

# Reference Manual

## A FEW TERMS

The following are definitions of a few of the terms used in the Reference Manual.

Current message: You are always at a message. Typical actions in the tree are to read the current message, move to another message, or to list the sub-branches of the current message.

Parent: The parent message is the message one level above the current message in the tree. Often the parent message is used in the command 'Move Parent'.

Toplevel: This is the highest message in the tree hierarchy. It is usually the starting point of the tree organization.

Left, Right: These are the messages that appear in the list above (the “left”) and below (the “right”) a particular message. For example, in the list below, the message to the left of the message “Has Children” is “New message”, and the message to its right is “Blocked message”.

Listing of TOPLEVEL

- 1) Normal message
- N 2) New message
- \* 3) Has Children
- X 4) Blocked message
- \*S 5) Has new children

Child or sub-branch: These are messages one level lower in the tree hierarchy, for example in the list above, all the listed messages are sub-branches or children of 'TOPLEVEL'.

### Multi-node System Description

Nova Link can multi-task on a number of levels. On the lowest level, it can use desk accessories with smooth animation while a user is on the system, even during xmodem file transfers. On the next level, it can run in the background on Multifinder while another application is running. For instance, you can be word processing while a user is logged on your Nova Link BBS.

A unique feature of Nova Link lies in its own built-in multi-tasking system that allows any number of local nodes, a modem-port node, and a printer-port node to be running all at the same time, even if you don't have Multifinder. Furthermore, you do not need a large amount of RAM to use this multinode feature. Three nodes can be running together quite comfortably with 512K of RAM available to Nova Link, which means one megabyte of RAM (with no RAM disk) can handle many nodes effectively. Furthermore, the multinode system has little overhead, and runs rather fast even on a 68000-based Macintosh (non-Mac II).

The “Edit System Node configuration” command is used to configure how many nodes are running and what device each one is connected to. When you first run Nova Link, there will be two windows, one for the local node and another for the modem node. Additional windows will appear for each any other node operating. You may drag these windows to whatever position you wish, and the next time you

run Nova Link, the windows will appear where you last had them.

Windows also have close-boxes. Closing a window does not make the node inactive, it only makes the window invisible. If you do not wish to monitor a user, you may want to close his window, since this will speed up the system. To make a window visible again, type ⌘-(node number). For instance, type ⌘-1 to open the node-1 window. You can also use these keys to move that node window to the front if it is currently visible.

### Other Interface Features

From anywhere in the system, using the **paste** command from the edit menu will paste the contents of the clipboard to the screen.

The **Wait for Call** menu command on a modem port/printer port node has a check mark next to it when the node is waiting for a caller. Otherwise, the node will act as a primitive terminal program. The modem menu lists baud rates, duplexes, xmodem file transfer commands, and other options.

The **Edit Access Level** menu command will bring up a dialog box allowing you to edit the user's access level and time limit of the current node (the one whose window is up on top). The Permanent button will make his access level and time limit change permanent, and the temporary button will only keep changes during this call until the user hangs up or logs off.

## INDIVIDUAL COMMAND DESCRIPTIONS

The following are a complete list of Nova Link's extended parser commands arranged alphabetically. The asterisk indicates the place to which the command should apply ("h" for here, "p" for parent, "l" for left brother, "r" for right brother, a digit from 0-9 for sub-branch). For numbers greater than 9 type a "#" first, e.g. "#12". Among the possible choices, "here" is the most commonly used.

### Adding a conference

Cmd:Add Conference \*

This command creates a "conference" section where users on different nodes can chat with each other. The conference is created just like a message, and users may enter the conference as they would any message. For a complete list of conference commands see the section "Conferencing".

### Adding messages

Cmd:Add \*

Nova Link will first ask for the name of the message.. This is the name that will appear in the "List" of messages. Then Nova Link will ask for whom it is posted to. This will generally be "ALL" for all users, or, it can be directed to a certain user, "The sysop", or, it can be directed to any group of people: "Dead Heads". There is no limitation on what this string can be. (only length). Then Nova Link will ask for the subject of the message. This can be longer than the name of the message. It is suggested that the name of the message be very clear since it labels that message and all messages below it.

Then you will enter the standard editor to edit the message from scratch. After

editing, you can >>Save or >>Abort.

### Adding Files

Cmd:Add File \*

This command is used to upload a file to the board with xmodem protocol. First Nova Link asks for the name, who this file is being posted to (usually “all”), and the subject. These questions are the same as when adding a message.

Nova Link then asks whether or not you will be using MacBinary. MacBinary is a protocol used for sending a Macintosh file over the modem. Because of the complexity of Macintosh files (not just a stream of data, but two forks, a data fork and a resource fork), transferring any Macintosh file more complex than a standard text file requires the use of MacBinary. Use this only if you have a Macintosh. If you do not have a Macintosh, or are sending a PURE text file (not a Microsoft Word or Macwrite document, but pure text), you should NOT use MacBinary.

Nova Link then asks whether you will be using Checksum or CRC (Cyclic Redundancy Check). These are two types of xmodem transfer. Most older implementations use Checksum, since that is the original standard; some terminal programs such as Red Ryder, however, use CRC; CRC works better and detects more errors than Checksum. If you have Red Ryder, use CRC. If in doubt, use Checksum.

You will then be given a message to start the transfer. To abort the transfer, type control-c a few times quickly. This is the cancel character. In order to prevent line noise from sending this character spuriously and ruining the transmission, two

control-c's in quick succession are necessary to abort the transfer.

### Adding a file section

Cmd:Add File Section \*

This command adds a file section to the target message. You will be prompted for the file section's name, subject, etc. For more information on file sections, refer to the part of this manual dealing with them.

Nova Link will then ask for the directory name of the folder to put the files in. To put the uploaded files in the same folder as Nova Link, type RETURN. Otherwise, type in the pathname of the folder. See the section on pathnames at the end of this manual.

### Adding a flat message base

Cmd:Add Message base \*

In some cases it is useful to have a flat message base. For most conversations, a tree structured message base is superior, since it naturally divides up conversation and organizes it into separate conversations on its own. Sometimes, however, a flat message base is better suited for the job. For instance, an advertising section or a role playing game usually consists of just a consecutive series of messages. In such cases, you can create a flat message base if you have the required access level.

Nova Link will ask you the name of the message base (as seen in the "List" command), whom it is directed to, and the subject (the standard three questions).

Then Nova Link asks for the maximum number of messages allowed on the message base. After the maximum has been exceeded, messages will start to be deleted from the beginning of the message base (earliest messages). It is good to allow a fair number of messages so that they are not deleted too soon. To keep the conversation up-to-date, however, old messages should be retired. The exact number will depend on your BBS's level of activity.

After these four questions, the message base will be added as a child of the message specified, and you can enter it by typing the number of the new message. See the section on “Flat message bases” for more information.

#### Add special messages

Cmd:Add Special ... \*

These commands are used to construct a menu. Although all commands can be issued by typing from the extended parser, it is often more user-friendly to have a menu like a more conventional BBS programs. Nova Link gives you the ability to create a BBS with a main menu and any number of sub-menus below it. If you are conservative, you can use only flat message bases and menu-driven prompts. For more information on creating a menu, read the description of the “Edit System Menu:Menus on” command or the Tutorial.

There are currently 12 special command message that emulate typing a command. They are:

<u>Cmd</u>	<u>Emulated command</u>
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Move Parent	Add Special Back *
Send Chat request... (no equiv)	Add Special Chat request *
Edit Configuration	Add Special DateTime *
Send Feedback	Add Special Edit Term Stats *
Send Node chat request (series of moves)	Add Special Feedback *
Quit confirm:Yes	Add Special Inter-node chat *
Send Bulletin	Add Special Jump *
NewsScan...	Add Special Logoff *
Edit Password	Add Special Message bulletin *
Read Mail	Add Special NewsScan *
Send Mail to: (no equiv)	Add Special Password Change *
List Users (no equiv)	Add Special Read Mail *
(no equiv)	Add Special Send Mail *
	Add Special Text *
	Add Special User List *
	Add Special X-Block *
	Add Special @External application *

### File and Library emulated commands

Read	Add Message base Special Read
Post	Add Message base Special Post
Upload	Add File Section Special Upload
Download	Add File Section Special Download
List	Add File Section Special List
New	Add File Section Special New

Most of these commands are self-explanatory; they emulate the extended parser



command listed.

