
IMAGE BBS V3.0

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NEW NISSA SOFTWARE

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Image BBS v3.0 Documentation

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- Preface –

To understand the history of Image BBS v3.0 you have to go back to 1991. Ray Kelm and John Moore started work on Image v2.0 and the C128 version. After a couple of years, John passed away and Ray lost interest in the C64 version of the software. Fred Dart who was supplying technical phone support got Ray to send him what he had up to that point. Fred recruited myself, Jack Followay, and Larry Gartin to help at least get the software to the marketplace. We hit the ground running and before long I had the EM section done, VF section done, and NF section done. Jack Followay was working on the im and other items. Larry Gartin was beta testing what we had going on. Fred was testing and fixing what he thought needed to be fixed. In the spring of 1996, I experienced a hard drive failure and left the programming team. At that point Fred Dart brought on Bob Sisco and Bob, Fred, Jack and Larry continued work. Over the next few years. Image 2.0 was worked on but never released. When Fred passed away all work pretty much ceased.

In 2015 I was moving to a new home and didn't want to bring my old Commodore stuff with me so I sent Larry Hedman the backup disks of my Lt. Kernal hard drive. Image BBS' 2.0 was among them. He took those files and over the next 3 years cultivated them into a working system. The final release of 2.0 was in December 2018. Days after the release of 2.0 and my BBS on a stick, Larry and I discussed the source code disks we got from Jack Followay. There was a BBS program on there which wasn't like the 2.0 we worked on. This was a completely renumbered version of 2.0. It was about 50% complete. Most of the subsystems did not work or were not fully written yet. We decided then we would take what was there and try to complete it and release it as 3.0 since it was a completely new basic portion. We also were able to get some of the ML changed and working. That project was started in December of 2018 and Larry took the helm and he pretty much wrote everything. So that brings us to today.

Thank you for downloading Image BBS v3.0 © NISSA BBS Software.

Special thanks go out to:

Larry Hedman:

For which none of this would be possible today. For his programming skills and after teaching himself a fully new system to which we now have 3.0.

Ryan Sherwood:

For his ML programming and knowledge of the ML used by Image BBS

Jack Followay:

For doing the major rewrite of the first set of 3.0 files known then as 2.0.

Bob Sisco:

For taking the helm and working with Jack in the late 90's trying to get 2.0 out the door.

The next few guys I am going to mention are what have made Image BBS what it was and what it is today.

Ray Kelm: For coming out of retirement to fix the issues with the ML and creating a full source code to be able to be mod and rebuild anytime anyone wants. Ray has been amazing me with his programming skills for 30 years and he never ceases to amaze me. Thank You Ray!!

Bob Leary: For his testing of the original 2.0 and his programming skills in adding to the original 1.2 then 2.0.

Last but not least the men who we have lost over the years for without whom Image BBS would never be where it is today!

In Memoriam

John Moore:

For the original 2.0 Sub-boards and network files, and other work on 2.0 including his never finished and now lost forever C128 Version.

Don Gladden:

Nothing would be possible here without the original 1.0 Image BBS.

Fred Dart:

My friend, my business partner, my confidante. The man who made me a better programmer when I was programming non-stop in the 80's and 90's. Without Fred, there would be no 2.0 today, and indirectly there would be no 3.0. Fred was the type of guy who you either loved him or hated him. He was a typical Military officer. Fred was my friend though, and he would be proud of what has taken place over the past 5 years, he would probably say it is all programmed wrong and it needs to be re-

written but that was Fred! Thanks Fred! I thought you were an old goat back in the day but you were more than that you were my friend!

These three guys made Image what it was then and what it is today!

Thank you to the above three men who took this high school educated basic programmer and made him a better programmer, and a better SysOp.

Last but not least, the group NISSA, when I took over NISSA in I believe 1989 it was a group that was slowly coming into its own and Fred and John felt it should not be run by “Company Men”, so it was offered to me along with Bruce Hammond, we ran it for a little bit and then brought in Larry Hedman to handle a leadership role on the west coast. Who would have known 30 years later Larry would be the main programmer of a brand-new version of Image BBS! Great job Larry!!

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1 - SETTING UP YOUR IMAGE BBS v3.0

Setting up your BBS should be very simple, as long as you follow the instructions. We suggest you read this chapter carefully and then setup your system step by step, keeping the manual handy for reference. The configuration section also has built in help to get you configured fast and easily.

HARDWARE CONSIDERATIONS:

Image BBS v3.0 was tested on the following hardware:

- WinVice using both 1581 and FD4000 disk drives, normal User Port communications

- With both TCPSER and BBS Server/VSPE configurations

- Lt Kernal (Rear Admiral) Hard Drive with Swiftlink and normal User Port configurations using BBS Server as the “Modem” of choice.

- CMD (Thunderdrive) Hard Drive with Swiftlink and normal User Port Configurations using BBS Server as the “Modem” of choice.

- uIEC/SD by Jim Brain as a mass storage device.

Although we have not tested this software on a great deal of other hardware, it should run with no issues on just about any hardware.

GETTING STARTED:

Now that you are ready to setup your IMAGE BBS, we recommend that the first thing you do is make copies of the .d81 and .d64 file(s) you received with the BBS Software and keep them in a safe place. When copying the files out of the original disk images we recommend you use FCOPY+ for all the PRG, and SEQ files, and COPY-ALL.64L written by Jim Butterfield for the REL files. (Available on the '3.0 UTILS.D64' disk)

DESIGNATING DRIVES:

The Commodore 64 is designed to use up to eight devices on the serial port however we recommend not using more than six due to current limitations of the serial port driver. It will support single or dual drives, partitions 1 through 254 on CMD hard drives or SD2IEC drives and logical units (lu's) 0 through 9 on a Lt. Kernal (IMAGE will not access lu 10 on a Lt, Kernal), You will want to plan your setup on what space you have available, so read the following information carefully to help you in this regard. Although

it is possible to run IMAGE BBS v3.0 using only two 1581 disk drives, we highly recommend you use multiple drives, since you will find that disk space and directory space gets used quickly.

When referring to "device" in this chapter, we are talking about the device number assigned to the particular drive. (i.e. one drive on line is usually set to device 8, two to 8 and 9, etc.). When referring to "drive", we are talking about the drive number. (0 on a single drive, 0 or 1 on a dual drive, 0 through 9 on a Lt Kernal hard drive, 1 through 254 on a CMD HD or Thunderdrive). If you have multiple drives, there may either be a switch somewhere on the drives to change device numbers or in the case of CMD and Rear Admiral drives, a "Swap" button in addition to rear panel switches. "Directory space" refers to the actual directory on the drive, which is usually limited, depending on the type of disk drive. A 1581 drive allows 296 directory entries, while an SFD allows 224, etc. Check your drive manual to see what the limitation is. "Drive space" or "blocks free" mentioned here will refer to actual blocks used/unused on the drive. When referring to "Image Drive" we are talking about the six "Image Drive" assignments. Each "Image Drive" will be assigned a "device" number and a "drive" number.

Now you will want to plan out which disks you want to use for which functions on the BBS. There are six "Image Drives" for system functions. These can be combined in any form on any drive or number of drives, they are described as follows:

1- The "System Disk"

Contains mostly sequential text files that do NOT change often. menu files, board entry files, and board data files are all included on this disk. Also, system news files will be located here. They will not use too much directory or drive space. All files on this disk will have a prefix of "s.", except news files, which will be prefixed with "n."

2- The "E-Mail Disk"

Contains all user Email and forced mail files. Will use much more directory space than disk space. All mail files are stored with a prefix of "m.", while forced mail files use a prefix of "f.". If the BBS is networked, all "nm." files will also be stored here.

3- The "Etcetera Disk"

Contains miscellaneous files used to supply the system with information. Many online games and functions use one or more "e." files to store data, some of these files are relative files, and most of them change frequently, all files on this disk are prefixed with an "e.", Storage depends on the number and type of online games and programs you are using. If no online programs use the e.disk, it will not use too much disk or directory space,

4- The "Directory Disk"

Contains all directories used on the system, whether for sub-boards, UD libraries, general file libraries, or whatever. These files begin with a "d.". These files change often, and this disk will use a fair amount of directory space, Not too much disk space,

5- The "Program Disk"

Contains all system module files needed to run the system. These are basic or ml modules that load in when needed to execute functions. These files are all the files found on the IMAGE 3.0 D1 disk. They are the main operating system of the BBS and use several prefixes which will be explained in

more detail in the User Guide section of this manual. They do not change, unless modified off line. We highly recommend using device 8, drive 0 for the "Program Disk".

6- The "User Disk"

Contains all user data files, which are expanded as needed, these are one relative file and two program files that keep all user information available to the system, these files begin with a "u.". Three directory entries, a little over one block per user total,

Different devices and drives can also be assigned to each sub-board in the SB section, UD library in the UD section, UX drive in the UX section, and any file defined as accessible from the GF section such as games, text files, movie files, etc. These need not be the same as any of the system functions, but may be included within those drives if so desired.

CONFIGURATION SETUP:

Image 3.0 has three methods of installation:

1. Configure a New BBS
2. Convert from 1.2
3. Convert from 2.0
4. Abort – In case you change your mind. Does a C64 cold start.

