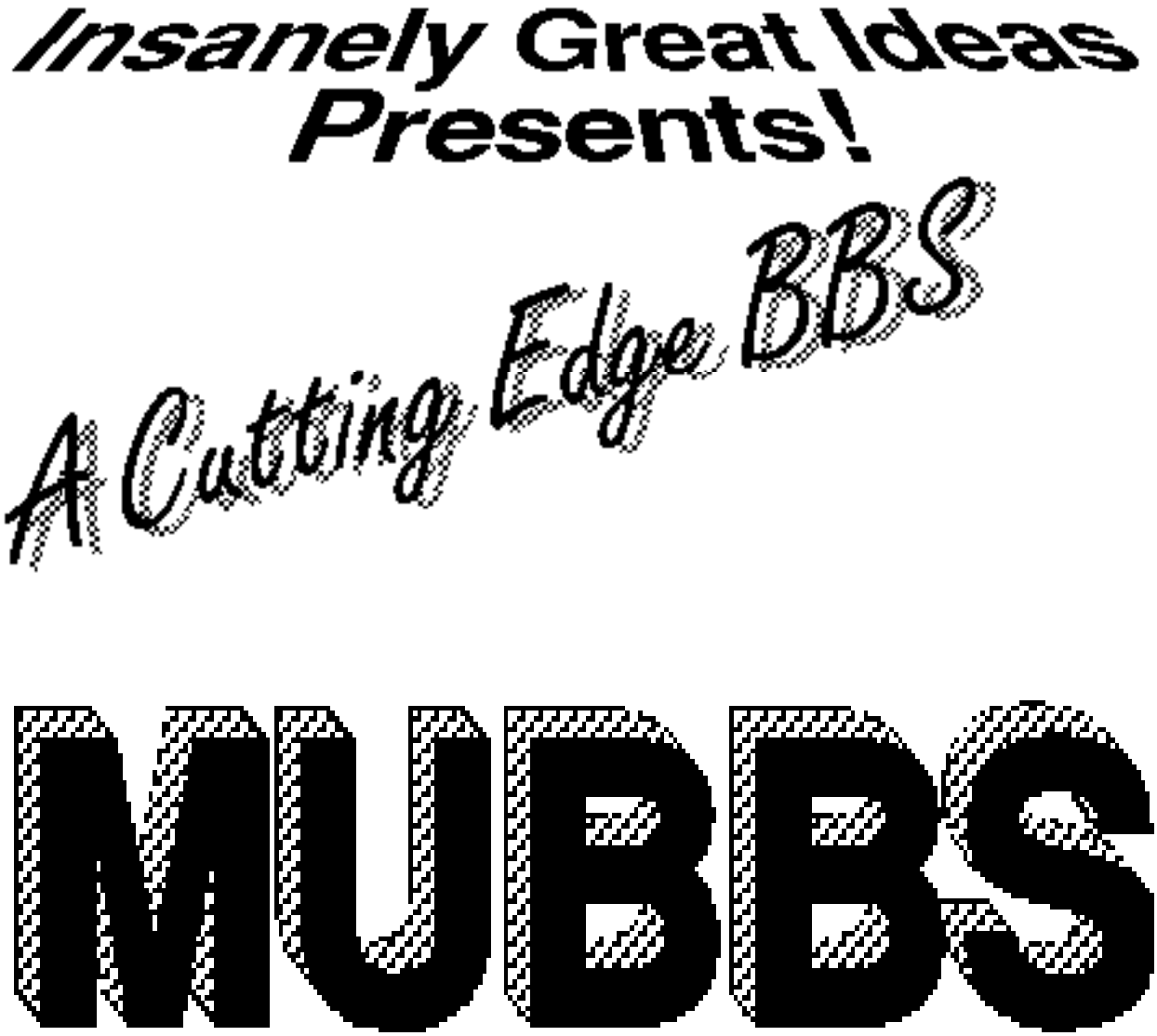

Be on the lookout for updates....

With each programer responsible for 15 to 32k of code, new and better modules will show up everywhere !

(screen by Richard Crawford)

MUBBS INSTRUCTIONS

11/15/91
By N. Hawthorn for V.5

Look for more instructions and modules from wherever you got this copy, or the MUBBS Support BBS.

