FidoGate
GT Fidonet Inteface
Copyright 1991-1993
Richard Warren Walker
Portions Copyright P&M Software

Welcome to FidoGate.   The product contained in this archive is copyrighted, and you are granted the right to use and redistribute the software so long as no fee is charged for the software. You may recover a media or bbs access fee so long as that fee is so represented.

For the experienced fidonet user, I refer you to the text file, FIDOTECH.TXT, which contains everything that you need to know to go from an already functioning and healthy fidonet system to a fidonet system with message areas available under GT 16+. It is basically the same information as contained in section VII of this document.
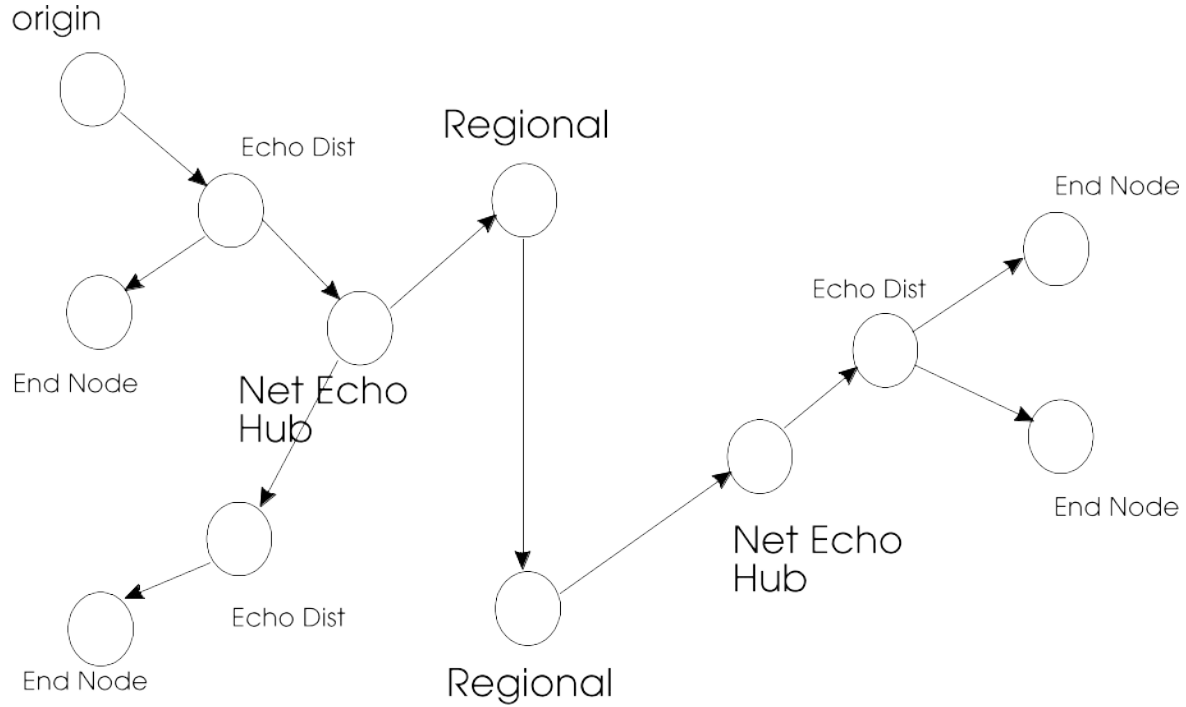

Table of contents:

I. What is fidonet

Fidonet is a well organized grouping of some 20,000 or more bbs systems, both public and private access, which run software compatible with FTS (Fidonet Technical Standards). These systems are grouped into what are called "Zones" on a continental basis. Each Zone specifies a designated time during which their systems will be available for mail transfers only, usually an hour in length in the early morning hours. This insures that if you want to send someone a netmail message direct, that your system will be able to connect with theirs and transfer the message.

Additionally, and probably most critically for applicants for a nodelist entry, is the "Net" which basically covers a local calling area such as "Houston, Texas" (net 106). It is to the Net to which you will make your application for joining fidonet.   The requirements are really very simple, just have a software package up and running to recieve inbound message during the mail hour, and to be able to send a netmail message to the Net Host (Net/0 entry) informing him or her that you wish to join fidonet, the phone number of your bbs, the type of modem that you are using, and whether you are going to run your system with 24 hour access to the mail recieving software. It is strongly advised that you do run your system with 24 hour access, as mail hour only systems are more of a pain for the net to deal with, and you don't need any additional difficulties set in your way by annoying the Net Host and your echomail coordinator.

