your communications parameters, your Hayes compatible modem may or may not be ready to immediately respond to further commands. What you need to do first is get the modem to recognize your new parameters by typing the "attention" command a few times until your modem responds with the message "OK". The following routine should be used after any **COMM** command.

COMM 1200-N-8-1-FULL
TYPE AT^M
PAUSE
TYPE AT^M
PAUSE
DIAL 555-1212
(Rest of Procedure goes here)

  Using the Procedure commands in new and novel ways will make Red Ryder's possibilities almost endless. A few ideas that come to mind are:

1) Upload a Procedure file to the Host Mode and then use the Host Mode command **DO** to execute it.

2) Use the WAIT command to send out daily updated information to customers or employees in the field during the evening hours when phone rates are lower. The remote people put their machine in Host Mode before leaving the office for the evening.

3) You can reserve one of your Macro Keys to execute a Procedure that loads in a new set of Macro Keys (ad infinitum) - a good way to extend the number of Macro Keys available above 30.

4) Let Red Ryder do the work for you! Use the Procedures generated by the **Write A Procedure For Me** menu command to get a good starting point to build on once connected to a system.

450 Baud And K&S Parity Explained

   While clicking through the Baud parameter in the General Status Bar, you probably noticed a very non-standard baud rate of 450. Why is it there?

   It's there for those of you who have Hayes Smartmodem 300's. It's been found that those modems can actually operate with a fair degree of reliability at 450 baud, a 50% better speed than you might expect. Of course, there are several catches (there always are, eh?).

   • Your modem will not respond to commands at 450 baud. You must give the commands at 300 baud, connect to the other computer, and then switch to 450 after telling the other computer that's what you're going to do. You'll also have to switch back to 300 baud before you can issue any further commands.

   • Since you're pushing your modem harder than its rated maximum, you can expect more transmission errors. This isn't a big problem for text information, but if you're going to do any downloading, use an error checking protocol like XMODEM.

   • You can't switch from 1200 baud to 450, or vice-versa. Nor would you want to anyway, for that matter.

   We have found other modems, like the Anchor Signalman, that will work at 450 baud. Your best bet is to give it a try. If it works, you've got that option available. If not, well... you get what you pay for.

   Another nifty use for this non-standard baud rate applies to the Procedure file above where I was sending files to my buddies. If I set my **COMM** parameters to 450 baud, none of the local War Games dialers could ever hope to guess my password. Only my savvy friends would know to switch to 450 baud before sending the password!

K And S Parity

   K stands for mark parity and S stands for space parity. These are used mainly for communications with IBM and H.P. mainframes, and Mark parity is by far the most common. We've found that if your mainframe uses Mark parity and you connect using 8-N-1, everything will look dandy for terminal communications, but file transfers and other odd things will fail. Suspect this as the cause. Try 8-K-1 or 7-K-2 and don't ask why it works.

Direct Hardware Connections

    If you do a lot of file transfers between machines that sit physically near each other, even 1200 baud can wear your butt out. For this task, we need to bypass the modem completely, make a direct cable connection between the two machines, and use the highest BAUD rate Red Ryder supports: 9600 Baud. Most people will tell you that you need a "black box" called a null-modem adapter. Not so!

    Apple was kind enough to provide us with a cable with a null modem adapter built in. It's the Imagewriter printer cable! Just plug the smaller plug into the back of your Mac, and the larger one into the RS-232 input of your other computer. Then, set up both machines using 9600-N-8-1 communications parameters and you're ready to zip. This has been tested on both an IBM-PC and a TRS-80 Model 100. You really haven't lived until you've watched an XMODEM at 9600 baud.

    We use a user-supported (of course) communications program called QMODEM on the IBM. Set Red's Duplex to ECHO, turn on the **Send LF After CR** choice under the **Mode** menu, and then enter Host Mode. I can then literally control both machines through the IBM (a rather nauseating thought, I admit).

    We have not tried a Mac-to-Mac direct connection, but for this we feel two modem cables with a null-modem adapter in the middle should work just fine. You can buy a null-modem adapter at your local Radio Shack.

Registration Form

I'm honest and I'm hooked! Red Ryder is a useful program and has earned a place in my library the hard way. Here's my $40 ($45 outside of the U.S.) for full registration benefits.

Send to: The FreeSoft Company, 10828 Lacklink, St. Louis, MO 63114

We Cannot Accept Purchase Orders Unless Payment Accompanies! If you've got a problem with this, please drop us a letter first to work something out (we're pretty good about not turning away money). **All checks, postal or bank money orders, etc. must be in U.S. funds.**

NAME   _____

ADDRESS   _____

ADDRESS   _____

CITY   _____

STATE/COUNTRY/ZIP _____

Where did you hear about/receive Red Ryder from?
_____

_____

Your comments, suggestions, etc. are what make Red Ryder better. Please take a moment to write down your thoughts on the back of this form. These comments directly influence future versions.