The MUBBS Main Module is FreeWare. You can use it for free, but you can't sell it or use any of my included source code in a commercial or "ShareWare" product (you can charge for access to your BBS). You are limited by each module's author copyright file, please read them.

The MUBBS Main Module will always be FREE. This is my promise to you that I will keep it free. If I ever start starving and can't feed my family, I'll go around and set up BBS's for local companies that need them.

Please READ this documentation, this is not a normal Mac program !

About MUBBS:

MUBBS is a "Multi User BBS" and is modular.

MUBBS started out as a "hack" I put together to run my own BBS with. Several people showed a interest in it so I "cleaned" it up and am shipping it out.

You can program your own modules, then add them to MUBBS wherever you like. You can basically construct your own custom BBS any way you please.

MUBBS can handle up to 32 users (and eats lots of memory when doing so).

Source code for sample modules is available on the support BBS. Programmers of modules are encouraged to release their source code so that others can build "on top" of what they have done and then release the

"improved upon" source.

The idea is that if everyone writes a module and releases it, you will get more and better modules in return !

Since each author of a module supports only a small amount of code (normally less then 32K), there isn't any "support hassles" involved. Support time may add up to 2 hours a month maximum, so most authors won't find it necessary to charge for a module.

Large modules like "super world info sorter" that take a lot of programming time my end up being "ShareWare" for MUBBS. Please pay any fees that authors ask for, you will get better modules in return.

MUBBS is meant to be run like a 24 Hr BBS. This means a SEPARATE computer turned on all the time. It's not meant to be used part time in the background of whatever word processing tasks you are doing. It runs fine under MultiFinder, but it's not necessary and you should use single finder and save your memory space.

It also works fine under System 7 and has been tested with the new Mac Portables. If you can run system 6.0.7 please do. It leaves you with more memory and 7 is really not needed.

The minimum configuration I will always shoot for is a Mac Plus with 1 Meg of RAM. The RAM is what may need increasing in the future.

It runs pretty good on a Plus, and Mac Plus's are running about $500 used currently. If you look around, you can always get a deal and set up your BBS properly. I really hate calling a BBS number and find that its not up because I called at the wrong time, or even worse; getting a voice on the line because it's a voice line during the day.

If you are going to be a Sysop, you need a way to log into your BBS from ELSEWHERE. The monitor screen is just that A MONITOR SCREEN. It's made so that you can locally log in because the Mac can do it, but you really need to see what your user's are seeing.

Old Terminals are about $10 each. No one wants them anymore, I see people at swap meets using them as seats and most of them would rather GIVE you one then have to LUG it home !

If you are NEW to BBSing, WELCOME! It will take sometime for you to use this program, it's NOT A STANDARD EASY TO USE MAC PROGRAM, nor was it ever intended to be. You are now crossing over into the "Sysop Zone" !

The Monitor screen has problems, I know ! But it works OK and I'll try to improve it when I can. Backspace is messed up so don't freak out ! (at least it scrolls back).

Configuration of Modules and other Accessories to MUBBS will be in the form of small APPLICATIONS because of system 7's way you can add applications to the "apple" menu. It was nice of Apple to think of us MUBBS users when they designed system 7 ! If you are using 6.0.7 it's no problem, they are still applications. (You don't use them WHILE people are online !)

Being a Sysop:

You are about to become a Sysop !

This means operating a place for thousands (hundreds?) of people to check into. You are just ONE out of many that will have to put up with any "bad" set up you do.

MUBBS is NOT a normal "click and run" Mac program !!

You can set it up as you like, but that's not going to take 10 minutes. You need to spend some time thinking about how you would like your BBS to appear.

Your startup screen is just about the most important thing about the BBS. Make it LARGE and fill a whole screen. It's like a "first impression" for your BBS.

The EASE of operation is important too. MUBBS is very "User Friendly".

My advice is to run as open a system as you can, and don't worry if EVERYONE downloads. People will eventually UPLOAD when they see you run a open and "nice" system. I get people calling long distance at 1200

baud uploading stuff !

You need a type of "Unverified Uploads" section that even first callers have access to. Leaving GIF and TEXT

fie sections open is OK because you can't put a virus in a STRAIGHT TEXT or GIF file.

The reason for this is that there's lots of NEW and good information that you will get from people that call long distance to distribute their TEXT files. If they have to be called back, or have to call back again it probably won't happen.

Talk to other Sysop's ! They have seen it all and their input is valuable.