Fidonet's usefulness if of course for netmail and echomail.   Echomail being the more useful of the two, we will start with it.   Unlike GT mbagger software, echomail is not managed by a sponsor who reviews messages before transmission throughout the network, rather echomail messages are propagated from the originating system out to all interconnecting systems as shown below:

origin

Echo Dist

Regional

End Node

Echo Dist

End Node

Net Echo
Hub

Echo Dist

End Node

Net Echo
Hub

End Node

Regional

Fidonet netmail works along a similar manner, but you have one or two possible methods, depending on your local nets capabilities.   One method, and undeniably the fastest and most secure, is direct transmission of netmail, point to point.   This is where you send a netmail to system XYZ, and your computer actually calls XYZ and transmits the message directly to their system.   Within the continental US, such calls will run an average of 12 cents. The other possible option, if available in your area, is routed netmail.   This utilizes the existing routes that echomail flows along, as shown in the previous figure, to move netmail between end node systems. The benefit of this is that no unnecessary call is made long distance, the drawbacks are that your message will not be truly private and it is possible for it to get lost in transmission somewhere. The reason your message is not truly private, is that unlike GT based mail systems, fidonet unpacks the message into a message base at each point along the way, so if it something you don't want anyone else reading, your only recourse is to make the call yourself.

II.   What software do I need inorder to get connected

Fidonet software packages are available in virtually every city, but also a copy of all the basics is kept on Specific Solutions, at 713-522-2533. V32, V32bis; 1:106/960.0 in the fidonet nodelist.

Fossil driver	Controls the UART
Mailer	Calls other fidonet systems and answers the phone.
Tosser	Takes inbound messages and unpacks them
Translator	Translates from fido *.msg to GT 16+ format msgs.
Nodelist	Listing of all systems in fidonet
Nodelist Compiler	Takes nodelist data and builds a phone directory
Fido *.MSG reader	Allows you to enter/view raw fido *.msg messages

While there are various packages that will meet the above requirements, I will make some suggestions that I know work well enough for me.

Fossil driver	BNU
Mailer	Binkley Term
Tosser	Qmail
Translator	FIDOGATE
Nodelist	current data, not software
Nodelist Compiler	QNODE
*.MSG reader	ME2 or MsgEd

There is one special thing about all of the above. They do not cost anything.

III.   How do I get a nodelist entry

Though I have briefly mentioned this in the introduction, it does deserve its own section, because it represents your intitial contact with a group of people who may or may not have some hostility towards GT based bbs'ing. There is a long history behind the bad blood, which need not be discussed here, but your best bet is to make your initial contact as positive as possible.

The following steps should be done slowly, and with a very deliberate and systematic reading of the documentation.   I know reading the docs is no fun, and printing them out is definately no fun, but it is worth it. I have an accounting binder with approximately 2,000 pages of documentation on the different programs that I use for my bbs.   Now that they are printed and bound, it is very easy to refer to them and find the things that I need to know. In the long run, this will save you many hours of work and confusion.   Plan to take 16 hours spread out over a week to ten days inorder to successfully complete this effort.   Once you are finished, and have successfully gotten a nodelist entry, make a **complete** backup of your directories which relate to the handling of mail, with such a backup safely stored away, you will be able to avoid having to do this process a second time!

The first step is to get your fossil driver talking to your communications port. May sound trivial, but a slow, careful read and proper install of the communications driver will save you much agony in the future.   Some important things to remember when installing the fossil driver:

1. If you lock your port at a high rate to enhance the performance of a high speed modem, you will want have the fossil driver lock the port, NOT, the mailer.
2. If you have a 16550 installed, the fossil driver will allow you to configure the FIFO buffer size to use; do not go for the maximum buffer size to start with.
3. Be sure you understand what the driver means by "port #" . These do not necessarily correspond to "Com 1" and "Com 2"..

The second step is to compile a nodelist. The nodelist zip/arj file carried in your net is just a raw data file, it is not useable by your mailer in this format.   You will have to install the compiler, configure it, and run it.   You will have to give it a fake node number for your own system, but as everyone has to get started in this or a similar manner, you need not be concerned about offending anyone with this part.