To have a menu item that will print out the current date and time, use the Add Special DateTime command.

To add a jump message, do the following:

1. Go to the destination message, that is, the message that the user will be moved to upon reading the jump message.
2. Type “Edit X-Mark”. This records the position of this message.
3. Go to the place where you want to add the “jump” message.
4. Type “Add Special Jump”
5. Type the name of this jump message.

That's all there is to it!

For the File and Library commands to work properly you must Edit System Mark-X to link your menu to the appropriate flat file libraries and message bases.

If you have a text resource that you would like to have printed, for instance a BBS List, use the Add Special Text command. It will ask for the name of the text resource, and whether or not to prompt the user for a RETURN afterwards.

The Add Special Newscan command does a newscan in a menu, which can be used to automatically newscan all flat-message bases, file libraries, and tree message bases that are within that level of hierarchy in the menus.

The Add Special X-Block command can be used in conjunction with the Add

Special Newscan command. This command goes through each Flat message base and File Library and asks whether or not to include it in the newscan. In this respect it is like doing a bunch of X-Block's.

Finally, if you have an external application that you want to run under Nova Link, you use the Add Special @External application command. It then will ask you for the pathname of the external application. The external application will be called then from menu mode, or when the message is read in normal mode.

### Adding Votes

Cmd:Add Vote \*

To add a vote topic in the tree, use this command. You will be asked the name of the message. This is the name as seen from the "List" command. Then you will be asked who the message is directed to. "All" usually will suffice. If, however, your poll has to do with the Macintosh for instance, you may want to address it specifically to "Macintosh Users". Next Nova Link will ask you for the subject. These are the three standard questions for almost any message.

You will then be put into the editor. You now edit the QUESTION, which will usually be short, although there is no limit to how long it can be. If you want, you can use a vote to post a long description, and then ask a question at the end.

Nonetheless, this is the message that will be printed prior to asking for the answer. You do NOT have to write the choices in the message, these will be asked by the computer, and you will enter them after you leave the editor. Just ask the basic question here.

Upon using “>>Save” to leave the editor, you will be asked for “Answer#1”. Enter one answer on each line, in the order you want them in, and when you have typed all the possible answers, type a blank line (just RETURN) at the beginning of an “Answer#” prompt. For instance, if you have three answers, “Yes”, “No”, or “Maybe”, then the screen will end up looking like this after you type in all the answers:

```
Answer#1>Yes
```

```
Answer#2>No
```

```
Answer#3>Maybe
```

```
Answer#4>
```

```
Total of 3 possible answers!
```

When a user reads the vote message for the first time, the question will be printed out, then the possible answers will be printed out (along with the numbers), and then the user will be asked for his answer. After typing in his answer, a table will be printed out: for each answer, it shows the number of users who have voted for that answer, and then the percentage of the users who have voted for that particular choice (out of all the users who have voted on this message). After printing the table out for each answer, it tells the number of users who have voted on this message.

If a user reads a vote message that he has already voted on, the question will be printed out, followed by a tabulation of the results thus far.

### Placing and Removing Blocks

Cmd: Block \*

Sometimes there is a part of the tree that just doesn't interest you, and you don't want to have the new scan go through that section. Well, there is an easy way to do it. To block off the "TI99/4a SIG", you would go to the message that is at the top of the SIG, and type "Block Here". You can still enter that section, but the new scan will skip over that message.

When you use the "List" command, blocked messages are marked with an "X".

This command toggles the blocked status of a message. When you first logged onto the board, there were no blocks for you. Then, the "Block \*" command can be used to "Place" or "Remove" a block. When you use this command, it will print either "Block placed" or "Block removed".

### Changing to the basic parser

Cmd:Change to basic parser

Because of the complexity of the extended parser, it sometimes takes a while for new users to get used to it. This command switches the user over to the basic parser. To return to the extended parser, type "C" again.

### Downloading files (for sysops)

Cmd:Download file:

Using this command will download any file on any disk that is available. Type in the pathname, and it will send the file with xmodem protocol.

## Editing the terminal configuration

Cmd:Edit Configuration

This command, accessible by all users, is used to edit their terminal specifications.

This is the type of screen displayed:

- 1) # of columns>80
- 2) Line feeds>Yes
- 3) Destructive BackSpace>No
- 4) Auto list>Yes
- 5) Hot menus>Yes
- 6) No Bother Mode>No
- 7) Logon/Logoff Notify>No
- 8) Terminal type>TTY
- 9) Clear screen character>12

Type \* to see display

Type Return to exit

Config>

The user types the number of the specification to edit, \* to see the current settings, and RETURN when done.

## Editing files on disk

Cmd:Edit File:

This is a command that requires sysop access. It allows the sysop, from remote, to

edit any TEXT file on the system, ANYWHERE on the hard drive or disk drive(s). If the file is on the same disk or HFS folder as the Nova Link application, then you simply have to type the filename, otherwise, you have to type a standard Macintosh pathname. (See the section on “Pathnames”)

Upon entering the filename, if the file exists and is a TEXT file, you will be placed in the editor with the file in the editor. Use the “>>List” command (see the section on “The Line Editor”) to read the current contents of the file. After editing, you can use “>>Save” to save changes to the file, or “>>Abort” to leave the file as it was before.

If the file does not exist, you will be asked whether to create a new file. If you answer “Yes”, a new TEXT file will be created with the name that you specified, and you will be put into the editor with an empty buffer.

### Editing Keys

Cmd:Edit Key \*

See the section on “Menu Mode”. A complete description of how to create and use menus will be found there. This command changes the key that is used to invoke a given command from menu mode.

### Locking messages

Cmd:Edit Lock \*

This command is used by the sysop to lock or unlock a message. If a message is locked, it cannot be deleted by anyone. Suppose that a user posted a message that

started a huge conversation going. He could then Kill his own message because he posted it, and that would delete all the branches below it. To avoid this, the sysop can Lock the message and then it cannot be deleted until it is unlocked.

This command actually toggles the state of being locked. It will print “Message locked” or “Message unlocked” to tell you which occurred.

### Editing existing messages

Cmd:Edit Message \*

This command is used to edit a message after you have saved it. For instance if you saved it hastily, and then noticed an error, you can still go back and edit the error out. To do so, you use this command, after which you are placed in the editor with the message and can make any changes you wish. You can then type “>>Save” to save the changes, or “>>Abort” to abort changes. If you save, then you will be asked whether to add the changes of this message to the newscan. If you answer yes, then no matter how old the original message is, the modified message will appear on everyone's newscan. If you have nothing but a spelling error, then you probably won't add it to the newscan; however, if it is a significant mistake that might have given false information, you will probably want to add it to the newscan so that everyone will see the corrected message.

There are some restrictions to edit after save. If anyone could edit their old message, then there could be a lot of confusion. For instance, imagine if a message were posted with an error, and then someone else responded to the message, pointing out the error to set the record straight. Suppose the user who posted the original message went back and fixed the error. Now the reply written by the

second user which pointed out the error makes no sense at all because there IS no error anymore. For this purpose, we give the sysop four edit after save restriction modes:

None	Never allow edit after save (except for sysops)
Always	Always allow edit after save
If no children	Allow edit after save if the message has no children
If not read	If the message has not been read by anyone else.

The mode can be set with the “Edit System Flags” command.

There are two exceptions to the above rules:

1. A Sysop can ALWAYS edit ANY message, no matter which mode is set.
2. A non-Sysop can NEVER edit someone else's message, no matter which mode is set.

We recommend that you use “If no children” to start, since this simply gets rid of the “reply not making sense” problem.

