NetChat

The AppleTalk network chatting desk accessory for the Apple Macintosh

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Written by Robert S. T. Gibson

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Written in *THINK's LightspeedC*™

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NetChat user's guide written and copyright © 1989 by Robert S. T. Gibson

Chapter 1 : **Introduction**

What is *NetChat*?

NetChat is a desk accessory which allows users to interact and communicate with each other in a reasonably good Macintosh interface over an AppleTalk network. It is by no means a substitute for electric mail. Rather, it is a simple way of transacting between terminals without requiring that many steps be followed. It also adds a bit of fun to the network.

What is *AppleTalk*?

AppleTalk is a manager that allows Macintosh programs to interact with other programs and devices connected to an AppleTalk network, allowing the program send and receive information through this network.

About this Manual

This manual is by no means a complete guide to using the program. It is up to the user to figure out the details of the various features of *NetChat*.

System Requirements

I'm not exactly sure what System version a user must have for *NetChat* to work. It has been tested on a Mac II and a Mac Plus, both using System version 6.0.2 and 6.0.3 (I changed systems during development). Theoretically, *NetChat* will work on any System which is AppleTalk-compatible. If you have any problems, please contact the author.

You need at least two Macintoshes hooked up via an AppleTalk network to use *NetChat* . However, no extra software (TOPs, AppleShare, etc.) is necessary to use *NetChat* .

Acknowledgements

Thanks are in order to Rob Hafernik, who wrote "AppleTalk Chatter Box" in the December, 1989 issue of MacTutor. This article was very good and provided the needed examples to make *NetChat* possible. Some of the tricks used in this article have also been put to use in *NetChat* .

I should say a special "Thank you" to all the beta-testers who tried and tried to break the program. They often succeeded in their mission, and *NetChat* has benefited from their excellent work.

I would like to extend my thanks to the person or persons who drew the icons provided with the NetChat DA, but I have been unable to find the names. If anyone can tell me who it was, I would appreciate it.

Distribution

NetChat is a FreeWare desk accessory, and is copyright 1990 by Robert Gibson. No monetary compensation is necessary for the use of this product.

NetChat can be distributed freely through BBSs, users' groups, communications networks, exchange forums, and the like, providing there is absolutely no charge except (and this is the only except) for normal duplication fees. Please keep *NetChat*, the manual, and any addendum bundled together in such distribution.

Distribution through software houses such as Educorp and similar businesses require specific written consent from the author before *NetChat* can be used in their libraries for mass-copying (and for their own profit).

Commercial distribution of *NetChat* is strictly prohibited without special licensing from the author.

About the Author

If you have any suggestions, comments, questions, or criticisms, please do not hesitate to contact me. I like receiving mail, be it paper or electric, so please let me know what you think.

The author can be reached at:

Post: Compuserve: 71261,2236
Robert S. T. Gibson   GEnie: J.GIBSON4
RR#1 Carrying Place,
Ontario, Canada.
KØK 1LØ.

Chapter 2 : **Setting it Up**

Installing the Desk Accessory

Installing *NetChat* is very easy. Just launch Font/DA Mover, holding down the option key to automatically list DAs rather than fonts, and open the *NetChat* file. Select the *NetChat* desk accessory in the list, and copy it into your system file. If you use any utilities like Master Juggler (Font/DA Juggler) or Suitcase (or Suitcase II), you can copy *NetChat* into a DA suitcase. Remember to close the file using whichever utility you have, before you try to copy into it.

If you are using MultiFinder, you might find that the menus are not updated after you copy the DA. This will be remedied if you quit whatever applications you load and start them again. Of course, there are many other solutions to this, so I am sure you'll have no problem with it.

Now, copy the NC Icons file into your System Folder. Do not rename this file, since it contains many icons for use with *NetChat*. Of course, if you have your own icons and don't want to use those provided, you don't need to have the file there.

Setting up *NetChat*

You probably know how to do this, but I'll include a small explanation here.

Now that the desk accessory is installed, open the Chooser DA from the Apple menu. If you don't have that installed, use the same method as above, using the DA files provided with your System disks. Through Chooser, make sure that AppleTalk is selected as ON. If the radio buttons need to be changed into the ON selection, do so. Remember which port has been selected as your AppleTalk port. It should be the printer port. That is, if you have one, your ImageWriter (or similar printer) should be selected as using the modem port.

Now, go around to the back of the computer and find the printer and modem ports. If you have a non-AppleTalk printer hooked up and want to keep AppleTalk on, move the cord from the printer port to the modem port, corresponding to your selection in the Chooser DA. Put the AppleTalk network cord into the printer port. Perhaps you should turn off your Mac before doing these adjustments. Doing so will give your menus a chance to reset so you can open *NetChat* if you were using MultiFinder.

You should be all set by now. If the program gives you an alert, there's likely something wrong either with your connections, or AppleTalk is not installed properly.

Chapter 3 : **Using** *NetChat*

Logging On

When you first open *NetChat*, you are asked for your name and a face icon ID. Your default name is the name entered in Chooser DA. You will be known by this name on all other terminals using *NetChat*, and they will be notified of your entry. You can change the icon ID directly in the edit field, or you can hit the Select button to choose your icon from a graphical list of the various ICON and cicn resources contained in any open files. Remember that if you close any files which contain your icon, you won't get the icon you chose. The file NC Icons in your System Folder is guaranteed to be opened by *NetChat*, so place any custom ICONs or cicns in that file.

If you want to change your face icon during your chat session, just click on your face icon in the main window. To change your name, you must log off (close the DA) and start again.

Sending a Message

Sending a message is quite simple. First, select the users you wish to receive your message. The Select All button selects all users on the network, and the Scan button scans the network for any users who might have somehow made it into *NetChat* without being listed. Use the Options menu commands to set your receive preferences. These commands speak for themselves and require no discussion.