The third step is to bring up the mailer software. You will again need to read the documentation carefully.   You will need to configure your mailer to show your desired fidonet address, the speed (if not locked by fossil), the init string and answer string, and the event times and flags.   If you can dial in and the mailer answers the phone you are in good shape.   If you have trouble keeping it up, you may want to "steal" an existing nodelisted systems address for the purpose of making initial contact with the net host. This will NOT hurt anything, nor annoy anyone; just be sure that you change the address once you get nodelisted and don't forget to recompile the nodelist once you have a real address!

The fourth step is to create the message directories that will hold incoming mail packets, raw *.msg netmail messages, and outbound packets ready for transmission. These you will also have had to type into the binkley.cfg or other configuration file if you use a different mailer.

The fifth step will be to configure Qmail or some other tosser for your system. Here you will have to tell it who you are, what your address is, and what directories you want to go where.   There will also be a routing file which you will need to set up, a very generic one has been included which can get you started with minimal editing, but you may very well want to tune it later.

The sixth step is to install your fidonet *.msg offline mail reader.   This will enable you to create the text of the netmail message that you will need to send to the net host in the process of getting a nodelist entry.   Again, it is likely that you will need to read the documentation carefully to get it set up right.

The seventh step is to create the netmail message with all your vital information, like name, modem type, phone number, name of your system, FTS crash mail capabilities, and a voice phone if you can stand someone else having it.   You will need to address it to Net/0. Example, for net 106 in Houston, you would address the message to sysop at 106/0. Once it has been created, you should run the "scan pack" mode of your tosser; for Qmail, it is simply, *QM SCAN PACK*.   This should take the message text from your netmail directory, and create a "packet" to transmit to the net host.

The eighth step is to bring up your mailer and be WATCH it to make sure that it dials the net host and transmits the packet.   Binkley is very easy to see what it is doing, so if you have doubts, it probably has not been transmitted.   If it does not get transmitted, you will need to review your configuration files to determine where the error is.   Note things like the dialing string that your mailer used to call the host, check to make sure you have the message routing file designating local stuff as "send crash"; check your file directories to make sure the tosser put your packet in the same directory as your mailer is looking for outbound stuff.   Once you correct any errors, go back to step seven and repeat.

The ninth step is to leave your mailer up and running. The net host will be sending you a netmail message back, both to provide you with a real node number, and to confirm that your mailer really is configured properly.   They will not nodelist your system if they can not confirm that you can send and recieve fidonet mail. Once you get this far, the only thing that should **ever** answer the phone is Binkley or some other fidonet mailer.

IV. What is echomail and how do I get it

Echomail are messages transmitted on fidonet with an AREA: tag inside the packet data, which allows the mail tossers, such as Qmail, to recognize and sort them according to echmail areas. These designators are known as "tags".   These tags are associated with a directory and a feed node in a file called "areas.bbs". Qmail reads this file to determine which directory belongs to which tag.   When you receive a packet of mail, the tosser will unarchive it, and then sort each message, placeing each message according to the designated directory associated with the tag included in the data packet.

Depending upon your nets policy, you may have to pay some monthly or volume based fee for your echomail. Moving echomail is an expensive proposition in fidonet because of the volume, for example, net 106 runs an average of $250 - $350 a month for the total bill; which pays for approximately four calls per day to an out of state regional hub.   This comes down to about $2.50 a month for each co-op member. Each net is free to develop its own method of paying for the echomail, several of the larger nets have functioning co-op systems, which collect a monthly based fee, and you can recieve a quantity of echomail specified by the co-op rules. The basic thing to remember however, is that recieving backboned echomail is a priveledge, not a right; and you should treat it as such.

V. How much is this going to cost

This is one of the better features of fidonet. It is entirely possible to get linked in, with the best available technology, without buying any software. Binkley, Qmail, ME2, and a host of other great programs have been developed by professional programmers in their spare time which allow folks like you and me to connect into the largest computer network based on microcomputers.

In this spirit, FIDOGATE, which is the translator that you will use to put the fidonet echomail onto your GT bbs, is also released, copyrighted, but free to use and distribute, so long as you or your associates do not collect a fee for doing so.

VI.   Blatant advertisement

This concludes the tutorial to assist you in getting linked into fidonet.   It is not a hand holding document, but rather is designed to take some of the uncertainty and guesswork out of connecting to fidonet.