### Creating a menu

Cmd:Edit Message Menus on

You can create a menu anywhere in the tree. You may wish to make the toplevel a menu so that the BBS has a familiar “main menu.” You can add other menus beneath the main menu and make the menus hierarchical in nature.

To make a menu:



1. Start out with a message (to be the menu), such that the message content is the text of the menu. To do this, either “Add \*” a message, or “Edit Message \*” an existing message (such as the toplevel) so that the text of the message is the text of the menu. The message will be the header, followed by the choices, and the last line will be the prompt. After typing the prompt in the editor, type CTRL-W instead of RETURN to terminate the line. This is to avoid skipping to the next line when the prompt is printed.
2. Starting at the top of the to-be menu, create each menu choice as a child of the to-be-menu-message. Use the “Add Special ... \*” command (see description above) to add menu items that mimic extended-parser commands such as chat request, logging off, send/read email, and the “Add Special Back” command (if this is not the topmost menu) to go back one menu. Also, if you need more flexibility than just going back one hierarchy (for instance, go to the TOP, or jump to a different place in the tree), use the “Add Jump \*” command to make a jump message (see description above). To create a “Tree” message base within the menus, just add a normal message with “Add \*”.
3. The menu choices are activated by letters and/or symbols. For each menu item, or with the current message at the to-be-menu message, use the “Edit Key” command. See below for details on how to use the “Edit Key” command.
4. Use the “Edit Message Menu on” command. This will turn the message into a menu. As soon as you type the command, the menu will be printed out.

To turn off menu mode for this menu (to edit it, or if you forgot to make a command to get out of it), type “@” (at sign). This command will only work if you have sysop access, so that users cannot corrupt the system.

More on Edit Key.

To edit the key for a given menu choice, while at the menus message, type “Edit Key” then the number of the menu choice (use “List Here”). It will then ask for the key that will be used to activate that menu choice. Type the key...

### Changing your password

Cmd:Edit Password

This command allows you to change your password.

### Editing Read and Write access of a message

Cmd:Edit Read access \*

Cmd:Edit Write access \*

This command is for sysops only. It edits the read access or write access of a particular message.

The read access is the access level necessary to even see that the message exists. For instance, if you have the “sysops section” as a child of the toplevel, if you set the read access of the “sysops section” message high enough, normal users cannot even see that the message exists.

The write access is the access level necessary to add a child to the message. For instance, the sysop may want to make the write access of the toplevel very high so that ordinary users cannot add more branches to the toplevel (only to messages within the toplevel)

See the section on “Access levels” for info on how access levels are compared.

### Editing the system access levels

Cmd:Edit System Access levels

This command is used to set the fundamental access levels of the system that give a user access to various commands. Any commands that a user doesn't have access to are completely invisible: they don't even appear to exist.

After entering the command, you will see this screen:

```
A)New user access level : 100 : 100 : 100 : 100
B)Kill access level : 900 : 900 : 900 : 900
C)Sysop utilities access level : 900 : 900 : 900 : 900
D)Vote access level : 100 : 100 : 100 : 100
E)New files access level : 800 : 800 : 800 : 800
```

Type Return to exit

Type \* to see display

SysAccess>

Type the letter of the access level to edit, \* to see the current settings, or RETURN to go back to the main command line.

The new user access level is the access level given to new users. The kill access level is the access level needed to kill any message (even if it isn't yours). The sysop utilities access level the access level needed to access many sysop

commands and functions. The vote access level is the access level necessary to create a voting topic. The new files access level is the read access level (see the “Edit Read Access” command) given to a newly uploaded file in the tree, used to make new files only accessible by sysops until validated.

### Editing the system flags

Cmd:Edit System Flags

This command governs various aspects of you board's behavior.

These are the general categories:

- E) Editor flags
- L) Log flags
- W) Logon flags
- U) User list flags
- R) User flags
- T) Tree flags

### Editor Flags

Abort verification?Yes

Cut off in editor if time expires?No

“Abort verification” means that Nova Link will ask the user to confirm an “Abort” command, before terminating the editing session. The next flag determines whether a user will automatically be logged off, even while using the editor.

Generally, it is more polite to allow the user to finish the message, before signing him off. However, Nova Link does issue warning to the user at five and two minute before time expires.

### Log Flags:

- L)Add logons & logoffs to user log?No
- P)Add posts to log?No
- N)Add new users to log?No

These flags govern what information is tracked in the userlog. (The userlog can be read with the “Read Userlog” command).

### Logon Flags

- A)Print total # of calls?
- B)Print total # of calls today?
- C)Print last caller's name?
- D)Print last call time?
- E)Print time of this call?
- F)Print # of calls by the user?
- G)Print posts/uploads/downloads/mail?

These flags govern the information displayed when the user logs on. You may show the user the total number of calls your board has ever received, that it received today, who the last caller was, the last time this user called, the current time, the total number of calls from this user, and a list of the number of messages

posted, files downloaded, uploaded, and letters sent.

### UserList Flags

F) Display calling from in user list?No

T) Display computer type in user list?No

These flags determine the type of information displayed when a user issues a "List Users" command. Nova Link may display each user's home city and computer type if you wish.

### User Flags

H) Allow handles?Yes

P) Private board (no new users)?No

W) Where is user command accessible by all users?Yes

These flags affect how Nova Link handles users. You may or may not allow "handles" or nicknames for your users; you also may restrict membership to the current users. The "where is user" command allows users to find out what other users on other nodes are currently doing. If the flag is "no" then only sysops will be able to use the "where is user" command.

### Tree Flags

E) Edit After Save?

S) Start message numbering at 1?

T)Print time left at command line?Yes  
D)Auto delete files that have been killed?No  
U)Make new uploads in file libraries public  
immediately?

These flags determine various other actions in the tree. You may allow your users to edit their messages even after they have already been posted—always, only if their are no sub-branches or never. You may start message numbering at another number besides one; you may not have the time remaining printed at the command line. The last two options are usually reserved for private boards: you may choose to have files that have been “killed” either immediately removed, or wait for your decision. You may also have uploaded files made publicly available without waiting for you to review them.

### Editing the node configuration

Cmd:Edit System Node configuration

This command displays a menu like the following:

```
Node Configuration
-----
N)Number of nodes: 2
S)Stack size: 16384
1)Node 1 device:Modem Port
2)Node 2 device:Local terminal
```

Type \* to see display

Type RETURN to exit

NodeConfig>

"N" will prompt you for the number of nodes; "S" will prompt you for the stack size each node will have. 16384 is the recommended minimum. For each node menu number, you may type "L" for local terminal, "P" for printer port, and "M" for modem port. The changes you make here will not be made until you restart Nova Link. If make a mistake with these settings, and cannot restart Nova Link as a result, hold down the OPTION key while starting up Nova Link. This action will create one local node, so you can logon and use Edit System Node Configuration to fix your mistake.

### Editing system parameters

Cmd:Edit System Parameters

Used only by the sysop, this command edits the system parameters. Upon entering this command, the following type of display is printed:

A) # calls:62  
B) New user starting time:30  
C) Last call time:11:27:21 9/11/87  
D) Calls today:4  
E) Last caller:The Sysop  
F) Password echo:\*\*\*\*\*  
G) Chat bell rings:3  
H) BBS's phone number:4013511465  
I) Logon time:5 min



J)New user time:15 min

Type Return to exit

Type \* to see display

SysParam>

You then type the letter of the parameter to change, \* to see the current settings, or RETURN to exit to the main command line.

### Editing the sigops of particular section

Cmd:Edit System Sigops \*

Often a sysop will want to have SIGOp (Special Interest Group Operators), who will run a particular section of the tree. This technique is handy to lighten the load on the sysop. In addition, SIGOps often have more expertise in a particular field of interest, and are better suited to run a section. In any case, the sysop may want to allow these sigops to:

1. Have special sysop privileges such as Killing messages and Editing after save ONLY in his or her section.
2. When a user sends feedback in a particular section, to have the message sent to the sigop of that section.

Every message in the system has a list of sysops that own that section. The sysop of the BBS should be in the list of EVERY message on the system

Upon entering this command, the current list of sysops in this section will be

printed out. You will be given the option to “Add” a sysop, “Remove” a sysop, or to leave the sysop editor.