Make sure the message edit field (the small one with your face icon beside it) has been cleared and selected, so you can begin typing. Enter your message, then either hit the return key or select the Send button beside the message edit field. Your message will be sent to each of the selected terminals.

If you want what you typed to be entered into your own message box, make sure the Echo menu option is turned on.

Received Messages

Messages are placed into the text box at the bottom of the window. The sender of any given message is listed by the user's name, given in parentheses at the end of the message. Echoed messages are contained in < and > characters.

You can select and scroll through the messages. After a given number of lines, the top lines are deleted as each new line is added (but it would have to be a long chat to get to that point). Messages can be selected and copied to the clipboard. You can move back and forth between the sending message field and the received messages field by pressing the tab key. Selection is preserved, so you can move back and forth between selections in the two fields as well. You can, for example, select text in the send

message field, press tab to move to the received messages field, select text there, copy the text, press tab to return to the selection in the send message field, and paste the text into the selection.

Face Icons

NetChat identifies users not only by name, but also by face. Several face icons have been provided in the NC Icons file, which you can use yourself. You can use color icons on a Macintosh with color QuickDraw.

The face icons I have provided will probably not last you very long, and you will likely want to make your own. What you will need are an ICON or cicn editor and a resource copier (preferably ResEdit). Design your cicn and save it as both a cicn and an ICON. If you are working in monochrome, just use an ICON. You must save it as an ICON so users on earlier systems can use the program without it crashing on them. If the icon editor you are using allows you to save an icon in a specific file, then you're all set. Otherwise enter your resource copier and copy the icons into the NC Icons file, or any file that you are sure will be open when *NetChat* is open. Remember to close *NetChat* before doing this, since the NC Icons file will otherwise be open and therefore inaccessible.

Take your copy of NC Icons and give it to your friends on the other terminals so they can use it and view your face icon while you are talking to them. I plan on allowing the transfer of face icons by *NetChat* itself in a future version, but for now that is beyond the scope of the program.

Limitations

NetChat is obviously not without limitations. For now, you are unable to select a zone in which you wish to chat. So you must chat only with those within your zone. NetChat also lacks any form of icon editing and icon or file transferring. But it's really only meant for fun, so if you're really serious about AppleTalk, you should get the proper software.

Appendix A: **Error Codes**

Following are most of the error codes returned by AppleTalk. You probably won't get many of them. In fact, you can't even get most of them using the AppleTalk routines I have implemented. But this should provide good reference in case you run into a problem.

The error codes have been taken directly from Inside Macintosh Volume II, pages 337-338.

Name	Value	Meaning
ddpSktErr	-91	DDP socket error: socket already active; not a well-known socket; socket table full; all dynamic socket numbers in use
ddpLenErr	-92	DDP Datagram or ALAP data length too big
noBridgeErr	-93	No bridge found
LAPProtErr	-94	ALAP error attaching/detaching ALAP protocol type: attach error when ALAP protocol type is negative, not in range, already in table, or when table is full; detach error when ALAP protocol type isn't in table.
excessCollsns	-95	ALAP no CTS received after 32 RTS's, or line sensed in use 32 times (not necessarily caused by collisions).
nbpBuffOvr	-1024	NBP buffer overflow
nbpNoConfirm	-1025	NBP name not confirmed
nbpConfDiff	-1026	NBP name confirmed for different socket
nbpDuplicate	-1027	NBP duplicate name already exists
nbpNotFound	-1028	NBP name not found
nbpNISErr	-1029	NBP names information socket error
reqFailed	-1096	ATPSndRequest failed: retry count exceeded
tooManyReqs	-1097	ATP too many concurrent requests
tooManySkts	-1098	ATP too many responding sockets
badATPSkt	-1099	ATP bad responding socket
badBuffNum	-1100	ATP bad sequence number
noRelErr	-1101	ATP no release received
cbNotFound	-1102	ATP control block not found
noSendResp	-1103	ATPAddRsp issued before ATPSndRsp

noDataArea   -1104   Too many outstanding ATP calls

reqAborted	-1105	Request aborted
buf2SmallErr	-3101	ALAP frame too large for buffer DDP datagram too large for buffer
noMPPErr	-3102	MPP driver not installed
ckSumErr	-3103	DDP bad checksum
extractErr	-3104	NBP can't find tuple in buffer
readQErr	-3105	Socket or protocol type invalid or not found in table
atpLenErr	-3106	ATP response message too large
atpBadRsp	-3107	Bad response from ATPRequest
recNotFnd	-3108	ABRecord not found
sktClosedErr	-3109	Asynchronous call aborted because socket was closed before call was completed

Appendix B: **Conclusion**

Legalities

Any names and/or information that are registered trademarks of any company, corporation or group are hereby respected and acknowledged.

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Bug Reports

Please send any and all bug reports to the author at the address given in Chapter 1, section "About the Author". Don't hesitate to write or send E-Mail, please. I would appreciate very much hearing from you, even if what I hear is a bug report. Making a utility is much more satisfying if one gets a response.

Future Plans

The future of *NetChat* depends on your response to it. If I get no response at all, I won't be adding much to it. However, if people do give me ideas, report bugs, etc., *NetChat* will continue to be supported.

Please report your suggestions to the address given above.

Please see the about box for information on *NetChat* . I should mention that part of the about box routines were provided by THINK in their release version of *LightspeeedC* 3.0.

The Helvetica font is required for smoother animation of the words in the about box. You will get a message if Helvetica is not installed fully, right above my CIS and GEnie IDs. Since it might be a bit confusing looking at my GEnie ID, I'll re-mention it: J.GIBSON4. Yes, in the about box it's a period, not a star.