Each method will be explained separately. Please refer to the installation instructions for the method you intend to use.

Installing a New System

Note: The file "im" line 3074 is preconfigured to run from drive 0. This is the default partition on most drives but if running on a Lt. Kernal and your boot LU is not LU0, change the "0" in line 3074 to the number of your boot LU.

1. Configure your hard drive and/or other system hardware for your Image drive assignments. I recommend separate partitions or drives for Image drives 1 (System), 2 (Mail), 5 (Program) and combining 3 (Etcetera), 4 (Directory) and 6 (User) drives to a different drive or partition. You'll probably want another drive or partition for the message boards and another for Uploads and Downloads.
2. Either convert the three .d81 and two .d64 files to floppy disk or use some other method of getting the files onto your Image drives.
3. Use fcopy+ included on the 3.0 UTILS disk for copying all the files from disk 1 to your "Program Disk".
4. I recommend using COPY-ALL.64L, also included on the 3.0 UTILS disk for copying all the e. files from disk 2 to your "Etcetera Disk".
5. Use fcopy+ to copy all the s.files to your "System Disk" and the nm.times file to your "E-Mail Disk". If you wish to run the Today in History logon module, copy all the "today." files to your "Etcetera Disk".

Installation

1. Access the device and drive of your "Program Disk" then type: load"boot 3.0",x,1 (x= device # of your boot drive)
2. When prompted enter 1 to Configure a New BBS.
3. Image will begin collecting information needed to configure 3.0.
4. Part I: Sysop Information - Enter the information asked for.
5. Part II: Clock Setting - You will be asked to select a method of setting Image Time automatically during boot up. (1) Manually, (2) CMD Device w/RTC Option, (3) Lt. Kernal Port 1, (4) Lt. Kernal Port 2. If you select (1) you will have to set the date and time after every reboot. If you select (2) the program will ask which device has the CMD/RTC option. Enter the device number of your CMD device. Options (3) and (4) are for use with Lloyd Sponenburgh's Real Time Clock module attached. (NOTE: The default for CMD drives is 8, MAKE SURE YOU ENTER THE NUMBER OF THE DEVICE YOU WANT TO USE HERE, EVEN IF IT IS 8.
6. Part III: Device/ Drive Settings – Configure your "Image Drives Assignments"
7. Part IV: BBS Information - Enter the customized information asked for pertaining to YOUR BBS.

8. At this point, Image will create several files needed for its own operation. When finished, Image will display a message for you to read and ask you to <Hit any key>. Hit a key.
9. The last step in the initial setup is whether or not you will be using a Swiftlink. If you are using the user port then choose option 0, if you will be using a Swiftlink, then choose option 1. This will setup a variable which will be used to automatically configure the BBS to use whichever port you have chosen.
10. Sit back and watch Image self-boot to the call waiting screen. If Image time has been set during boot up from an external device, Image will perform auto maintenance.

Configuration

1. At the System Idle screen, hit the number 1 key to set the time if not already set by the CMD boot device. Image may or may not perform auto-maintenance again and return to the idle screen.
2. Press the f1 key to go to full screen mode then press the f7 key to log on. Press the "I" key for Instant Login.
3. If asked, enter your password. The BBS will greet you with a welcome message and then prompt you to select your time zone.
4. Select your time zone (7=EST, 6=CST, 5=MST, 4=PST)
5. The BBS will display the current time and a Stack Free; 239.

Note: any number less than 239 at the main prompt means there is garbage on the stack.

6. At the main prompt, enter EP to Edit your Parameters.
Select Parameters
Set your Computer Type and any other Terminal Parameters you want.
More? Prompt Off and Cursor Menu Mode On are recommended.
Hit RETURN to exit.
7. At this point, it is suggested you log off using the O command and answer Yes to Update User File? This will save your new parameters to your user file. You can then log back on in any mode you choose.

Note: Always log off with the O, O! or O%! command. Logging off with the f7 key will bypass the module which updates the last 10 callers and cause errors in the time used.

8. Log back on to the BBS. At the main prompt, enter IM - You will be taken to the Image BBS V3.0 Configuration Editor.



9. You can use cursor controls or just enter E for Access Groups. The Group 9 flags should already be set for full sysop access. Enter the number 9 and change the group name to Sysop. Edit any access group Name and Flags per your preference. Enter RETURN to exit, saving changes. You will be returned to the Configuration Editor.
10. Enter I for Misc. Features - At minimum, you will need to set the Time Zone and the System ID. Edit any other parameter you wish to set. When finished, enter N to Quit back to the Configuration Editor.
11. Enter J for Modem Config. **Please use the Addendum at the end of this file to properly setup your modem setup you will use.**
12. The remaining Configuration options are custom setting for your BBS and will not be discussed as part of the installation process.
13. Enter N to go to the Base Editors
14. Cursor to or enter G for Editor Utils.
15. Enter A to Run Reledit. Here you will define your Subs, U/D's, U/X's and SIG's the same way it is done in Image 1.2a. You **MUST** define at least one SIG and add your SB, UD and UX assignments. When finished with Reledit, exit out using the RETURN key until you end up back at the Base Editor Programs Menu.
16. The remaining items in the Base Editor Programs are Sysop Utilities for maintaining the BBS. Refer to the User Guide for further information.
17. Select K to return to the Configuration Editor.
18. Select Q to exit the menu back to the Main prompt.
19. Read the [Final Notes](#) on the last page of these instructions.

From here, explore and become familiar with the new features.

Much has changed since Image 1.2 and 2.0. The best way to learn is to experiment. You'll probably be confused and make mistakes along the way but the learning experience is necessary for any new system. More information will be provided in the User Guide section but one of the main objectives of Image 3.0 is to make it as user friendly as possible.

As in previous versions of Image BBS software, menus are displayed with the ? mark and a Local Command menu is displayed to level 9 users with ZZ access by entering ??.

Converting a 1.2 System

Note: The file "im" line 3074 is preconfigured to run from drive 0. This is the default partition on most drives but if running on a Lt. Kernal and your boot LU is not LU0, change the "0" in line 3074 to the number of your boot LU.

Note: This is the recommended way of converting 1.2 to 3.0. Other ways may work but have not been tested.

1. Make a complete backup of all your Image 1.2 drives.
2. You will need two new Image drives (partitions) or use two locations not already assigned as Image 1.2 drives. They will be used for your Image 3.0 "Program Disk" (DR5) and your 3.0 "System Disk" (DR1). DO NOT delete any of your Image 1.2 files unless otherwise told to do so. Alternately, if you have enough hard drive space, such as on a CMD hard drive, you could make new partitions for all your Image drives and copy everything except the 1.2 boot and program drives to the new partitions. This method would allow you to revert back to 1.2 at any time in the condition it was last in.
3. Either convert the two .d81 files to floppy disk or use some other method of getting the files onto your Image drives.
4. Either use fcopy+ included on the 3.0 UTILITIES disk or log onto your 1.2 system in local mode and use +.CP for copying all the files from disk 1 to your NEW 3.0 "Program Disk". Copy all e. files EXCEPT for the rel files from IMAGE 3.0 D2 to your "Etcetera Disk".
5. Use fcopy+ or +.CP to copy all the s.files to your NEW 3.0 "SYSTEM Disk" and the nm.times file to your EXISTING 1.2 mail drive. If you want to keep your existing news files and canned message files, copy the n.* and s.can* files from your 1.2 system drive to your 3.0 "System Disk".
6. IMPORTANT STEP – Log on to your 1.2 system. Enter the 1.2 WF editor and load the file "bd.data" from your 1.2 boot drive. Lines 1 through 12 identify your Image drive assignments. Edit line 1 and 2 for your NEW 3.0 System Device and Drive numbers. Edit line 9 and 10 for your NEW 3.0 Program Device and Drive numbers. Edit any other drive assignments that may have changed. List the file and make sure everything is correct. SAVE that file as "d.data" (NOT "bd.data") to your NEW 3.0 "Program Disk".
9. Scratch the file "e.last" from your 1.2 system. Then shut down your computer.

Installation

1. Turn on your computer and go to your new 3.0 "Program Disk". Type: load"boot 3.0",x,1 (x=device # of your "Program Disk")
2. When prompted, enter 2 to Convert from Image 1.2.

3. Clock setting: - You will be asked to select a method of setting Image Time automatically during boot up. For this installation method, select (1) Manually. You will be able to change that later during configuration.
4. At this point, Image will create several files needed for its own operation. It will read the Image drive assignments and access group information from "d.data" and use that information to create a new "bd.data" file on its own Program Disk, modify the existing e.data file with expanded 3.0 information and create a new file called "e.access". When finished, Image will self boot to the call waiting screen.
5. The last step in the initial setup is whether or not you will be using a Swiftlink. If you are using the user port then choose option 0, if you will be using a Swiftlink, then choose option 1. This will setup a variable which will be used to automatically configure the BBS to use whichever port you have chosen.

Configuration

1. At the System Idle screen, hit the number 1 key to set the time. Image will perform auto maintenance and return to the Idle screen.
2. Press the f1 key to go to full screen mode then press the f7 key to log on. Press the "I" key for Instant Login.
3. If asked, enter your password. The BBS will greet you with a welcome message and then prompt you to select your time zone.
4. Select your time zone (7=EST, 6=CST, 5=MST, 4=PST)
5. Enter the number of lines per screen (suggest 23)
6. At the main prompt, enter EP to Edit your Parameters.