Some quick details:

Make sure all INITs are off, get rid of those pesky CDEVs that arn't standard too. You don't need a million INIT's when running a BBS.

MUBBS is set up to pick up the line, wait for carrier detect switch baud rates and then call the first module.

You NEED a TEXT editor (MacWrite sucks for this) to edit configuration files in MUBBS. JolliWrite is a GREAT DA that does this nicely, and it even runs all the way up to a Fx.
EACH MODULE HAS IT'S *OWN* INSTRUCTION FILE, please read them.

The first module called is "maincaller", a "caller" type module. A "caller" type module calls other modules from a TEXT file list of modules to call. The modules to be called are in the "caller" folder. They are named the same as the module with ".info".

MAKE SURE YOU INCLUDE A (CR) after each name, and DON'T add extra (CR)'s in the file (one after each name only).

In this archive, "maincaller" is set to call a "sendfile" module (called "sendfile1") that sends "systemstartup.txt" then the "login" module then a "menu" module (called "menu1").

"menu1" then calls all sorts of EXAMPLE modules and the File and E-mail modules. You need to look at the

instructions for each EXAMPLE module to figure out what they are doing, you may go CRAZY wondering why

the "start" text is being sent again. Remember, any module can be called anytime ! (by your command).

You can configure MUBBS to do whatever you want it to !

Don't expect to pick all this up immediately, it's gona take some time to figure out what I'm doing. I can't explain it all here, and I will be putting together some more text for you soon.

LEAVE ALL FOLDERS ALONE ! DON'T RENAME THEM and DON'T RENAME MUBBS !

You can rename the "1 BBS" folder to whatever you want (the folder MUBBS came in hopefully).

You install new modules by using "ResEdit 2.x". ResEdit 2.0 and above allow you to do a "unique ID" when

there is already a module that has a ID that your's does. MUBBS doesn't care about ID numbers, just names.

You just copy and paste modules like any other Mac program.

Use "get resource info" to change the module's name and or ID number as you wish.

There may be a "installer" later that does all this for you, but for now use resedit.

If you need two "menu" modules for two different menus, name one "menu1" and the other "menu2". Your

configuration files will need to be made in the "menus" folder under the names "menu1.info" and "menu2.info".

You get the idea...

The modules depend on folders being names a certain way.

Most MUBBS configuration TEXT files allow for about 30 characters MAX on a line. That's why it's important

that you keep your lines short and make sure to include the PROPER data. Checking the line lengths takes

processor and programming time, so you should check it YOURSELF.

The modem strings are in the "bbsconfig" file under "modems".

The file format is like this (comments are NOT in the file so DO NOT include them):

```
2400,1,0                - Maximum baud your modem has (30 chars max) LINE 1
                            (,) 0=No carrier detect HARDWARE cable used
                                1=Detect Carrier with cable (HIGHLY RECOMENDED)
                           The ,0 will be for using DTR hang up when it's available.

ATE0V0M1S0=0S2=2        - Modem string (up to 250 characters allowed here)
2400,1,0                - Maximum baud your modem has (30 chars max) LINE 2
ATE0V0M1S0=0S2=2        - Modem string (up to 250 characters allowed here)
```

And so on for each line....

The S2=2 is standard Hayes for making the "+++" into ASCII code 2. The V0 means we want numeric result

codes only. You may have to tell your modem to send NO EXTENDED RESULT CODES if it's a 9600 MNP

type. You need to READ your modem's manual. There's some other text in this archive about modems and

strings.

The "serial" module doesn't handle hardware handshaking, so you would have to have new serial module to

handle 19200 type modems correctly. I'm sure someone will have one soon. It would be nice to have a much more configurable one.

The "modems" module handles all the modem string stuff, and other modules may be available later that handle special modems.

It is ready to go as is, MUBBS runs on a Mac plus with 1 meg and ONE serial port. Use modem cables that give CARRIER DETECT back to the computer. IT IS LOOKING FOR A MODEM ON THE "MODEM" PORT! If you don't a modem on the port it will be slow while it looks for the modem ! (see the last few paragraphs for logging in on a terminal).

I HIGHLY RECOMMEND GETTING A CARRIER DETECT MODEM CABLE !! This is a standard modem cable most of the time. If you're not sure, use a "ohm" meter and check your pins against the "modem cable" file.