If you would like to express your appreciation for the fidogate software in the form of monetary compensation, please feel free to send a check to:

    Catholic Charities
    3520 Montrose Blvd
    Houston, TX 77006-4387

Be assured that this agency has a far more effecient utilization process than the United Way or any other secular organization; contributions can be designated to the following departments, Adoption, Counselling and Psychotherapy, Foster Care, Services to Young Parents, Needy Family Services, Undocumented Juvenile Foster Care, Immigrant Legal Assistance, Project Learn, Parish Social Ministry, Refugee Resettlement, Services to the Elderly, and Serenity House.

Thank you for reading this section of the documentation, and please give this request some heart felt consideration.

VI.   How to use the fidogate translator

Source code WILL be made publicly available. It will be uploaded to Paul's system in AZ, Perry Alexander's in Lexington, and mine in Houston. Any future independent modifications of this software, and redistribution of software based on this code will be coordinated through me, but I will not act to impede any independent progress. Just let me make the final call on coordinating the various potential inputs. All code submitted becomes subject to the "no fee for use or distribution" copyright.

SYNTAX:

   FIDO

Concepts:

1. The gate software tracks messages in three ways.

   a. Messages imported from fidonet are marked as fido originating. This is marked by the 2nd bit in the flags byte, the one after the sticky bit.

   b. The "Fido Gate" user record uses the lastread pointer to indicate the last message processed. No messages before this will be scanned out.

   c. Messages output to fidonet by the gate, but not yet scanned will have the node number encoded in the ftsc header, and if it matches the systems node number, the gate will not import it.

2. The gate software deletes *.msg files when the following conditions occur:

   a. The message is from Qmail, ie, highwater mark.

   b. The message has an ^APATH: nnn/xxx where nnn/xxx is the node number of the gate. ie, scanned out messages originating on the gate system.

   c. The message is an externally originated message that has been imported.

3. Maximum message size is about 60k. (0xF000). It was picked arbitrarily.

4. Source code will be released with the package at the time of its first initial non-beta release.

These concepts are not up for discussion, so if you don't like'em, don't bother using the software, it didn't cost you anything anyway.

System Assumptions:

1. I am making the assumption of Binkley and Qmail v1.00 as the primary interface software on the *.pkt and *.msg side. I have attemted to adjust it for Qmail 1.3x and SquishMail *.msg highwater marks as well.

2. Message bases will be initialized properly on the GT side. (I'm not adding DRAM code to my programs for several reasons, one of which is that I program religiously in large model.)

3. You are using GT Power version 16 or higher.

4. You currently have a valid and functioning fidonet system.

5. That there is a user named "Fido Gate" with an access level high enough to prevent accidental deletion from inactivity. (ie, be careful when you delete users with the sysop.exe program)

Setup instructions:

1. Configuration file must be in GTPATH: "fidogate.cnf"

    line 1: fidonet z:net/node.point   NO fields are optional. Complete 4D address only.

    line 2: fidonet origin line text, careful of your line length

See the example included.

2. Login to your bbs using the username of "Fido Gate" Access level does not matter. Or use the SYSOP.EXE program provided by P&M software.

3. Join "Fido Gate" to the message area you wish to gate. Either by selecting that area from the BBS or by joining with the SYSOP.EXE program. (be careful when deleteing users that you do not accidentally delete Mr. Fido Gate.)

4. Add the area to your configuration file according to the syntax:

    AREA=<mode> <gt directory> <fido directory>

    AREA=nnnn must be in upper case and have no imbedded spaces.

    Directory entries *MUST* have a trailing backslash.

Available operating modes:

    0001   Strip high-bit, and ftsc illegals and .ORIGIN/Route: gtnet identifiers.

    0002   Allow high order ascii to pass through but kill control A characters.

    0009   Process fidonet netmail message. Use the full zone:net/node.point format on line 1, ie, line 1: 1:106/960.0.

Any other will do no modifications to the text of the messages processed.

Leading zeros are NOT optional.

5. Configuration file must have an "END" command after the listing of areas, again, case IS critical, "end" will not work.

MARKALL:

SYNTAX:

MARKALL <msgpath>

This little program will mark an entire message base as fido originated so that you can convert to the new driver with an existing message base, without having to worry about duplicates.

DISCLAIMER:

I disclaim everything.

Simple nuff.