Select Parameters

Set your Computer Type and any other Terminal Parameters you want.

Set Cursor Menu Mode On

Hit RETURN to exit.

At the main prompt, enter EP to Edit your Parameters.

Select Info

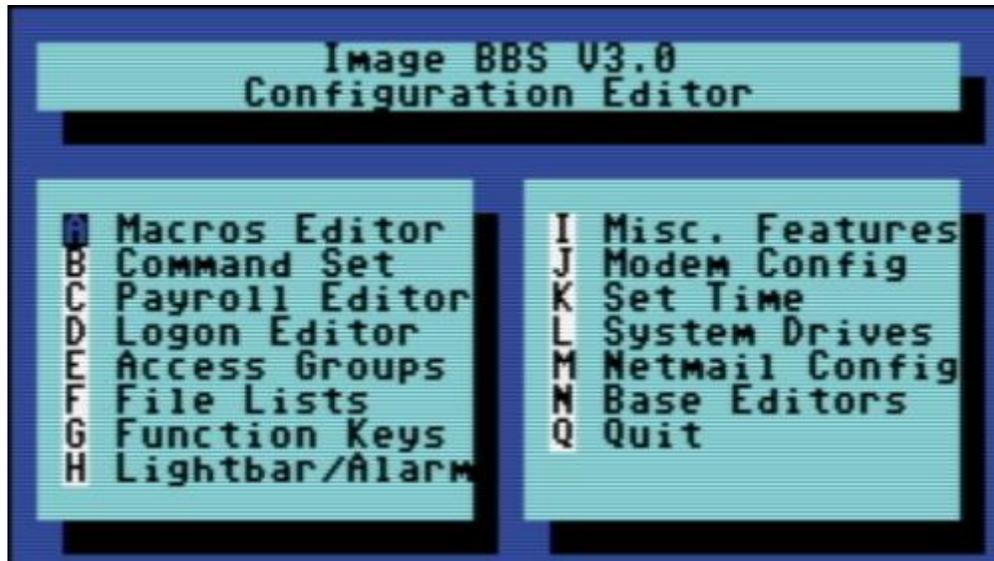
Change your phone number to your email address

Hit RETURN to exit

7. At this point, it is suggested you log off using the O command and answer Yes to Update User File? This will save your new parameters to your user file. You can then log back on in any mode you choose.

Note: Always log off with the O, O! or O%! command. Logging off with the f7 key will bypass the module which updates the last 10 callers and cause errors in the time used.

8. Log back on to the BBS. At the main prompt, enter IM - You will be taken to the Image BBS Configuration Editor



9. You can use cursor controls or just enter E for Access Groups. All group names and flags should be the same as your 1.2 system was. Edit any access group Name and Flags per your preference. Enter RETURN to exit, saving changes. You will be returned to the Configuration Editor.
10. Enter I for Misc. Features - At minimum, you will need to set the Time Zone and the System ID. If you are running on a Lt. Kernal, use option A to set to your Lt. K device number. Enter M to configure your Chat messages for entering and leaving chat. Edit any other parameter you wish to set. When finished, enter N to Quit back to the Configuration Editor.
11. Enter J for Modem Config. **Please use the Addendum at the end of this file to properly setup your modem setup you will use.**
12. Enter D to go to the Logon Editor.
13. Enter A for Logon Mods and enter H(elp) for instructions on how to configure your logon modules. Configure them for your preference. Since this is a conversion from 1.2 to 3.0, I highly recommend including "i/lo-email" as a forced module in your login mods. This will ask any user who is still configured with a phone number in their u.config file to change it to an email address.
14. Enter B for Maint Mods and configure your nightly Maintenance modules.

15. Configure any other items you need to get started.
16. When back at the Configuration Editor, enter N to go to the Base Editors.
17. Cursor to or enter G for Editor Utils.
18. Enter A to Run Reledit. Here you should find your Subs, U/D's, U/X's and SIG's the same way it was configured in Image 1.2a. Verify everything is correct or make changes as needed. If your 1.2 system was networked, you will need to enter into each netsub you have defined. No changes need to be made from within the netsub but when you exit each netsub, they will be updated with the Image 3.0 load address for the structures type file they are stored in. When finished with Reledit, exit out using the RETURN key. The BBS will then perform a series of operations to convert all your 1.2 Sigs to 3.0 format. And end back at the Base Editor Menu.
19. This would be a good time to check your CMD Clock and Set Time Dv # of your CMD drive if you want to use it for setting Image time during boot up. Use the available menu selections.
19. Select K to quit back to the Configuration Editor.
20. Select Q to quit back to the Main prompt.
21. If you had macros defined in your 1.2 system and want to keep them, you will need to edit the e.macros file, otherwise, just delete it. To edit the e.macros file, use the RF command at the Main prompt to read the Relative File, "e.data". Read "All" the records to see how many macros you have defined. Then read "e.macros" again and view record 1. Edit record 1 by changing it to a number equal to 1 less than the total number of macros you previously viewed.
22. Read the [Final Notes](#) on the last page of these instructions.

From here, explore and become familiar with the new features.

Much has changed since Image 1.2 and 2.0. The best way to learn is to experiment. You'll probably be confused and make mistakes along the way but the learning experience is necessary for any new system. More information will be provided in the User Guide section but one of the main objectives of Image 3.0 is to make it as user friendly as possible.

As in previous versions of Image BBS software, menus are displayed with the ? mark and a Local Command menu is displayed to level 9 users with ZZ access by entering ??.

Converting a 2.0 System

Installation

NOTES:

- a. The file "im" line 3074 is preconfigured to run from drive 0. This is the default partition on most drives but if running on a Lt. Kernal and your boot LU is not LU0, change the "0" in line 3074 to the number of your boot LU.

- b. This is the recommended way of converting 2.0 to 3.0. Other ways may work but have not been tested. Since you are already running Image 2.0 keep the same Image drive assignments for the 3.0 upgrade.
 1. Make a complete backup of all your Image 2.0 drives.
 2. Copy "bd.data" from your programs drive to your "Etcetera Disk".
 3. Remove all your 2.0 boot and program files from your "Program Disk".
 4. Copy all the files from IMAGE 3.0 D1 to your "Program Disk".
 5. Copy "bd.data" from the "Etcetera Disk" to the "Program Disk" and rename it to "d.data".
 6. Copy "e.lightdefs", "e.lightbar" and "e.ecs.main" from IMAGE 3.0 D2 to your "Etcetera Disk" replacing the existing files of the same name.
 7. Remove all the Image 2.0 s. files from your "System Disk".
 8. Copy all the s. files from IMAGE 3.0 D2 to your System Disk".
 9. If you want to run the "Today in History" login module in 3.0, copy all the "today.*" files from IMAGE 3.0 D2 to your "Excreta Disk".
 10. From your "Program Disk", type load"boot",8,1 (or the Lt.K or Jiffydos equivalent)
 11. When prompted, enter the number 3 to Convert a 2.0 system.
 12. Image 3.0 will perform all the necessary tasks of converting your 2.0 to 3.0 and will end up at the idle screen. Since the 3.0 modem configuration is different from 2.0, Image will not be communicating with your virtual modem.
 13. Log on to your BBS from the console and enter IM to go to the Configuration Editor.



14. Configure your modem.
15. Configure any items not already configured in Misc. Features.
16. Go into the Logon Editor and configure your Login Mods. There is a Help function which will explain how to do it.
17. Configure your new Maint Mods.
18. Configure your Lightbar Defs.
19. When back at the IM Configuration Editor, select the option for "Base Editors". This will take you to the menu page that used to be called by the SM command in 2.0. You shouldn't have to do anything there but you can look around if you want to. When done, use the Quit option to go back to the Configuration Editor and Quit from there back to the Main prompt.
20. Enter NF to go to the News files and configure any news files needing to be edited, added or configured. (n.\$Welcome!) Quit back to the Main prompt when done.
21. Enter GF to go to the General Files section. Notice that nothing is configured. You will need to reconfigure your GF section due to the incompatibility of 3.0 and 2.0 program files.

From here, explore and become familiar with the new features.

Much has changed since Image 1.2 and 2.0. The best way to learn is to experiment. You'll probably be confused and make mistakes along the way but the learning experience is necessary for any new system. More information will be provided in the User Guide section but one of the main objectives of Image 3.0 is to make it as user friendly as possible.

As in previous versions of Image BBS software, menus are displayed with the ? mark and a Local Command menu is displayed to level 9 users with ZZ access by entering ??.

2. ADDENDUM:

Modem Configuration – New to Image BBS v3.0 is built in Swiftlink High Speed compatibility. The BBS will run at speeds up to and including 38.4k, this has been tested in a Vice Environment extensively. If upgrading from 1.2 you must follow the Modem setup instructions fully as there are some changes from the add on 19.2k mods that were used before. 2.0 will not have this problem as you will be able to configure it fully from inside of the IM command line. The following settings are settings which have been tested extensively and we know they work.

Enter 1 to Setup New Modem Config

Answer Yes to the next two questions.