WHY CARRIER DETECT ? Because your thousands of users will keep getting BUSY signals while your BBS waits to TIME OUT !!! Now picture this:

You are NOT running a carrier detect cable, a user hangs up on your system, someone else calls the BBS (with their AUTODIAL on just to make things worse) and the modem then sends the "ring" to the serial port. GUESS WHAT THE BBS THINKS ??? It thinks a user is STILL TYPING ! (so it NEVER hangs up for HOURS !)

MOST STORE PURCHASED CABLES WORK FINE !!

Please, please, please run a proper cable. If you have CHECKED your cable and it's sending back carrier

detect for sure, there may be some sort of Mac hardware change that prevents the "serial" module from

detecting carrier detect. IT'S MOST LIKELY YOUR MODEM STRINGS ! Some modems need &C1 or C1 in the

string in order to send back carrier detect.

If you are really having problems, look for other "serial" modules on the support BBS and see if others are having the same problems. ALL serial I/O is handled through a REPLACEABLE module !

The BBS can use BOTH ports if you want it to. It WILL not access any special serial cards till someone writes a "serial" module to handle them.

MUBBS has the basics that are important to any BBS, and they are working very well. Handling the serial ports

seems like a easy task for those who don't program, but that is one of the hardest things to do. Switching

between two users, all the while using the SAME code is also not a simple task. A lot of thought has been put

into the Main Module's code.

MUBBS is set up to run on a Mac Plus with 1 meg ram because you can buy 512 boards cheap and hack

together a plus for under $400. It should run on other configurations, but don't complain too loud when it

doesn't.

This is still a sort of "test" version of the finished BBS so don't expect it to be without bugs. We have run it on

several configurations, and it seems to work OK on system 7 (the memory hog system).

The best way to learn is to run the BBS and play around with it...

When I originally designed MUBBS it was made so that I could do almost everything from a remote location.

There isn't much of a Mac interface. You cannot actually see what a user is doing because the MAC'S scrolling

SLOWS the system down considerably. There are reports in each window that show where the user is, and

what he is selecting. I would think later there would be a option to monitor a port for a while, and if you leave it

alone it automatically switches back. This would allow the system to operate at it's highest efficiency.

You will notice that BACKGROUND tasks under multifinder go REAL SLOW when the BBS is running. This is to

give the BBS as MUCH time as I can. When you log in locally, everything speeds up. If you select "Faster

Background" from the "Sysop" pull down menu, the background sped will increase, but YOUR USERS that are

ONLINE will start going REAL SLOW ! That's the trade off. On faster systems, like a Mac II the users don't slow

down much. You should only log on locally or select this feature if no one is on (depending on the computer you

are running). TURN IT OFF WHEN YOU ARE DONE !

The system automaticly RESETS back to "slow background" after 30 minutes, incase you forgot to. But your users are gona get a slow system till then. You need to remember to turn it off.

The only USER in the USERLIST right now is the sysop , called "sysop" (and maybe some other "test" fake

people that you can delete). The password is "sysop" and can be changed by either editing the "userlist" file

with a text editor (make sure all FIELDS are the same length as they were before you started) or edit it in the

"sysop" menu (if the "sysop" module is installed).

Passwords are NOT case sensitive. They are stored in UPPERCASE also.

The sysop heavy stuff system password is "sysop" also. To get to the sysop functions, press "]" at the main menu (no, I'm not stupid enough to put it on the menu!). If you are a level 20 user ("sysop" is set for 20), you will get the sysop menu (if the "sysop" module is installed).

The "bbssupport" folder contains the "bbsconfig" file. It looks something like this:

1	- The Debug Level
2	- Number of users for this set up
24576	- Stack size in Bytes for each user (you shouldn't change)
360	- Number of 1 minute periods till a "reset"
1	- Reset mode
sysop	- This system's Sysop name
MUBBS Super BBS	- This system's name

Later on there will be a small application that modifies this file in a "Mac" way (but don't hold your breath).

Debug levels are 0= OFF, 1= ON, 2= more. There may be a level 3 later where it does shows the other level stuff also. If you don't like all the "weird" printing at the start of MUBBS, turn it off.

Number of users is up to you and your MEMORY. 1 is minimum (the Mac screen and keyboard). You ALWAYS have to include the "monitor" screen as a user, so really you could only have 32 phone lines, you set the number of users to 33. Each user gets his own memory space. Figure that for each user you need another 32K.