Invoice

Invoice #99-1959

Do Not Return This Form To FreeSoft! Keep For Your Records.

Accounting Department:

This is an invoice for the Red Ryder Asynchronous Tele-communications Software. Please remit the below amount in U.S. funds at your earliest convenience. A check, postal or bank money order is acceptable.

Quantity	Description	Amount Due
1	Red Ryder Computer Software ($45 outside of the United States.)	$40.00

Notes: Price includes technical assistance, documentation, materials, and all future updates (less materials and handling charges).

Please send to:

The FreeSoft Company
10828 Lacklink
St. Louis, MO 63114

Registration Benefits

Beginning with version 8.0, The FreeSoft Company has put together what we feel is an extraordinary value for the $40 registration fee. Here's what your bucks buy:

• When we receive your registration fee, we'll send you back the latest shipping versions of the entire Red Ryder package. As of version 8.0, this almost completely fills two disks and includes the Red Ryder and Red Ryder Host packages.

• You'll also receive access to the FreeSoft RoundTable. This is an private online support group for registered users only provided by General Electric's GEnie network. Not only is GEnie providing this forum, they are also giving every registered Red Ryder user a free subscription to this network. Besides being extremely reasonably priced ($5/hour at 1200 baud at the time of this manual's construction), they offer the slickest and fastest XMODEM support I have seen on any network. In addition, the network's Mac user group has a download section of nearly a thousand files for your downloading pleasure. The only way to get into the FreeSoft RoundTable is to be a registered user of Red Ryder.

• First access to all new versions. The FreeSoft RoundTable will be the only source of each future version of Red Ryder for 30 days after its release. No copies may be given out during that period. For foreign customers who do not yet have access to the GEnie network, we will offer updates by mail at an extremely reasonable price.

• This is just the beginning. I'm currently in the process of putting together an even larger package that I think will pay for your Red Ryder registration fee a dozen times over (if the utility of the software hasn't already done so!). The people who have been "free-lunching" me are about to be left out in the cold. Clenching of fists and gnashing of teeth will ensue when they discover the only person they cheated was themselves.

• Authorization to use the Red Ryder Host package. The FreeSoft Company is the only source for Red Ryder Host. It is not a shareware product, it is not for sale at any price, and I will take great pleasure in suing the poo-poo out of any non-registered cluck who puts Red Ryder Host online. Red Ryder Host is for the exclusive use of registered Red Ryder users, and a copy is provided free of charge to all registered users.

Here is a brief description of Red Ryder Host:

This software was made available to any all interested parties during its testing phase under the product code name Lazarus. It has been drastically improved and officially released as Red Ryder Host.

Red Ryder Host is a true host network construction set in that the System Operator has complete control over the appearance and operation of the entire system he/she is running. Simple but powerful building blocks are used to create menus, file transfer sections, message sections, etc. Up to 20 different message sections can be online at the same time, with an unlimited number of file transfer sections. The number and appearance and components of all menus is completely up to the ingenuity and needs of the System Operator.

Red Ryder Host allows up to 256 levels of clearance for each user, menu command, and download file. Each menu command can be set up to be available if its clearance level is greater than or equal to, less than or equal to, or only equal to the user's clearance level for a superb amount of control.

Both XMODEM-checksum and XMODEM-CRC file transfer protocols are supported, with full MacBinary format recognition.

Many system-level options can be configured to the System Operator's preference, to gain a virtually limitless number of permutations.

It has many features there is not enough room to describe here (there are over 70 pages of documentation)! It is without question the most powerful network software ever implemented on a Macintosh.

The simple fact is that each and every Red Ryder Host system is a unique system unlike any other. The System Operator is not burdened with the many artificial limitations imposed by other host system software products.

The best is yet to come. Red Ryder Host will soon be supporting a unique graphics driver protocol that will make your remote machines appear to be using a local Macintosh application (an application that's just as unique as each Red Ryder Host system!). We're talking graphics, menus, mouse buttons, scroll bars, the whole ball of MacWax!

Because of its official release status, there should be no further systems running software by the name of Lazarus, and no one except registered users of Red Ryder using Red Ryder Host.

Red Ryder Host can be used for such things as BBS's, Electronic Mail centers, Customer support and update distribution centers, online stores, and internal corporate communications managers.