USERPORT SETUP:

Enter Modem Brand/Name: GLINK232

Enter Author (Return=New Image): GGLABS

Enter Custom Init String: Just hit RETURN

What is the Max. Connection Rate For This Modem? 3

Select Hang-Up Method For This Modem: D

Auto-Answer (ATS)=1): A

Use an ATH After ESCape Codes?: H

When In Local Mode, Should Phone Be: H

Does This Modem Need a 0 After ATH?: 0

Should ATH be in the Modem/Init String?: H

Select Value For ATX Setting: 1

Is DTR on This Modem Normal or Reverse?: N

Select CCITT or Bell Labs Standard: 0

Select RS232 Interface Type: 0

Is Caller ID Available (Both Modem AND Phone Line): 0

```

Modem: Glink232
By   : Gglabs

Modem Config Flags
1:Max. Baud 2400      2:DTR Hang-Up
3:Auto-Answer       4:ATH Aft/ ESC
5:Local Off Hook    6:ATH w/0 (ATH0)
7:ATH in Init$      8:ATX Value = 1
9:Normal DTR        10:CCITT (ATB0)
11:RS232: Normal    12:No Caller ID

Modem Init. Strings
-:e0v0h0x1b0
-:s0=1s2=27s7=25
A:

Modem Config Utilities
B:Setup/Import Modem Config
C:Customize Current Result Code(s)
X:Exit Modem Config
->

```

CARTRIDGE PORT: Swiftlink

Enter Modem Brand/Name: SWIFTLINK

Enter Author (Return=New Image): CMD

Enter Custom Init String: Just hit RETURN

What is the Max. Connection Rate For This Modem? 6

Select Hang-Up Method For This Modem: D

Auto-Answer (ATS)=1): A

Use an ATH After ESCape Codes?: H

When In Local Mode, Should Phone Be: H

Does This Modem Need a 0 After ATH?: 0

Should ATH be in the Modem/Init String?: H

Select Value For ATX Setting: 1

Is DTR on This Modem Normal or Reverse?: N

Select CCITT or Bell Labs Standard: 0

Select RS232 Interface Type: 1

Is Caller ID Available (Both Modem AND Phone Line): 0glink232

NOTE: You do not need to customize results codes unless you are using a dialup modem.

```

Modem: Swiftlink
By   : Cmd

Modem Config Flags
1:Max. Baud 19.2k      2:DTR Hang-Up
3:Auto-Answer        4:ATH Aft/ ESC
5:Local Off Hook     6:ATH w/0 (ATH0)
7:ATH in Init$       8:ATX Value = 1
9:Normal DTR         10:CCITT (ATB0)
11:RS232:SwiftLink  12:No Caller ID

Modem Init. Strings
-:e0v0h0x1b0
-:s0=1s2=27s7=25
A:

Modem Config Utilities
B:Setup/Import Modem Config
C:Customize Current Result Code(s)
X:Exit Modem Config
-=>

```

VICE Modem Setup: BBS Server v1.4a -VSPE (Virtual Serial Port Emulator)

Enter Modem Brand/Name: Swiftlink

Enter Author (Return=New Image): CMD

Enter Custom Init String: Just hit RETURN

What is the Max. Connection Rate For This Modem? 6

Select Hang-Up Method For This Modem: E

Auto-Answer (ATS)=1): A

Use an ATH After ESCape Codes?: H

When In Local Mode, Should Phone Be: H

Does This Modem Need a 0 After ATH?: 0

Should ATH be in the Modem/Init String?: H

Select Value For ATX Setting: 1

Is DTR on This Modem Normal or Reverse?: R

Select CCITT or Bell Labs Standard: 0

Select RS232 Interface Type: 1

Is Caller ID Available (Both Modem AND Phone Line): 0

Everything is the same as real hardware with the exception of DTR which is REVERSED and ESC Codes for hangup.

VICE Modem Setup: TCPSER Setup

Enter Modem Brand/Name: Swiftlink

Enter Author (Return=New Image): CMD

Enter Custom Init String: Just hit RETURN

What is the Max. Connection Rate For This Modem? 6

Select Hang-Up Method For This Modem: D

Auto-Answer (ATS)=1): A

Use an ATH After ESCape Codes?: H

When In Local Mode, Should Phone Be: H

Does This Modem Need a 0 After ATH?: 0

Should ATH be in the Modem/Init String?: H

Select Value For ATX Setting: 1

Is DTR on This Modem Normal or Reverse?: N

Select CCITT or Bell Labs Standard: 0

Select RS232 Interface Type: 1

Is Caller ID Available (Both Modem AND Phone Line): 0

NOTE: If using the TCPSER package, you MUST use the -I (Invert Carrier) option in the startup line. So, It looks like the following:

```
tcpser -v 25232 -s 19200 -p 6400 -I -B c:\tcpser\busy.txt -A c:\tcpser\answer.txt -C c:\tcpser\connect.txt -I 4
```

This will invert carrier on TCPSER, not in Image, which will have the effect of showing carrier in TCPSER, but not in Image. In my opinion TCPSER is the opposite of what it should be. This issue will not happen with BBS Server v1.4a (also included in this package)

NOTE: If running in Vice, and you will not be a part of the NISSA Network, then use TCPSER as it supports DTR for carrier loss, and hang-up. At the time of this writing we have not been able to find a Virtual Null modem cable/Serial Device program which allows the disconnection of PIN 6 in the “cable”. If you are going to be a part of the NISSA Network, then you will need to use BBS Server v1.4a and VSPE (Virtual Serial Port Emulator) because in my experience TCPSER has not been exact in uploads and downloads. BBS Server allows both up and downloads to work properly. The drawback to this setup is DTR carrier detect and carrier drop is not detected due to the fact that DTR is reversed.

3. The Light Bar

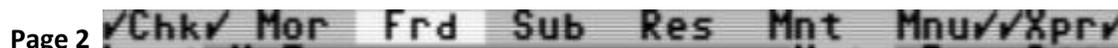
The light bar has many new options from the original writing of the Documentation when v1.0 and 1.2a was written. The original bars are still active as was before.



	Left Side	Right Side
SYS	SysOp Available For Chat	Background Page Enable
ACS	Edit User's Access	Disable 300 Baud
LOC	Local Mode (No Modem IO)	ZZ (Pseudo Local) Mode
TSR	Edit User's Time	Prime Time
CHT	Enter/Exit Chat Mode	Disable Modem Input
NEW	Disallow New Users	Enable Screen Blank
PRT	Print Spooling	Prints Log Entries
U/D	Disable U/D Section	300 Baud U/D Lockout



ASC	ASCII Translation	Line Feed After Returns
ANS	ANSI Color Enable	IBM Graphics Enable
EXP	Expert Mode Enable	Disallow Double Calls
UNV	No Immediate U/D Credits	Allow Auto-Logoff
TRC	On-Screen Trace Enable	Time: Reset Clock (By Alarms)
BEL	Local Bells Enable	Local Beeps Disable
NET	Netmail Enable	Netmail Trigger
MAC	Macros On/Off	MCI Disable In Editor



CHK	Enable Mail Check At Login	Excessive Chat Logoff
MOR	More Prompt On	More Prompt Not Available

FRD	Full-color Read Disable	
SUB	Message Bases Closed (SB)	Files Section Closed (GF)
RES	System Reserved (Default PW)	Network Reserve
MNT	Dump tr% at Hit Backspace	Modem Answer Disabled
MNU	Is User in Menu Mode?	Are Menus available on BBS?
XPR	Enable Express Logon	Use s.detect Files

Page 3 **EM3 ✓Sc2 ✓Scp✓Alt ✓Trb Dcd✓ Dsr✓ \$3e**

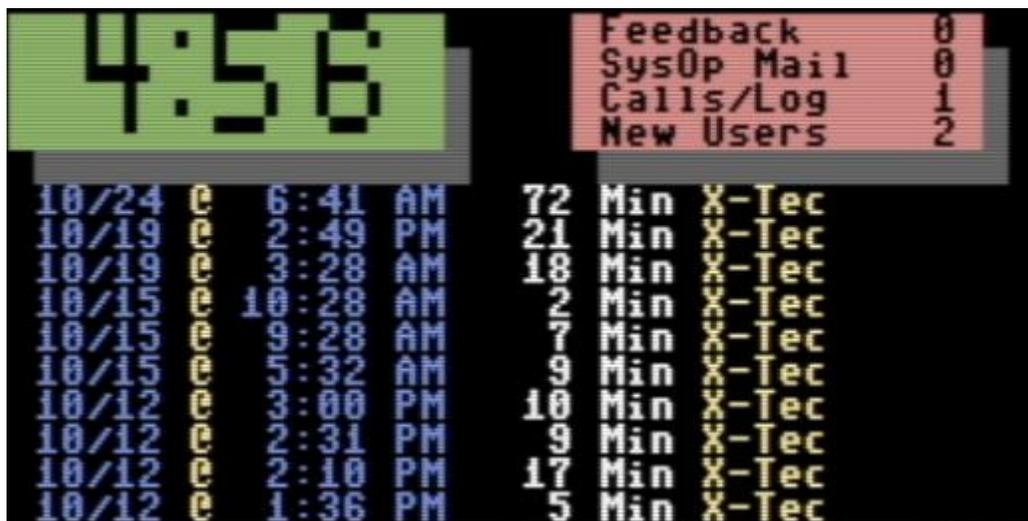
EM3	Emulate Image 1.3 Mode.	
SC2	Disable 2 nd Security Check	
SCP	Super CPU Configured	Turbo Mode v=On
ALT	Alternate Last 10 at Idle	
TRB	Disable Troubleshooting Mode	
DCD	Invert DCD	Carrier Present
DSR	Use DCD/DSR	Enable Rx/Tx Windows

Pages 4 through 7 are user definable and with the source code available on Facebook and other places you can modify the lightbar and rename the string choices. In addition to that all lightbar function defaults can be edited via the IM command and setting Lightbar defaults option.