The screen will look something like this:

```
Current sigops of Toplevel:
```

```
The Sysop
```

```
The Cosysop
```

```
EditSigops (Add/Remove/Return) :
```

At the command prompt, type “A” for “Add ”, and then the name of the user/sysop/sigop to add to the list, or, “R” for “Remove ” and then the name of the user/sysop/sigop to add to the list. After typing “A” or “R”, you can type a RETURN to abort the “Add ” or “Remove ” operation.

After Adding a Removing a sysop, You will be asked whether or not to “Make lower-global change(Y/N)?”. If you answer “Yes”, then not only will that sysop be added/removed from this message, but all the messages below this one in the hierarchy (that is, this message's children, and grandchildren, etc) will reflect this change. You will usually want to make a lower-global change. For instance, suppose the Macintosh SIG has been around for a long time with “Joe Bloggs” as the SIGOp. There are MANY messages. Then you decide that Joe Bloggs is incompetent and should be replaced with “Mac Master”. Well, you would go to the top message of the Mac SIG, “Edit System Sysops Here”, “Remove Joe Bloggs”, and make it a “lower-global change”, and then “Add Mac Master”, and make it a “lower-global change”, so that all the children messages are affected also.

### Verifying new Users

Cmd:Edit System Verify Users

This command will locate all users who have not been verified. You may use this command to keep your user lists up-to-date.

### Editing text resources

Cmd:Edit Text:

This command is used to edit a text resource. Almost all messages are actually text resources stored in the "STR FILE". For instance, when a user FIRST calls the system, (before he even types his password), the text message "Welcome" is printed out. Or, in the extended parser, when the user types "?" or "H" for "Help", actually, the text resource "ExtendedHelp" is printed out. You can add your own text resources for personal use even if they are not intrinsically printed out by Nova Link. To edit a text resource, type this command "Edit Text:", followed by the name of the text resource. If you type the name of a text resource that doesn't exist, you will be asked whether or not to create one.

You will then be placed in the editor, with the current text of the resource in the editor. After editing, you can ">>Save" or ">>Abort".

This command is only usable by sysops.

### Editing users

Cmd:Edit User:

This command, accessible only by sysops, edits a user on the system. Upon entering the command, the following type of display is printed:

```
User#1:A)The Silver Warrior   is  b)Mark  C)Weaver
Password:D)TESTING  Phone:E)4012455384
City&St:F)Barrington, RI  Computer type:G)Macintosh II
First call:H)20:40:16  8/25/87  last call:I)11:27:21
9/11/87
Time allowed per day:J)999  time used today:K)255
# calls:L)41  # posts:M)10  # uploads:N)0  #
downloads:O)0  # email:P)1
Access level  Q)  : 1000  : 1000  : 1000  : 1000
%)Repair user structure
V)erify user
Z)Delete user

Type RETURN to exit
Type * to see display
UserEdit>
```

Type the letter of the parameter to edit, “%” to repair a user's structure (after a system crash) “V” to verify a user, “Z” to delete the user, \* to see the current settings, or RETURN to return to the main command line.

### Placing a Mark at a message

Cmd:Edit X-Mark \*

This command keeps a temporary “bookmark” at this message for use by a later command. This command is only accessible by sysops. This command indicates where an “Add Special Jump \*” message should jump to, and which message to move to with the “Move Message \*” command.

### The Help System

Cmd:Help

In either parser, typing “H” or “?” will print a help menu. Actually Nova Link will print the text resource “basichelp” or “extendedhelp” depending on which parser you are currently in. (See the section on “Editing text resources” above).

Additionally, in the extended parser after typing any number of letters, for instance “Add Special ”, you can type “?”, and Nova Link will print out a list of possible relevant commands. Nova Link will then return you to your original place. The name of the text resource that is printed when “?” is pressed in the middle of a command consists of the name of the command, plus “help”, without spaces or punctuation. For instance, the “Add Special” help is named “AddSpecialHelp”.

### Killing messages

Cmd:Kill \*

This command kills the given message, and all of its descendants. Sysops can Kill ANY message, but users can only kill messages that they “own” (that they themselves wrote). If the message is locked, Nova Link will give an error message. If a descendant of the message is locked, it will delete everything else,

and move that descendant to where the main message was. For instance, if you kill “Poor Message”, and it has a descendant “Locked Message”, then Poor message and all of its descendants except for “Locked Message” are deleted; and then “Locked Message” is put where “Poor Message” used to be.

After the message has been killed, the user is put at the parent of the message that was killed.

### Killing old files

Cmd:Kill Downloads:

This command permanently kills any files that users may order killed in the file sections. Depending on the status of a system flag, files that users kill may not be deleted from the disk, just from the tree. A sysop must use the “Kill files” command in Read Disk to decide which files to keep and which to erase from the disk. This command will ask for the name of a text resource (default is “filestodelete”). The text resource consists of a list of filenames, one per line, of files that may need to be deleted. This command will go through each file and ask whether or not to delete it. The “filestodelete” text resource is appended to (or created if necessary) when a file in the tree is killed, or a file in a file library is killed. If the system flag “Auto delete files that have been killed” is set, then the files will be deleted automatically when the message is deleted; however, if the system flag is clear, then the filename will be appended to the “filestodelete” text resource for Sysop to review before permanently deleting the file.

### Killing a file on disk

Cmd:Kill File:

This command deletes a file on disk. The sysop will be asked for the name of the file to delete.

### Killing a text resource

Cmd:Kill Text:

This command kills a text resource. The sysop will be asked for the name of the text resource to delete.

### Listing the ancestors of a message

Cmd:List Ancestors \*

This command lists all the ancestors of a given message starting with the specified message. For instance, an example might be:

```
[999]Command>List Ancestors Here
```

```
Ancestor listing
```

```
INF Treaty
```

```
Russia
```

```
Politics
```

```
Hobbies
```

```
Toplevel
```

This command is especially useful during a newscan, in order to find out where you are.

### Listing the files in a folder

Cmd:List Files:

This command lists all of the files in a specified folder. See the section on pathnames for more information.

### Listing the users

Cmd:List Users

This command, accessible by all users, lists all the users on the BBS, in order of User ID. It will ALWAYS print at least the User ID and Handle. Depending on the two System Flags (see “Edit System Flags”):

Q) Display calling from in userlist?No

R) Display computer type in userlist?No

it may also print where the user is calling from, and his computer type.

### Listing text resources

Cmd:List Text resources

This command prints a list of the names of all the text resources (see 'Edit Text') that are in the current setup.

### Listing the children of a message

Cmd:List \*



This command is used to list the children of the given message.

The format is:

Listing of TOPLEVEL

```
    1)Normal message
N 2)New message
* 3)Has Children
X 4)Blocked message
*S 5)Has new children
```

The first column has an asterisk if the message has children; the second column has new scan information (“N” means that the message itself is new, “S” means that although the message is old, it has new descendants, and “X” means that you have blocked with the “Block” command).

After the two reference columns, the message number and NAME are printed.

### Moving around the tree

Cmd:Move \*

To move to a child of the current message, simply type the number of the child to move to. If the child is new the message will be automatically read.

To move to the “Parent”, “Left”, “Right”, “Toplevel”, or a “Brother#”, type the “Move”, and then the corresponding letter, “P”, “L”, “R”, “T”, or “B”.

## Doing a New scan

Cmd:New scan

Every time a user calls, he or she should order a newscan. To do so, first move to the toplevel, (or, the section to do the newscan on), and then type “N”. This command will search down the tree for the next new message, read it, and then leave you at the command prompt. Then you can either type “N” again to read the next new message, or “Add \*” to reply to the message that you just read, or any other command you like. When you are done with the newscan, or type “N” and, if there are no new messages, Nova Link will tell you that there are no more new messages.

Note: This command will only newscan the messages below the tree location you start at. This allows you to new scan a particular section of the tree. To newscan the entire tree, use the “Move Toplevel” command to start at the top.