Stack size is configurable so that you can taylor the BBS to low memory configurations. SOME MODULES MAY CRASH and screw up if this is too low a number. It's better to add a SIMM or two than make this smaller. Don't ever make it bigger than 28000 ! (MUBBS adds 4K to whatever you put in so it's never under 4K).

If you add more users, you may run out of memory. More users = more memory needed. You may have to increase the "Application Size" in the finders "get info" box if you are running 16 or more users..

Reset happens every 360, 1 minute periods or every 6 hours. Depending on the "reset mode" you select, the system reloads or resets the computer.

Reset mode levels are 0= NEVER, 1= Only reload MUBBS, 2= Every 4 times do a FULL system RESTART. I recommend AT LEAST level 1. When you are playing around setting the BBS up, you may not want it to reload at all. It only reloads after EVERYONE is logged out.

The "config" file contains the sysop's name so that when someone writes to the "sysop" it automatically E-mails the sysop's real name. The system name is there for other modules to use if needed.

Yes, RELOAD... A new concept in BBS's that don't glitch.....

The program is set to RELOAD itself twice a day and if you turn level 2 on, every fourth time it completely RESTARTS the computer. I was using the FINDER (not MULTIFINDER) and had the MUBBS appl set to start up at boot. RELOADING a program is important when you understand COSMIC RAYS, like GAMMA, BETA and stuff like that. Those rays penetrate through all kinds of electronics and CAN'T be stopped. Ask anyone

who MANUFACTURES RAM CHIPS! Reloading the program prevents this from becoming a real problem. If

someone is online, the system waits till all are logged out and then reloads.

WATCHDOG... I had a hardware WATCH DOG hooked to the clock chip on the mother board, when you read

the time, the watchdog reset itself. If you didn't read the clock chip once every minute, it would reset the

computer. This kept the system up ALL THE TIME. Remember, I was using it a lot from REMOTE. I didn't feel

like going for a hour drive every time I had a POWER GLITCH (UPS's screw up too). MUBBS is set up to do

this, and a watchdog board will be made available with "clip" leads or something so that it can be easily added.

Watch the support BBS for more details.

You're talking about a REAL BBS, that ANSWERS the phone all the time. You're talking about leaving it in a

remote location, several hours away from you and not having to drive every other day to un stick it. You're

talking about the Voyager Spacecraft !!! (or MUBBS, whichever you can afford).

You can FORCE a reset as a test from the "sysop" pull down menu. There is also a "function" that calls the "function" module (when it's available) that might do something.

There are some things in the ONLINE sysop menu that allow you to force a reload, or reset from remote and do some other stuff. You should read the "sysop" module's instructions. Basically the user list maint runs a check of all records and checks to see if some extra characters have been added to the file (through a glitch).

To get to the heavy sysop stuff, use "sysop" as the password. I put this in as protection from someone that may have my password and then gets to this and has to type another password (it wasn't the same password as the log on password on my system). It will hang up immediately if you don't type it correctly. The password is

configurable.

I have made it so you can log in from a terminal, just type "me(cr)" while it is waiting for ring (at the modems

MAX baud setting for that port). It will ask you if you want to go to 19200, say yes and change your term's

speed, say no and remain at whatever you were on at. If you don't run it from remote, or a terminal you really

won't get what's happening when a user logs in. TRY IT ! (You'll like it)

"bbsresets" (we are still looking at the "bbssupport" folder) is a count for the reset function, don't bother with this.

"bbscounts" is the count of how many logins there has been TOTAL to your system. You should set it to 0 when you first start your BBS.

"closemodules" is a list of modules to call when MUBBS quits. "serial" is ALWAYS called at start up and needs

to be called before the program quits or reloads. THIS FILE IS AUTOMATICALLY SET UP FOR YOU, so don't

mess with it.

"logoffmodules" is a list of modules that could be called when a user logs off. There are no modules installed as

of this release. Again, DON'T call a module this way unless the instructions SPECIFICALLY say to do this.

"misc" is for miscellaneous things MUBBS needs to have a scratch pad for, leave this alone.

"newuser" 1,2,3 are the different log on files sent out to any new users, you could modify these type of

"instruction and help" files.

"systemstartup" is a text file sent when you first log on, you can modify it.