4. SCPU Mode

Image BBS v3.0 has a built in SCPU mode. This mode, when turned on and a SCPU is installed, whether it be real hardware or Vice Emulation, will allow the BBS to drop down to 1mhz mode for file transfers and network transfers and at all other times will run at 20mhz mode. It also is hooked up to a menu command, (TM) which turns on and off Super CPU mode. Although not fully tested on the new Ultimate 64 by Gideon, this feature should work fine as the Ultimate 64 acknowledges the poke statements needed to speed up and slow down the emulation.

5. The Idle Screen –Top



The above is an example of what the top of the idle screen might look like in the default option 4 mode. It displays the large clock, the current number of Feedback messages, SysOp Email messages, Calls in today's log and New Users which have not yet been archived. The following functions are available at the idle screen:

1. Set Time
2. Bar Stats
3. Blocks Free
4. Clock, Last 10 callers
5. Perform a Garbage Collect
6. Reset The "Modem"
7. Reserve/Un-Reserve BBS with Password or remove password.
8. View Activity Or Idle Logs

Viewing the Activity logs will allow you to view the past 7 day’s worth of logs.

Viewing the Idle Logs will show you what takes place while the BBS is sitting at idle whether it be modem resets, Automaint, network calls in and out etc. This item also has the option to view the past 7 days’ worth of logs.

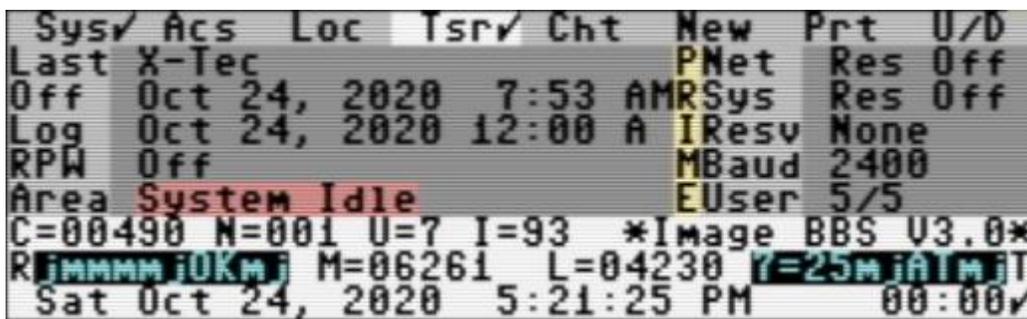
9. Is not used at this time.

A. (Shift A) sets off Automaint

Back Arrow: The Back Arrow Key runs Image Term, which has become a full blown Terminal program, which can upload and download show CG/ANSI/ASCII.

R. Reload i.lo (self-explanatory)

6. The Idle Screen – Bottom



1. Top Line is the Lightbar. Function keys are used with the Lightbar as follows: F1-Full Screen Mode (Hides all but the bottom line), F2-2Mhz Mode (With C=128 Computer Only), F3-Cursor Left, F4-Page Left, F5-Cursor Right, F6-Page Right, F7-Toggle Left Checkmark, F8-Toggle Right Checkmark
2. Middle Section. The left lines 2 – 6 display the last caller, logoff time of the last caller, daily log reset time, reserved password (Off if none) primetime if active and system status. The right lines 2-6 display Network Reserved (On or Off), System Reserved (On or Off), System Reserved (None, One, All), Current Baud Rate and Users (Active Users/Highest User Record)
3. Line 7. Displays C= Total calls to the system, N= Number of calls since reboot, U= Percent of today’s used time, I= percent of today’s Idle Time, *Image BBS V3.0*
4. Line 8. Displays R Last 10 received bytes, M=Free Memory, L=Line number being executed, T Last 10 transmitted bytes. (R and T windows will be blank unless Dsr-R is check marked)
5. Bottom Line. Displays the current Day, Date and Time and Time Remaining for a user while he is online. Will display 00:00 at idle. The left and right corners of the bottom line will display check marks from time to time. A left check mark indicates a user is online in Color/Graphics mode. A right check mark indicates a carrier is detected. You may also see uppercase letters between the current time and time remaining from time to time. G (Garbage Collect), L (Loading a file), S (Swapping Memory Chunks), I (Interrupt in progress), F (Full Buffer)

7. The Bottom Screen – After Logon

```

Sys✓ Acs ✓Loc✓ Tsr Cht New Prt U/D
User X-Tec ID # IM1
Last Oct 24, 2020 8:01 P Call 3/716
Name Larry Hedman Prms 40x24
Mail larryhedman@gmail.com Baud 2400
Area L:i.main User 5/5
C=00490 N=003 I=000 A=9 Commodore 64
R [REDACTED] M=21480 L=00006 [REDACTED] T
✓Sat Oct 24, 2020 8:13:22 PM --:37✓

```

- A. After logon, the bottom screen changes to a different format. The top line, Bottom line and line 8 do not change.
- B. Middle Section. The left lines 2-6 display the User's Handle, Last Call Date, Full Name, Email Address and Current Area of the BBS in use. The right lines 2-6 display the User's ID#, Call Number Today/Total, Line Length/Lines Per Page, Baud Rate and Users
- C. Line 7. Displays C=Total calls to the system, N=Number of calls since reboot, I=Idle time of current user, A=Access level of current user, User's computer as defined in his parameters.

8. Editing System Info Files

- A. Image 3.0 is supplied with several system files, identified by the prefix "s." which you may wish to edit to suit your own taste and to coincide with your BBS plans. Most "s." files are provided in six formats, three for 40 column and three for 80 column. Filenames ending in "0" would be displayed to ASCII callers, "1" to Commodore CG callers and "2" to ANSI callers. Likewise, filenames ending in "80" would be displayed to ASCII, CG and ANSI callers whose parameters are set for 80 columns. These system files are all SEQ format and can be edited with the WF editor.
- B. Suggested files for editing are "s.login", "s.welcome", "s.end", "s.start"
- C. You might also wish to edit the "Banner" files that display when entering into the various BBS sections. They are "s.SB", "s.UD", "s.UX", "s.EM" and "s.VF".
- D. The "s.detect" files are alternate login files that will display if Xpr-R is check marked.
- E. The "s.config" file is displayed to the user when the CF command is entered. It should be edited to reflect your system information.
- F. The "s.new user" file displayed to new users after they complete the new user logon application. In its generic form it contains Rules and Regulations, a Disclaimer message and a Privacy Notice. Feel free to edit this file for your preference.
- G. The "s.nu welcome" file is a welcome message that is sent as email to a new user after you give him access. You should edit this message for each access group that you will be assigning to new users. For example, if all new users are going to be assigned to group 1, save the message as "s.nu welcome 1".

9. The Local Commands

```

Main-Level Local Commands
-----
CP      File Copier
CP3     Enhanced File Copier
DE      Direct download editor (DX)
ED      Edit Users
IM      Image Configurator
MU      Message Move Utility
NW      Edit/Kill/View/Weed Netwall
R       Run + File
RF      Read Files (All Types)
RP      Read Program file
RS      Reserve an Account
SF      Sysops File Editor
UU      User View (Cursor Driven)
VL      View Variables List
MENU   Menu Editor
RELRD  Relative file reader

```

```

Read All-Level Local Commands?: Yes!
-----
All-Level Local Commands
-----
BFx,y  Blocks Free
CA     Add Credits To User
DCx,y  Disk Command
DRx,y  Disk Directory
FG     Force Garbage Collect
ME     Change ID to another User
RDx,y  Read File
MM     Memory Management

```

- A. By default, Local commands are available to level 9 users when logged on from the console or remote logon after entering into "ZZ" local mode. Other access users defined with maintenance functions may also be able to perform Local Command functions. From any main system prompt, enter ?? to access the Local Commands Menu to see a list of available commands.

- CP Stock Jim Butterfield file copier modified for Image 3.0
- CP3 Copies REL files, displays CMD Partitions, Counts files, Reads files and more.
- DE Sysop tool for providing direct downloads.
- ED Sysop tool for editing user records

IM	Main Configuration Editor
MU	Tool for moving messages between sub boards
NW	Edit, Kill, Vies, Weed the Netwall
R	Run a Program, Module or Sub-Module
RF	Read PRG, SEQ, REL files, edit rel file records, and more
RP	Read a PRG file directly. (RP5, RP8,3, etc.)
RS	Create a reserved account with password and access level
SF	Create, add to, edit record of other Sysop Users
UU	View User Information in 5 different formats
VL	View string, integer and floating point variable values
MENU	Edit menus for viewing by different access levels.
RELRD	Read REL files directly
BFx,y	Find blocks free on device x, drive y or use Image drive (BF5) format
CA	Add credits to current user
DCx,y	Send disk command to device x drive y
DRx,y	Get directory of device x drive y
FG	Frees up memory by forcing garbage collect
ME	Switch to another user account. Must be logged on from console
RDx,y	Read a SEQ file from device x, drive y
MM	View memory used by type and free RAM

2. Other sysop utility functions not listed on the Local menu may be available. View the ECS commands for further information.