## Reading messages

Cmd:Read \*

Although you will usually read the new messages with the “Newscan” command, you can explicitly read a message using this command.

## Reading a file on disk

Cmd:Read File:

This sysop command will read any available text file on disk.

## Reading Mail

Cmd:Read Mail

This command will check your mailbox, and, if you have any mail waiting, will start with the first letter. For instance:

```
From:The Silver Warrior Sent at 15:02:23 on 9/11/87
Subject:Test Mail
```

This is a test of the Nova Link mail system.

```
A)gain N)ext D)etele E)xit R)eply>
```

You will be given the option to read (A)gain, read (N)ext message (without deleting this message), (D)eleting this message then going to the next message, (E)xiting to the main command level, or (R)eply to this message, (that is, send mail to the person who sent this message).

If you use the “Reply” command, then a new command will be added to the editor. if you type “.RM”, “>>Read: Mail” then it will read the message that you are replying to. For instance:

```
>>Read: Mail
```

```
From:The Silver Warrior Sent at 15:02:23 on 9/11/87
Subject:Test Mail
```

This is a test of the Nova Link mail system.

Normally, after reading each piece of mail, you will “Delete” it so that you won't have to read it again.

When you logon to the system, if you have any mail waiting, Nova Link will tell you and give you the option of reading your letters.

### Reading text resources

Cmd:Read Text:

This sysop command reads the contents of a given text resource.

### Reading the userlog

Cmd:Read Userlog

The userlog is a TEXT file that keeps a log of system activity. You can select which events are to be added to the userlog with the “Edit System Flags” command. Upon entering this command, the userlog is printed, and then you are given the option to read (A)gain, to (C)lear the userlog, or to (E)xit to the main command level.

Only sysops have access to this command.

### Doing a newscan

Cmd:Newscan.

This command starts with the current message and scans the tree message base until it finds the next message that you haven't read. Nova Link then stops at that message, and reads it. You can type any commands you wish at that point, including adding a message as a reply, sending mail, logging off, or whatever. To resume the newscan, type "N" again. Note that the Nova Link newscan keeps track of each and every message with a flag indicating whether you have read it yet. Calling up Nova Link and ordering a partial or no newscan will not affect any future newscan.

#### Printing the header of a message

Cmd:Position \*

This command prints the header of a given message

#### Logging off

Cmd:Quit

To log off the system, type "Q" (the system will print "Quit Confirm:."), and then you must type "Y" to confirm, or any other key to return to the main command level.

#### Sending a bulletin to another user

Cmd:Send Bulletin

This command sends a "bulletin" or short message to a user on another node. Nova Link displays a list of users and their nodes and prompts you for the number of the node. The bulletin will appear on the addressee's screen.

### Sending a chat request to the sysop

Cmd:Send Chat request...

This command will either tell the user that the sysop is not available, or ring the Macintosh bell for a few seconds, depending on whether the sysop has his “Chat available” menu item (in the sysop menu) checked. See “Send Node Chat Request” to chat with another user.

### Sending Feedback to the sysop/sigop

Cmd:Send Feedback

This command, accessible by all users, lists the sysops of the current section (see the “Edit System Sysops” command), and lets the user pick which sysop to send feedback to. Then Nova Link asks for the subject of the message, before putting you in the editor to type the message.

### Sending Mail to another user

Cmd:Send Mail to:

To send mail to another user, type “SM” and then the handle or user ID of the user to send mail to. You will then be asked for the subject of the message, before being placed in the editor.

With this command, there is an added feature to the editor. The user can type “.SC” “>>Save a copy as:”, and then type the name of ANOTHER user to send mail to. This will send a copy of the CURRENT version of the text to the given

user. This command does NOT add onto a list of people to be sent mail to when you do a final save. It sends mail as is, so, if you wish, you can send slightly different versions to different users.

### Sending a Chat Request to another user

Cmd:Send Node Chat Request

Nova Link will display a list of users and their nodes, and ask you which user you wish to chat with. The other user will receive a message informing him of your request. If he wishes to chat with you, he must send you a Chat Request. See “Send Chat Request” to chat with the Sysop.

### Sending a Mail reply to a tree message

Cmd:Send Reply to ...

If you type “.SR”, Nova Link will print out the name of whom are you sending mail to (this will be the author of the current message). For instance, Nova Link may print: “Send Reply to The Sysop” (if the sysop was the author of the current message). Nova Link will then ask for the subject of the mail, and then put you into the editor as if you used the “Send Mail to:” command.

### Locating a user on another node

Cmd:Where is user...

This command displays a list of users and their nodes, and prompts you for a node number. Nova Link will then tell you where that user currently is on the BBS.

This command is accessible by Sysops, and, if the appropriate system flag is set,

by other users.

## APPENDIX

### Conferencing

Nova Link has a powerful conferencing feature in which several users can communicate with each other simultaneously. Below is a summary of available commands while in a conference.

### Conference commands

- ? Help
- L List users in conference
- P Private chat with a user
- B Send bulletin to a user
- R Roll dice: Example "3d6"
- E Echo typing on/off
- I Interrupt your typing enable on/off
- C Conference lock/unlock (for sigops)
- N Notice on door (for sigops)
- K Kick out user in conference (for sigops)
- Q Quit conference

"?" prints out the text file "ConfHelp." "L" lists all the users in a particular conference. "P" allows two users to enter a private conversation in which their messages are not made visible to other conference users (see "Send Node chat request" command). "B" sends a bulletin to a user anywhere on Nova Link (see "Send Bulletin" command). "R" generates random numbers in the format n "d" s where n is the number of "dice" and s is the number of sides each die has. For instance "3d6" rolls three six-sided dice. This is useful for game-playing. "E"



turns echo on or off, it determines whether what you type will appear on your screen before the message is seen by others. "I" disables interrupts, that is, you will not see other user's messages until you are finished typing your own. The next three commands are for sigops or sysops only: "C" locks the conference, not allowing anyone else to enter. "N" posts a notice that appears when users enter the conference. "K" expels users. "Q" (available for all conference users) quits the conference.

### Access Levels

Each access level has 4 numbers that can range from 0-1000. The purpose of this system instead of having just one number is flexibility. Suppose that you have an "Elite Programmers" section, and an "Elite Musicians" section. With most BBS programs, there is no way to give the an elite programmer access to the programmers section and not the musicians section, and vice versa.

With Nova Link, you can make the first access level "Programming ability", and the second access level "Musician ability". And then give the programmers section an access level like: 500,0,0,0, and the musicians section an access level like: 0,500,0,0.

In order for a user to have access to a particular section, each of his four access levels must be equal or higher than the corresponding quarter of the required access level.

The standard way of displaying access levels is to separate them by colons. For instance:

Access Level: 300 : 100 : 400 : 0

The standard way of editing an access level is by typing in the numbers, separated by colons (or semi-colons). typing a colon when you haven't typed an access level yet fills in the old access level (of that fourth), and typing RETURN fills out any information that you haven't already filled out.

### Basic Parser

This is the parser that new users are originally put in, however, it is suggested that every user eventually gets used to the extended parser. Basically, the basic parser commands are a subset of the extended parser commands, and these are the commands:

<u>Basic command</u>	<u>Equivalent Extended command</u>
Add	Add Here
Back	Move Parent
Feedback	Send Feedback
Help	Help
Kill	Kill Here
List	List Here
New scan...	New scan...
Quit	Quit confirm:
Read	Read Here
Send Chat Request	Send Chat Request
X-Block	Block

All commands in the basic parser are one keypress (the first letter of the meaning).

To switch between parsers, type “C”. “Change to extended parser”

### Flat message bases

To enter a flat message base, move to it. Upon doing so, you will get the following display:

```
Message base:D&D
Message range:1-4
There is 1 new message.
Your highest read:3
Command>
```

Your highest read keeps track of what messages are New to you. The commands from this mode are:

- E Exit message base
- N Newscan (same as RN command)
- P Post
- RF Read forward from #
- RR Read reverse from #
- RI Read individual:
- RN Read New

With the “Read individual:” command, you may specify line ranges, as in the line editor. See the section on the line editor for more information.