In the "logs" folder; the file "systemlog" is a log of system events, like when it resets/reloads and how many calls

were logged during the time it was up. This log doesn't get purged automatically so you need to shorten it once

and a while. Later the "minute10" module will do a "maintenance" function once a day and shorten the files for

you.

The file "userlog" is a list of users that logged in.

The folder "usermonitor" is where the "monitor" file is put for each user you have the "logmode" set to 1 in the user's record (see the login module's instruction for details). Basically you can have log a users "moves" on the BBS to a file for later inspection. I don't recommend turning this on for everyone because it eats disk space like a DOG !

The folder "user" is where the user record file is. The "maintenance" module may make a daily copy of this file as a back up.

The other folders are for particular modules, please refer to the module's instructions.

When making menus, please follow the "MUBBS User Interface Guidelines". MUBBS menus are simple and to the point. Your user will appreciate the ease at which they can access your BBS.

Sysop Log On:

Pull down sysop menu and select log on, JUST SAY YES to "put all modems to ring?" if you arn't hooking up modems to the ports. This will stop it from trying to reset the modems.

You can select "Modems to Ring" from the pull down menu, it will SHUT the modems up if you don't have the cables hooked to anything. (it skips to wait for a ring)

WARNING: This Program will modify your STACK size! Quit the program and reboot after if you want to run other programs. D/A's work OK, I used PowerEdit or JolliWrite to edit most of the text files WHILE the BBS was running.

DON'T QUIT WHILE YOU OR SOMEONE ELSE IS LOGGED IN ! It's not a good habit, but MUBBS allows it to happen just incase you had to.

MUBBS WILL USE small APPLICATIONS for configuration of most things. I mean "special" APPLICATIONS written for MUBBS. There will be source code examples of these apps too. DON'T use these applications WHILE SOMEONE IS ONLINE ! If you are MODIFYING some file, it may screw things up.

DISCLAIMER: This program is a test, it is not debugged, USE AT YOUR OWN RISK ! It is not intended for any particular purpose, and especially not any you expect. It can crash, wipe out your hard drive, and make your life miserable. Back up all data before using. YOU HAVE BEEN WARNED ! This program will self destruct if not handled in a caring manner. Keep the copy that you downloaded in archive format or suffer the "download again" pain. Use sparingly. Don't drink and BBS.

User levels: 20 is sysop, 1 is New User. You could have 32767 user levels if you wanted, but to conform to other

MUBBS setups, 20 is enough !

You can upload this file to any BBS or online service, it's free, you cannot charge for it for any reason (as if someone would pay for it). You must include ALL files found in the ORIGINAL distribution archive. You can find the original on my BBS, free to download (and I'll try to keep it "access first call"), up to 9600 baud V.32/V.42 (unless something better rolls around).

Other stuff... DON'T ASK ME !!! Figure it out yourself !!! Don't bother me till you waste 5 hours trying to figure it out yourself. Post on the MUBBS support BBS and see what comes back (there are some really GOOD people involved in MUBBS, and they are very friendly).

Remember most MUBBS modules will be FREE, so be real NICE to any programmer !

I spent enough time putting this version together. I am busy putting the new modules together. What would you rather have ?

I hope you read this WHOLE FILE. If you didn't you will have problems for sure.

PROGRAMMERS:

Please read the "Writing MUBBS Modules" file, it tells how to write your own custom modules for MUBBS.

You need to read the "MUBBS User Interface Guidelines" file if you are planning on writing a module.

There is example code that shows you how to make menus, and how to print out text files. That's mostly what

BBS's do anyway! With all the EXAMPLES AVAILABLE you may only have to modify one slightly to get your

application of MUBBS to work.

When you compile a module, it's a code resource. You should note the settings in the projects that are supplied.

A nice BBS support application would be one that let you remove/move/add modules to MUBBS (hint, hint).

Have a good time with all this !

Nate...

"N Hawthorn" <----- via America On Line

My BBS: (MUBBS Support)

Space Sciences BBS;

Shuttle updates, Hubble pictures, status reports, RAW science data, Space discussions, MAC PD programs,

GIF's, BBS Support & LOTS MORE !
3/12/24/9600, 300+ Megs. FREE access to most sections (805) 259-6407 24hr
PC Persuit D/CAGLE or in the SF Valley (818) 998-2076
From Palmdale (805) 268-8815