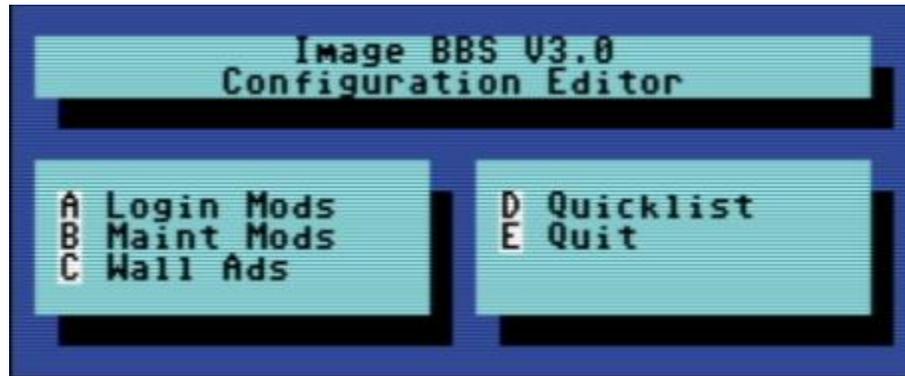
10. The Configuration Editor



1. The Configuration Editor is the main place where you will configure nearly every aspect of your Image 3.0 BBS. You should be somewhat familiar with it after performing the installation procedures to get your BBS up and running. In this section, the Configuration Editor menu and its several sub menus will be explained in more detail. As with all cursor driven menus, you can either place the cursor over the item you want to select and press the Return key or just enter the letter corresponding to its function
 - A. Macros Editor - Function A will take you to the Image 3.0 Macro Editor/Creator. Macros are short text strings you define that will appear at random near the Main prompt. Here you have the options to Create the macros file, Edit the individual macros, List the macros on file, Add more macros to the list and Quit back to the Configuration Editor. Keyboard colors are available for creating macros as are multi-line macros by the use of the back arrow key.
 - B. Command Set – Function B loads the Extended Command Set editor. ECS commands are the interpreter for the commands you enter at most prompts. Here you can Add, Delete, and Edit ECS commands. You can Load and Save them from/to disk, Get and Put them from/to memory, Find any ECS command included in the file and View them with the option of starting at any command number. There are basically two types of ECS commands, For the most part, GOTO commands load and execute a main program, identified with the “i.” prefix in the filename and GOSUB commands usually refer to a line number in the jump table part of the “im” file. Image 3.0 comes standard with 70 pre-defined ECS commands.
 - C. Payroll Editor – This function allows you to add members of your BBS to a list of users who receive “payroll” credits provided by the auto maintenance module “i/lo/payroll”. When the

first entry is added, the file “u.payroll” is created which is used by auto maintenance and subsequent deletions or edits of the file.

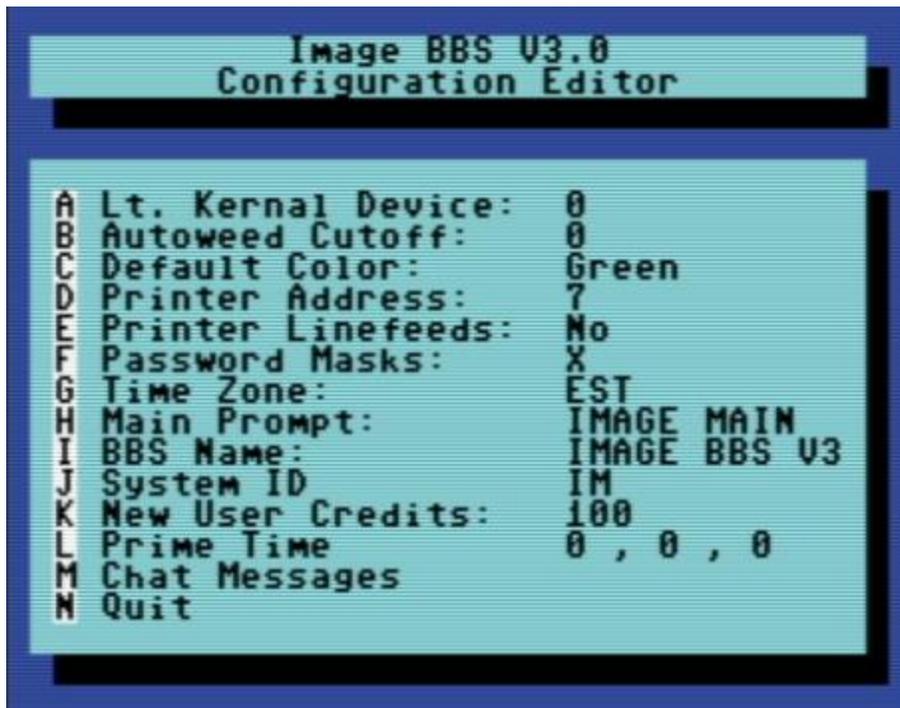
- D. Logon Editor – Selecting function D will bring up the following sub menu:



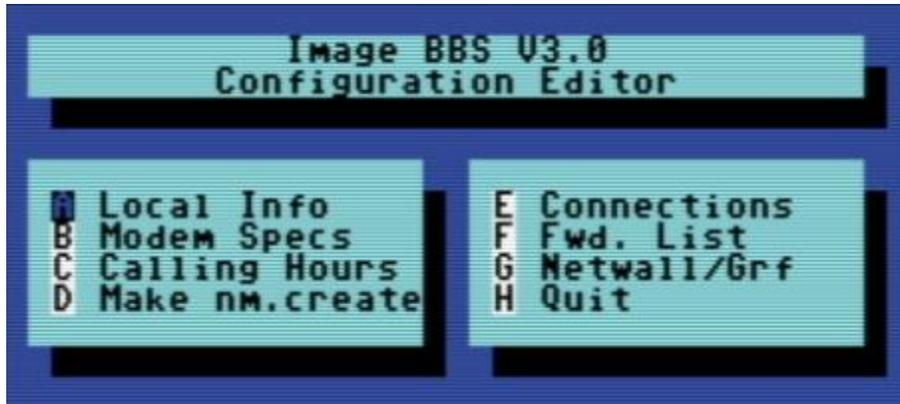
- A. Login Mods – This is where you can configure the optional login modules that the user sees during login. There is a Help option within the application which will explain how to set up the list of included modules.
- B. Maint Mods – This is a configuration utility to set up the auto maintenance program that runs at midnight. Here you can Add, Delete, Edit, Insert and Move items around on the list.
- C. Wall Ads – Wall ads are used on networked boards in the Graffiti and Netwall and also in the local netwall which will display a BBS name and telnet address at random from a list of items defined here. This utility allows you to Add, Delete and Edit items on the list.
- D. Quicklist – This option will allow you to identify sysops and co-sysops allowed to use the Instant login feature and have access to various functions defined by this utility.
- E. Access Groups – Used to set the Group Name and what each group has access to in the way of BBS functions
- F. File Lists – Used to create a list of files and define which UD they belong to.
- G. Function Keys – Defines an alternate set of function key actions used in the Image Term.
- H. Lightbar/Alarm – Selecting function H will bring up the following sub menu:



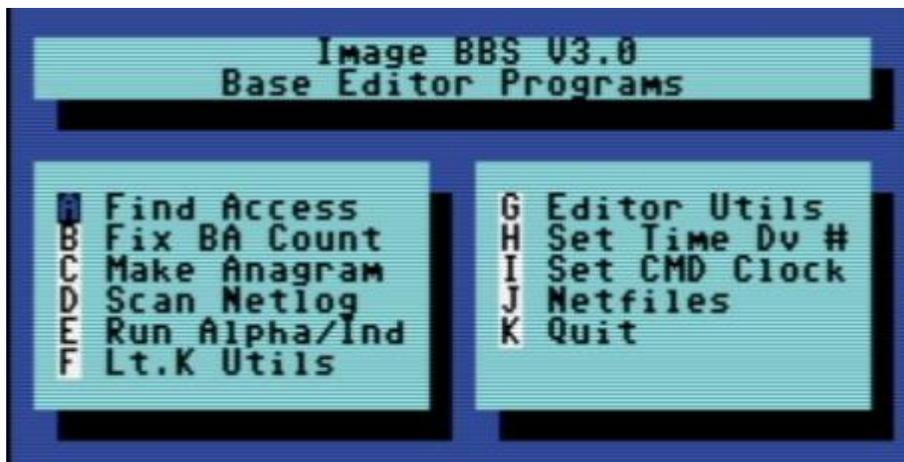
- A. LightBar Defs – Brings up a page by page list of Lightbar functions, their locations and their definitions. Allows you to select the default condition of the Lightbar function upon boot up. Items with a dash (-) next to their number are system controlled. All others can be toggled on or off by selecting the corresponding number.
 - B. Alarms – Provides two sets of alarm features configurable by the sysop. Items 1 through 8 control the At1 through At8 functions on the last page of the Lightbar. Items 9 through 16 can be configured with on and off times for any position on the Lightbar.
 - C. Netmail Alarms – Provides 24 configurable times for network maintenance to run throughout the day.
 - D. Quit – Reverts back to the main Configuration Editor.
- I. Misc. Features – Function F will bring up the following sub menu:



- A. Lt. Kernal Device: Set for the device number of your Lt. Kernal hard drive if used. Otherwise enter 0
 - B. Autoweed Cutoff: Set for the number of months to use for an optional nightly autoweed function
 - C. Default Color: Select one of 15 colors to use as default color for text used by the BBS when not otherwise defined.
 - D. Printer Address: Selects the Printer Secondary address for special printer functions.
 - E. Printer Linefeeds: Configure as Yes or No to send linefeeds to the printer.
 - F. Password Masks: Configure the character that displays when entering passwords by the user. If more than one character is used here, the password mask displayed will be at random among the characters defined.
 - G. Time Zone: Set for the timezone of the BBS location.
 - H. Main Prompt: Configure for how you want the main prompt to appear to the user.
 - I. BBS Name: Configure for the name of your BBS.
 - J. System ID: This is a two letter ID which is part of the user account number.
 - K. New User Credits: Defined for the number of credits given to new users by default.
 - L. Prime Time: Goes to a sub menu where you can define the start and stop times and number of minutes allowed online during prime time.
 - M. Chat Messages: Allows you to edit the messages that appear to the user upon entering and exiting the chat window.
 - N. Quit: Reverts back to the main Configuration Editor
-
- J. Modem Config – Brings up the modem configuration menu. Refer to the setup instructions.
 - K. Set Time – Allows you to set the BBS clock during an online session.
 - L. System Drives – Brings up a sub menu displaying the location of the six Image Drives and allows editing. If any locations are edited, you must reboot before they become effective.
 - M. Netmail Config – Selecting M will bring up the following sub menu:



- A. Local Info – Used to set the access level for users to be able to use network functions, the password for your node, and the city and state of the BBS location.
 - B. Modem Specs – Configures the maximum baud rate of the BBS, and the off hook, on hook and dial commands to use for modem communications.
 - C. Calling Hours – Allows up to 10 defined calling hours to use for network maintenance.
 - D. Make nm.create – Use this function to make a new nm.create after you receive a node update.
 - E. Connections – Used to edit 1) Standard and 2) Short-Cut connections. Each network node may have up to four standard connections and four short-cut connections. The only items you need to configure are the password of the node you are connected to, the calling hours as defines in item C, and the number of calls per day to each connection.
 - F. Fwd. List – Allows mail forwarding between network nodes. You should add at least one forwarding name in order to create the filename even if you later delete the name, the file will remain on the mail drive and is needed for proper netmail delivery.
 - G. Netwall/Grf – Here you should enter the node ID of each of your network connections if you intend to exchange netwall and graffiti messages.
 - H. Quit – Reverts back to the main Configuration Editor.
- N. Base Editors – Selecting N will bring up the following sub menu:



Q. Quit – Option Q exits out of the Configuration Editor back to the Main prompt.

11. Base Editor Programs

- A. Find Access – A utility that lets you look through your User files and find all users in any access group that you specify. Any validated users who have not called back since being validated will display as group 0, regardless of the group you assigned them to.
- B. Fix BA Count – This utility will fix the counts in your Board Activity display. You have the options to count Posts/Responses, Uploads, Mail, Feedback, Sysop Mail, New Users and scan the User List for the first available record or do all of the above. Hitting RETURN will exit back to the menu.
- C. Make Anagram – Anagrams is a logon module which you may wish to add to your logon sequence. It is a game your users can play to try to unscramble a set of letters to form a word. Before it can be used, you must first create the word file using this utility. A help menu is included.
- D. Scan Netlog – If your BBS is networked, this utility will allow you to scan the network logs created during network transfers. Entering a ? will display a list of nm.log files available for viewing.
- E. Run Alpha/Ind – You should never have to use this utility unless your users are not able to log on via their handle. If that happens, use this utility in the following order: Load, Clear, Make, Save, Quit. Other options are included like Search, Insert, Delete, List and Kill. Use at your own discretion.

- F. Lt.K Utils – This option will only work if your BBS is configured for running on a Lt. Kernal. It will take you to a sub menu with two items on it, “Run Backups” and “Lt.K File Util”. Selecting the Rub Backups option will run the program “i/SM.bu”. Before you use this program for the first time, you should load it in basic and follow the instructions in the rem statements at the end of the program. The Lt.K File Util option will load a menu of items for copying, reading and other file utilities that work on the Lt.Kernal hard drive by Device, Drive and User number.
- G. Editor Utils – See the next section titled “Editor Programs”
- H. Set Time DV # - This option will allow you to edit how the Image clock is set during boot up. The options are (1) Manually (2) Cmd w/RTC Option (3) Lt. Kernal Port 1, (4) Lt. Kernal Port 2. If you select (2), the program will ask for the device number of the CMD drive with a Real Time Clock option. This works in real hardware and VICE simulations.
- I. Set CMD Clock – Allows you to adjust the date and time of any CMD device connected to your computer as long as it has the RTC option.
- J. Netfiles – This utility allows networked sysops to exchange files with other nodes. It will first look to see if you have received a netfile and ask if you want to dissolve it. Next it will ask if you want to send files.
- K. Quit – Reverts back to the main Configuration Editor.

12. Editor Programs



- A. Run Reledit – Any sysop who has run a previous version of Image will recognize the options in this menu. It is the same reledit program we have been using since 1.2 Turbo/Rel but it has been modified to work with Image 3.0. See the next section titled “Reledit” for more detailed instructions.
- B. Run Sigedit - This option allows you to add and edit Sub-Boards although it would be better to do that in Reledit. It also allows you to change message base settings by allowing unlimited time

in the Subs or disabling that feature. There is also an option for setting default Sub-Board Flags which is an option planned for future implementation.

- C. Convert Menu - Converts "s.menu x" files to "e.menu x" files. The stock menus supplied with Image 3.0 are "s.menu 1" through "s.menu 9". These are sequential files that could be edited if you prefer. Image will use these seq files for displaying the various menus used throughout the BBS unless it first finds an "e.menu x" file. The e.menu files are saved as prg files in structures format which adds another capability to the file explained in next paragraph. Any s.menu file can be converted to an e.menu except for s.menu 3 which is the editor menu and is too large to be converted.
- D. Edit Menu - When you select the Edit Menu function, the BBS will ask Which Menu to edit. Enter a number between 1 and 9 for a menu which you have already converted to an e.menu. The utility will load that menu and display it by line number followed by access number followed by the menu line. By default, all lines are assigned as access level 1023 which means all users, regardless of their access level can view that line. You may like to restrict some of the higher level commands to more experienced users which has the effect of newer users only seeing a limited number of lines making it easier for them to navigate the BBS.
- E. Edit Text Msg - The text message editor comes with instructions for using it. It allows you to edit certain messages that appear to users when they try to do something which generates an error.
- F. Edit B.A.R. - This utility gives you another way of editing the numbers displayed in the Board Activity Register. It is self-explanatory and easy to use.
- G. Edit Sayings - Sayings are the random messages that appear at the main prompt. They are held in the e.say file. This utility will allow you to List, Add, Replace, Delete, or Edit any saying by it's record number.
- H. Quit - Reverts back to the Base Editor Programs menu.

13. Reledit

```

RELEDIT V2 (Rev. 1)
(C)1990 New Image
1 SIGs, 1 Subs, 1 U/Ds, 1 U/Xs,
Network (Node 4) Configured

Edit: S - Sub
      U - U/D
      X - U/X
      G - SIG
      N - NetSubs

RELEDIT: █

```

- A. The Reledit program is used to configure the three major sections of the BBS, Message Bases section (Sub), Upload/Download Libraries Section (U/D) and Direct Disk Access section (U/X). Selecting this option will bring you to an opening screen displaying a copyright message and a line displaying the number of Special Interest Groups (SIG) you have defined and the number of directories in each major section. If the BBS is networked, it will also show the node number of your BBS as configured.
- B. Sub - Used to add message boards where users can communicate with other users. Entering S will display a list of message boards already defined and allow you to edit them by number. To add a message board, enter A and use the nine configuration settings to configure it. Give the message board a Title unique to all other message boards. For the Access level, you can enter a ? and answer either Y or N to each access level you want to have access to that board. The program will calculate the proper access number based on your answers to the group numbers. If you wish to have a Subop enter the user number of a user on your board or the ID number of the Sysop. Items 4 and 5 define the device and drive where the messages will be written to. Entering 6 will toggle the Status between Open and Closed. Item 7 defines the Type of message board it is. Answer Y or N to the next three questions. Item eight allows you to password protect the board. PASS is the default for no password. Entering 9 will allow you to create Ascii or C/G opening screens for this message board and will put you into the editor to create a screen.
- C. U/D - Used to add Upload/Download Libraries. It uses the same procedures for adding boards as the Sub editor does with one exception. The Type will give you different options to select from.
- D. U/X - Used to create Direct Disk Access boards. It uses the exact same procedures for adding boards as does the U/D section.