Upon reading a message in the message base, you will get the following prompt:

```
A)gain N)ext R)eply Q)uit    Command>
```

You can read the message (A)gain, read the (N)ext one (for RF, RR, and RN), you can (R)eply to this message (post to the author of this message), or (Q)uit to the flat message base prompt.

### File Libraries

Though the facility of putting files in the tree is very useful and can be ideal for some situations, there are many instances when a more conventional 'library' approach would work better, for instance if you wanted to make all of the Macintosh Technical Notes available on your BBS. In the tree, they would be clumsy at best. However in a library, they are easier to access and to add.

To start a file library, just use the 'Add File Section \*' command in the extended parser. To enter the file library, just move into it.

Once you are in the file library, you get a display that says the name of the library, the range of the file numbers, and the number of files that you haven't seen yet.

You have the following commands available:

D)ownload:Download a file. You may either type in the file number, or it's name. It will then give you the long description of the file, and ask you if you want to continue with the transfer. Then it asks you the transfer type, and starts the transfer.

U)upload: Upload a file. You are asked to name the file, type in a short description for it (76 characters), and type in a long description for it (as long as you want using the editor). Then you start sending the file to the BBS.

L)ist files: This will print out a list of all the files, how many times they have been downloaded, the date they were uploaded, their size, and their short descriptions.

N)ew files: This will print out a list of all new files in the same format as the list above.

R)elease file: This command, accessible only to sysops and sigops of the current section, will make the file public to all users. When a file is first uploaded, it is put in a private section, for the sysop to check it out before it is made public. If the system flag (see Edit System Flags) "Make new uploads in file libraries public immediately" is on, then new uploads are immediately made public. If this command is used on a file that is already public, the file will be put back into the private section. This command also checks to see if the file exists, and checks the file size.

K)ill a file: This will delete a file. You must either be a sysop/sigop for this section or you must have uploaded it. If system flag 'V' is yes, then the file on the disk will be erased, otherwise it will remain and the file name will be put on a list of files for the sysop to pass judgement on (see 'Read Disk').

### The Line Editor

The line editor is a very powerful editor that allows you to edit any sort of text up

to 32767 line, or 2 gigabytes, whichever is smaller. Although it is a line editor, in some ways it acts like a word processor. Unlike most line editors which can only deal with lines, this line editor deals

with words: it word wraps at the end of the line, it keeps track of the ends of paragraphs so that the text can be automatically reformatted for different width screens, and upon editing, inserting, moving, etc, it can re-justify the line breaks and compress the text as much as possible without breaking words over lines.

The editor commands are:

- .A Abort
- .S Save
- .E Edit lines
- .D Delete lines
- .F Find/Replace text
- .I Insert lines
- .X Xit insert mode
- .L List (with line numbers)
- .R Read (without line numbers)
- .J Justify text from a certain line number onward
- .M Move line range to another place
- .C Copy line range to another place

Ctrl-C can be used to abort in many places...

When you type a "." at the beginning of a line, a ">>" will be echoed to inform you that you are now typing a command. If you want to put a period at the

beginning of a line (in the actual text), type two consecutive periods (“..”).

To specify line ranges, you may specify a list of line ranges separated by commas. A line range can be a single line number (9), a range of line numbers (9-12), a range with an upper bound (-5), a range with a lower bound (120-), or the entire file (-) (just a dash). You can combine various ranges by using commas. For example: “>>Delete:-5,7,10-12,15,20-” You do not have to worry about the order of deleting lines. If you “>>Delete:1,3” Nova Link will correctly delete the first line and the third.

The “Justify” command requires only one line number, the line number at which to start justifying. Nova Link will justify all lines from that line onward.

“>>Justify:1” will justify the entire text buffer.

The “Insert” command also only takes one line number, the line AFTER the place of insertion. For example, to insert between line 3 and 4, use “>>Insert:4”.

With “Move” and “Copy”, you must specify only 1 line range, and a destination line to insert at. You can type this in one of two ways. You can type just the source range, then RETURN, for example “>>Move:3-6”, and then it will ask you for the destination line, for example “Move to:9”. There is also a shortcut. You can type a “>” between the source range and destination range, for example “>>Move:3-6>9”

Most commands have a default line range. To use the default, type the command, but then type RETURN without typing any line range, and Nova Link will type it for you. “Edit” and “Delete” use the last line entered as the default, (or in insert

mode, the last line inserted). “List” and “Read” use ALL lines as the default (“-”). “Justify” uses line 1 as the default (to justify ALL lines).

The way the editor keeps track of paragraph ends is by remembering for each line whether you ended it by pressing return or with the automatic word-wrap.

However, when you edit a line, even though you press return to finalize changes, it will not change whether it was considered the end of a paragraph or not. You can force it to make that line the end of a paragraph however, if you end the line with a Ctrl-E (End paragraph). You can also force it to NOT make it the end of a paragraph by ending the line with Ctrl-T (Terminate line). Normally, while typing in text, you won't have to worry about these control characters, because you will only type RETURN for paragraph ends, and let word-wrap do the rest. However, Suppose you had the following three lines:

```
This is a test of the emergency system. If this were an
actual emergency,
you would be notified of where to go and who to see
when you got there.
But this is not an actual emergency, so forget about
it.
```

We forgot “broadcast” in the first line. Wuppose this is really part of a big paragraph, and it would be inconvenient to retype it, but you want the word wrap to look nice. Well, this is no problem, do the following:

```
>>List:1-3
```

```
1:This is a test of the emergency system. If this were an actual emergency,
```



2:you would be notified of where to go and who to see when you got there.

3:But this is not an actual emergency, so forget about it.

>>Edit:1

Original line #1

This is a test of the emergency system. If this were an actual emergency,

Retype line, start with period (.) to start with original

This is a test of the emergency broadcast system. (Ctrl-T)

>>Insert:2

If this were an actual emergency, (Ctrl-T)

>>Exit insert mode

>>List:1-4

1:This is a test of the emergency broadcast system.

2:If this were an actual emergency,

3:you would be notified of where to go and who to see when you got there.

4:But this is not an actual emergency, so forget about it.

>>Justify:1

>>List:1-3

1:This is a test of the emergency broadcast system. If this were an actual

2:emergency, you would be notified of where to go and who to see when you

3:got there. But this is not an actual emergency, so forget about it.

For a three line paragraph, it may not be worth it to do all that, but if you have a long paragraph, it can be very helpful.

### Details on CTRL-T:

The primary purpose of CTRL-T is to insert or delete words in a line, and then being able to re-justify it, or allow a user with a different screen-width to see it

formatted correctly. Therefore, CTRL-T forces a SPACE at the end of the line, if there isn't already one. This is so that the last word on the current line and the first word on the next line have a guaranteed space between them. If they are going to be on separate lines, they must have a space between them. Usually this is exactly what you want to do. However, sometimes you will want to suppress that automatic SPACE. For instance, if you are writing a message to be made into a menu, the last line must be the prompt. You don't necessary want a space at the end of the prompt. Another important time to suppress the SPACE is when editing the Modem Configuration Text Resources (see below). To end a line without a return and without a space, type CTRL-W. The "W" stands for "Without-space".

### Find/Replace:

The line editor's find command is a very powerful find/replace command that allows you to find any sequence of text, even across line boundaries, and then replace all/some of the occurrences with different text, automatically re-adjusting line breaks and word-wrap. The find command treats upper and lower case the same. Here is an example of the find command:

```
>>Read:-  
  
this is a test of the emergency broadcast system. If this were an actual  
emergency, you would be notified of where to go and who to see when you got  
there, but this is not an actual emergency, so forget about it.  
  
>>Find:emergency  
  
Searching...  
  
1:this is a test of the emergency broadcast system. If this were an actual  
          ^^^^^^^^^^  
  
Find[(N)ext, (X)it, (R)eplace, (A)ll]:
```

Notice that the editor lists the line, and underlines the occurrence with carats. If the occurrence is more than one line, each line is printed and underlined. The user is then given the option to skip and find the (N)ext, (X)it to the editor, (R)eplace this occurrence and find next, or replace (A)ll occurrence from this one forward. Each time you use a replace command, it starts with the last thing you replaced with, and then you can edit it or leave it as it was.

### Text Resources List

Note: In text resource names, there is no difference between uppercase and lowercase lettering.

BasicHelp	Printed when ? is typed in Basic parser.
BasicPromptHelp	The prompt line displayed in the Basic parser when beginner mode is active.
BeginnerMode Help	Help text displayed when user requests help on Beginner mode configuration prompt.
ChatRequest	Text printed when user requests Chat with Sysop.
ConfHelp	Printed when ".?" is typed in a conference.
Download	Text to tell user to begin receive file.

EnterChat	Text displayed when entering chat mode with Sysop.
EnterConf	Text displayed when entering a conference.
EnterEditor	Text displayed when entering the line editor.
ExitChat	Text displayed when leaving chat mode with Sysop.
ExitConf	Text displayed when leaving a conference.
ExtendedHelp	Printed when ? is typed in Extended parser.
ExtendedPromptHelp	The prompt line displayed in the Extended parser when beginner mode is active.
FlatHelp	Text displayed when ? is typed in a flat message base.
FlatPromptHelp	The prompt line displayed in a flat message base when beginner mode is active.
FlatReadHelp	Text displayed when user types "Read ?" in a flat

ForcedHangup	message base. Text displayed to user when Sysop selects "Forced Hangup" menu item.
Hangup	Text displayed when user logs off.
HotMenus Help	Help text displayed when user requests help on HotMenus configuration prompt.
Launch	Text displayed when an external application is entered.
LibraryHelp	Text displayed when ? is typed in a file library.
LibraryPromptHelp	The prompt line displayed in a file library when beginner mode is active.
LineEditHelp	Text displayed when ".?" is typed in the line editor.
Logon	Text displayed after user successfully enters password.
LogonLogoffNotify Help	Help text displayed when user requests help on

	Logon/Logoff notify configuration prompt.
ModemAnswer	Specifies the connect strings sent by the modem.
ModemAnswerP	Same as above for printer port.
ModemAsk	Specifies string sent by modem when connect message is garbled. It should ask the user to press Return.
ModemAskP	Same as above for printer port.
ModemHangup	String sent to modem to hang up.
ModemHangupP	Same as above for printer port.
ModemInit	String sent to reset modem.
ModemInitP	Same as above for printer port.
NewUser1	Printed to new users before asking standard questions.
NewUser2	Printed to new users after asking standard

NoBother Help	questions. Help text displayed when user requests help on No Bother mode configuration prompt.
NotAvail	Text displayed when user requests chat with Sysop and Sysop is not available.
ShutDown	Text displayed to all users when Sysop selects the "Shutdown" or "Quit" menu items.
ShutDown5	Text displayed to all users when Sysop selects the "Shutdown in five minutes" menu item.
Termtype Help	Printed when user types ? at terminal type prompt.
UnShutDown5	Text displayed to all users when Sysop cancels the "Shutdown in five minutes" menu item.
Upload	Text to tell user to begin send file.
Welcome	Text displayed when modem connection is made and

before Nova Link asks for  
user ID.

In addition to the text resources listed above, other help files exist. After the first keyword of each extended parser command, the user may type a question mark and receive help on that command. The help file consists of the name of the commands typed thus far, without spaces or dashes, and with a “help” at the end. For example: help for the “Add Special” commands is “AddSpecialHelp”. Another example: help for the “Edit X-Mark” command is ”EditXMarkHelp”. If the resource for one of the extended help resources does not exist, Nova Link will ignore the “?” typed by the user.

The sysop can also create his own text resources for personal use. A complete list of text resources is printed out with the “List text resources” command.

### Control Characters

There are three control characters that are standards in the system:

Ctrl-C Aborts most messages and lists

Ctrl-S Pauses, stops output

Ctrl-Q Resumes output

The sysop can type control characters using the OPTION key on the Macintosh, or, if he has a Macintosh SE or Macintosh II, he can use the CONTROL key. Red Ryder users use the option key, or the buttons in the upper right corner of the window. Other users: most other computers have a control key or some method of typing those standard control characters. If there is no control key, try a button like



“start/stop”, or “Pause”, or “Abort”..

### Embedded Text Commands

Nova Link gives the sysop the ability, in any messages, to make certain parts of the message visible, and certain parts invisible depending on the user reading it, and on the time it is read, etc. These “embedded commands” are entered with the line editor by typing Ctrl-Z at the beginning of a line, (which echoes a “[ ]EditCmd[ ]:”), followed by the command letter and parameters.

The format of the data after the “[ ]EditCmd[ ]:” (Ctrl-Z) is as follows: the first character is a letter which tells Nova Link what command this is. the rest of the characters are the parameters, which depend on the command.

In the line editor, the Ctrl-Z at the beginning of the line is shown as “[ ]EditCmd[ ]:”, however, when the message is printed anywhere else, it is NOT shown, but instead toggled an “enable read flag” depending on the conditions.

At the beginning of any message, the “enable read flag” is ON, meaning that text is printed. When the “enable read flag” is OFF, text is not printed, but commands are still interpreted. Each command either turns the “enable read flag” ON or OFF.

There are four commands at the current time, and there may be more in the future:

<u>Cmd</u>	<u>Parameter format</u>	<u>Description</u>
+	(no parameters)	Turns “enable read flag” ON, always
-	(no parameters)	Turns “enable read flag” OFF,

	always
W+	Enables word-wrap.
W-	Disable word-wrap.
T	(no parameters) Toggles “enable read flag”
R	(prompt) Prints prompt then waits for user to type RETURN.
A	#####,#####,#####,##### Turns “enable read flag” ON if users access is equal to or above the access given in the params. (formatting here is strict: 4 digits for each number, separated by commas with no spaces)
B	MMDDYY,HHMMSS Turns “enable read flag” OFF if the user has called since the given date time, else turns it ON. (B stands for “Bulletin”)
P	(text resource name) Prints the contents of a text resource onto the screen. The printed text resource can have embedded commands of its own.
O	(text resource name) Opens “filename” as the output text resource for the “C”, “U” and “I” commands.
I	(prompt) Prints the prompt, waits for the user's input, and writes the input to the open text file (see “O” above).
U	(no parameters) Writes a line and the user's handle to the open text resource. Useful for tagging a survey.

C	(comment) Writes the comment to the open text resource. Useful for tagging responses
L	(string) Writes string to the userlog.
V	##### Verifies, or asks a question of the user, where # is the answer (either “N” or “Y” and \$\$\$\$ is the question prompt.; if the user's response does not match #, then the message is halted, and no further text or commands are printed.
^	##### Asks a question of the user, where # is the answer (either “N” or “Y” and \$\$\$\$ is the question prompt.; if the user's response does not match #, then the entire message is started over again.

There is a shortcut for the “B” command in the editor. To add a “B” command with the CURRENT time in the parameter list, simply type “.=” at the beginning of a line (like an editor command). When you type the “.”, it will print “>>”, and when you type the “=”, it will backspace over the “>>” and type something like “[EditCmd[:B091287,160237”

### Uses for embedded text commands

Example 1: In the “welcome” text resource, you want to add a notice for sysops only (access level above 900,900,900,900).. and then, after that notice, a message that anyone can see.

Use the “Edit Text” command to edit the “logon” text resource.

upon entering the editor, add the following lines to the end:

(remember that to enter “[]EditCmd[]:”, type Ctrl-Z.

```
[]EditCmd[]:A0900,0900,0900,0900
```

```
(sysops only): please verify new users until september 22. I am going to be  
on vacation for a while.
```

```
[]EditCmd[]:RPress RETURN:
```

```
[]EditCmd[]:E
```

```
To all new users: After logging on, please send feedback to other sysops,  
NOT me, because I am going to be on vacation for a few days.
```

The first edit command sets the “enable read flag” according to access level.

The second edit command sets the “enable read flag” back to ON so that all users can read the following text.

Example 2: In the logon message, the sysop puts system bulletins every few days, but only wants the users to have to see each bulletin once. In other words, any users who haven't called since the bulletin was added, will read the bulletin.

Every time to add a bulletin, use the “.=” editor command (described above) before typing the text of the bulletin. For example, add the following text:

```
[]EditCmd[]:B091287,160237 (just type “.=” to get this)
```

```
Bulletins for 9/12/87:
```

A new SIG has been added to the board, it is called the "Electronics SIG" for all you electronics enthusiasts out there.

```
[]EditCmd[]:T (toggle flag)
```

No bulletins.

That bulletin will only be printed out once for each user.

**Example 3:** After the standard new user questions are asked, the sysop would like some additional information asked. Questions include the user's job and employer.

```
[995]Command>Edit Text:NewUserSurvey
```

```
Edit Text
```

```
=====
```

```
Editor: Type '.S' to save, and '?.?' for help>
```

The following questions are optional:

```
[]EditCmd[]:VYDo you wish to fill ou this survey?
```

```
[]EditCmd[]:ONewUserInfo
```

```
[]EditCmd[]:U
```

```
[]EditCmd[]:CJob:
```

```
[]EditCmd[]:IWhat is your occupation?
```

```
[]EditCmd[]:CEmployer:
```

```
[]EditCmd[]:IWho is your employer?
```

```
[]EditCmd[]:^YAre you satisfied with your answers?
```

Thank you for your cooperation.

>>Save

## Modem configuration

There are eight text resources (edited with the “Edit Text” command) that affect the way Nova Link uses your modem(s). Their names are “ModemInit”, “ModemHangup”, “ModemAsk”, and “ModemAnswer” for the modem port, and “ModemInitP”, “ModemHangupP”, “ModemAskP” and “ModemAnswerP” for the printer port.

The first two of each set are “Modem Dump Files” which have the same format. “ModemInit” is dumped when Nova Link is booted up, when a call is terminated, and every 2 minutes of waiting for a phone call. “ModemHangup” is dumped when Nova Link wants to hang up the phone. They are basically the same as every other text resource, but they include pauses so that the modem has time to respond before the next command is given. First of all, a one second pause (approx) is automatically placed after every RETURN. This is so that the modem has time to process the command. Second, to embed pauses without a RETURN, use the backquote (`), which is on the same key as the (~) key, on the top left of Mac Plus and extended keyboards, and to the left of the space bar on Mac SE/II normal keyboards. For instance, for Hayes modems, the hangup sequence consists of using “+++” to go into command mode, and then “ATH” to hang up. The text resource would be something like “+++`ATH”. An automatic pause is placed before and after the “ModemInit” and “ModemHangup” text resources. Note that the pause techniques described above are only for the modem resources, not for all

text resources.

The default “ModemInit” and “ModemHangup” resources, for the AppleModem 300/1200 are:

ModemInit:

AT

ATZ

ATM0X1

ModemHangup:

+++` `` `ATH0

The “`” (backquotes) indicate pauses.

The last modem text resource is “ModemAnswer” which describes the messages that are sent by the modem when a connection is made. Nova Link can handle 300, 1200, 2400, 4800, 9600, and 19,200 baud, and to find out which baud rate, it checks the last four characters of each line (before the <CR>). For instance, the messages sent (or prophesized) by the Hayes standard in extended message mode are:

<u>Message</u>	<u>BaudRate</u>	<u>Last four chars</u>
CONNECT	300 baud	NECT
CONNECT	1200 1200 baud	1200
CONNECT	2400 2400 baud	2400
CONNECT	4800 4800 baud	4800

```
CONNECT 9600 9600 baud 9600
```

```
CONNECT 19200          19200 baud  9200
```

The format of the “ModemAnswer” is as follows: The first character specifies the modem initialization baud rate. “1” is 300 baud, “2” is 1200 baud, and so on. Then, for each baud rate, in the order listed above, the last four characters of the connect message are taken, and they are all concatenated on the first line of the file. For instance, the “ModemAnswer” file for the above set of connect messages with an initialization baud rate of 300 is:

```
1NECT12002400480096009200
```

If you only have a 300/1200 baud modem however, the format should be:

```
1NECT1200
```

If the connect message gets garbled for some reason, Nova Link will go through all available baud rates and print out the “ModemAsk” text resource which should basically say “Press RETURN”. When the user presses return on the available baud rate, it will connect. The reason to put dashes on baud rates is so that Nova Link won't waste time trying baud rates that are impossible.

The modem text resources for the printer port are the same names except with a suffix “P”.

This format will take care of most problems, and we will make the modem configuration more flexible later on.



## Changing File Names/Locations

There are six fundamental files that Nova Link uses, and creates if they do not already exist:

USERLOG

STR FILE

MAIL FILE

OTHER FILE

MSSG BASE FILE

USER FILE

You may need to change the names of these files. The primary reason for this is to move the file to a disk or HFS folder other than the one than Nova Link is in. To change the name of any of these files, go into ResEdit, or any other resource editor, open the Nova Link application file, and edit the 'STR ' resource with the name of one of the above default filenames. The name of the file is in the resource itself.

## Pathnames

The Macintosh has an internal standard format for pathnames, but this format is usually transparent to the user because of the Macintosh user interface. Nova Link does not use much of the Macintosh user interface in order to make every function accessible by a remote sysop. Therefore, pathnames must be entered in as text.

A pathname and a filename are really the same thing. Pathname was given its name because it describes the path from the root directory of the disk to the desired file. A pathname can be specified in three ways:

1. Type the name of a file which is in the Nova Link folder.

Example: USER FILE

2. Type a colon followed by a folder within the Nova link folder, and so on into various folders, and finally type the name of the file.

Example: :Files:Macintosh:Games:ShootEm

3. Type the name of a disk, followed by a colon, followed by a folder name in the root directory, and so on into various folders, and finally the name of the file.

Example: HD40:Data:Documentation:Nova Link Docs

## **Support**

Nova Link is supported both on GENIE in the BBS RoundTable, Category 6, Topics 28, 33, 34, and 35, and on The Lands of Adventure BBS (401)351-1465 which we also use for beta-testing. Registered owners may download the most recent version of Nova Link. We maintain a list of registered Nova Link BBS's, so please tell us if you take your board down, change your phone number or your board's name. We also have a policy of fixing any bugs that users turn up within one week of them being reported. We are eager to hear any suggestions you may have for this program and help you in any way possible.

## **Extended Parser Summary**

Add \*

Conference \*

File \*

Section \*

Special

Upload \*

Download \*

List \*

New \*

Message base \*

Special

Read \*

Post \*

Special

Back \*

Chat Request \*

DateTime \*

Edit term stats \*

Feedback \*

Inter-node chat \*

Jump \*

Logoff \*

Message bulletin \*

Newscan \*

Password change \*

Read E-Mail \*

Send E-Mail \*

Text \*

Userlist \*

X-Block \*

@External application \*

Vote \*

Block \*

Change to basic parser

Download file:

Edit

Configuration

File:

Key \*

Lock \*

Message \*

Menus on

Password

Read access \*

System

Access levels

Flags

Node configuration

Parameters

Sigops \*

Text:

User:

Write access

X-Mark \*

Help

Kill \*

Downloads:

File:

Text:

List \*

    Ancestors \*

    Files:

    Users

    Text resources

Move \*

    Message \*

    Toplevel

New scan...

Position \*

Quit

Read \*

    File:

    Mail

    Text:

    Userlog

Send

    Bulletin

    Chat request...

    Feedback

    Mail to:

    Node chat request

    Reply to ...

Where is user

0-9

(\*) Means that message parameter follows:

0-9            Child number

Brother#      Brother number

Left           Left brother

Right          Right brother

Parent        Parent

#              Child number (for numbers greater than 9)

## Basic Parser Summary

Add

Back

Change to extended parser

Feedback

Help

Kill

List

New scan

Quit

Read

Send chat request

X-Block

0-9