- E. SIG - Configures the Special Interest Groups which allow you to separate your Subs, U/Ds and U/Xs into special interests. For example, you might have a SIG dedicated to Commodore 64 and another SIG for Commodore 128. Each SIG can hold a maximum of 30 each Sub, U/D and U/X directories. Each directory can hold up to 60 entries. This allows Image BBS the capability of expanding to enormous proportions. Dividing the directories into SIGs makes it easier for your users to get to the parts they have interest in without having to wade through things of non-interest. Your BBS MUST have at least one SIG defined as a place to assign all your Sub, U/D and U/X directories to. Enter G to access the SIG configure menu. To add a SIG, enter A to see a sub menu where you will give the SIG a Title, Access and SIGop the same way as for the other directories. Items 4, 5 and 6 define the Subs, U/Ds and U/Xs as either open or closed. Use items 7, 8 and 9 to place the Sub, U/D and U/X directories previously defined into the list of directories included in this SIG. Entering 7 will bring up a list of Subs included in this SIG. Enter ? to see a list of options available at this sub menu. Do the same for items 8 and 9. You do not have to add directories to every list. For example, if your BBS only has Subs and no U/Ds or U/Xs, only the SB List needs to have entries in it. IMPORTANT: For any section that has no directory entries in its section, change the corresponding item 4, 5 or 6 to Closed.
- F. NetSubs - If your BBS is networked, you will need to get together with your network connection sysop and decide which netsubs will be shared between your connections. Each netsub has a unique NetSub ID. To add a netsub to the list, enter the NetSub ID EXACTLY as it is defined. Misspellings will cause otherwise valid messages to be rejected. Items 2 through 17 allow you to enter the node id of your network link(s). Usually this will only be the node ids of the boards you are connected to. Item 18 identifies the Sub where the netsub will be sent to when received during a network transfer.
- G. When you are finished configuring all your boards, press your RETURN (Enter) key as many times as it takes to exit the Reledit menu. The BBS will then perform some automatic configuration functions and when finished will return you to the Base Editor Programs menu. From there you can "Quit" back to the main Configuration Editor menu and then "Quit" to the main prompt.

14. The GF (General Files) Section Maintenance Options



- A. Setting up the GF section for use requires you to be in local or pseudo-local mode and have the graphic menu option on. Entering GF at the Main prompt will bring up a menu similar to the one above.
- B. Cursor to or enter /Z to access the Maintenance Options. A pop up menu will display and you will be asked "Which Option?:"



- C. To Add an item, enter A. For example we will add a directory named "Games". Enter the number 1 and then type Games. Enter 2 and select 1-Dir. Enter 3 and set the access level. The ? and Y/N responses to the groups can be used to compute the number. If credits are to be charged for using this function enter 4 and the number of credits to charge. Enter 5 to give a name such as "games1" to the directory which will be created. Hit the RETURN key and notice you just created a new directory.
- D. Now we need to put a game or two into the Games directory. Enter the number corresponding to the Games directory. Enter /Z to access the maintenance menu. Enter A to add an item. For this example, we will add i.p.poker (included on the games disk) which has already been copied to the Image programs drive. Enter 1 and type Power

Poker. Enter 2 and select 2-Prg. Set the access level and credits to charge if any and enter 5 to set the filename of the program. Notice "i." are already set as the prefix so just enter "p.poker". Set the device number and drive number of your Image programs drive the hit RETURN.

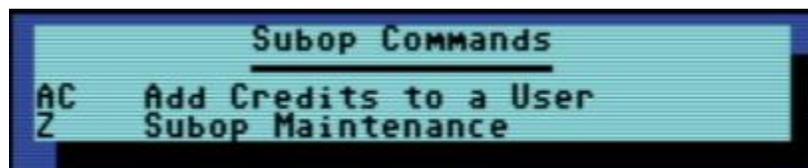
- E. Setting up the GF section with all the directories, sub-directories, programs and files can be tedious but with a little practice it should become easy to do.
- F. When selecting the "Type" of files to use in the GF section, currently only the following are active. 1-Dir (directory), 2-Prg (program file), 4-Txt (sequential text file), 5-Mov (sequential movie file), and 6-RLE (RLE file). Option 3-Mod is for future addition of i/GF modules. Items 7-U/X, 8-U/D and 9-Sub will be used in future additions to those sub sections.

15. The NF (News Files) Section Maintenance Options

- A. Entering NF at the main prompt will take you to the News File section. There is no fancy cursor driven menu here but if you are in local or pseudo-local mode, a prompt will be displayed as "News-Maint:"
- B. You could use the ? to bring up the Directory Systems Commands menu. This is one that you might want to convert and edit the access level of the lines that display the sysop commands to 512 (access level 9).
- C. In the NF section the active maintenance functions are List Items, Add Items, Edit Item #x and Kill Item #x
- D. To add an item, enter A then enter the Title and the Access number or ? to select the access groups that will see this message. If you use a \$ at the beginning of the Title, the news file will appear as a reminder every time a user logs on. If no \$ sign is used it will only appear if it new since the user's last logon date. The BBS will then enter the editor where you will write your news file and save it.
- E. How the news files are presented to the user during log on depends on which news module is configured into the Logon configuration. There are three different news file styles. Select the one which you prefer.

16. Other Sections Maintenance Options

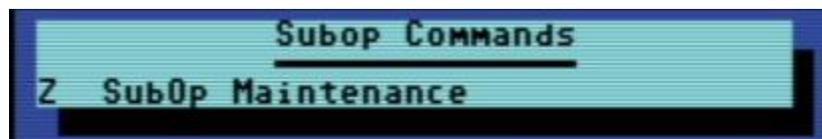
- A. Access level 9 "Sysop" users will always have access to all maintenance functions when they are in local or pseudo-local mode. You may have users of your BBS that you wish to assign as SigOp or SubOp to certain SIGs or Subs. The preferred way of doing that is to use a high level access group such as group 8 to assign maintenance functions to by setting the flags for that group accordingly. Doing so will allow you to edit e.menu file lines that show maintenance functions so that only group 8 and 9 users will see them.
- B. Certain maintenance functions are available in the SB, U/D and U/X sections. To see what maintenance functions are available in each section, enter ? to bring up the menu pertaining to that section.
- C. In the SB section, Subops may Add Credits to a user or access the the Subop Maintenance functions.



- D. In the UD section, Sigops and Subops may validate or unvalidate files, scan for unvalidated files and access the Subop Maintenance functions. They can also use the "Copier" protocol to upload files to the directory or download files listed in the directory to other device/drive locations.



- E. In the UX section, Subops only have access to the "Z" Maintenance functions.



- F. The “Z” Maintenance functions are the same in all three sections listed above. Users with maintenance capability can use the following functions.

```
Maint Options:
1) Edit Library Entry Files
2) Edit Library Detail
3) Edit SIG Entry Files
4) Edit SIG Details
```

- 1) Allows for creating or editing ASCII and C/G Library Entry “Screens”.
- 2) Allows editing of the Library Details which were originally set in the Reledit program.

```
Details - U/X#1:
Drive 11:

1) Name      : Drive 11
2) Access   : 1023
3) Open?    : Yes
4) Type     : Cred
5) Pswd?    : No
6) Pswd     : PASS
7) Subop    : IMi
8) Device   : 11
9) Drive    : 0

Maint:
```

- 3) Allows for creating or editing ASCII and C/G Entry “Screens”.
- 4) Allows editing of the SIG Name, SIG Access and SigOp.

17. The Mini-Term

- A. Image 3.0 has a built in “Mini-Term capability which is only available when logged on in local mode from the console. It could be used to call out to other boards when there is no intention of performing any file transfer functions. Enter MT at the Main prompt to use it.
- B. In Mini-Term you can set your baud rate to anything from 300 to 38400 baud providing your virtual modem and your rs232 interface can handle it. You can also switch between ASCII and C/G mode.
- C. To begin a Mini-Term call out session, enter T and type ate1 to turn on local echo.
- D. Then type atdt and the telnet address of the BBS you want to call. Example, atdtcib.dyndns.org:6400

- E. If everything was typed correctly and the BBS is available for receiving calls, you should connect to the board and be able to perform all user functions except the exchange of files.
- F. When finished with your online session, log off the BBS that you called and enter the combination of the Commodore Key and the CONTROL key to exit back to the Mini-Term prompt. Enter Q to exit Mini-Term back to the Main prompt.

18. Image Term

- A. Image Term is a full featured terminal program included in Image 3.0. To use it, press the left arrow key while the BBS is at System Idle.
- B. After a brief loading process, you will be presented with the Terminal Options menu.



- 1) Terminal Mode - Goes to full screen mode and allows you to communicate with the modem via Hayes commands. Type ate1 to turn on local echo then type the telnet address of the BBS you want to call. (atdtcib.dyndns.org:6400) At any time while in Terminal Mode enter the C= CTRL combination of keys to revert back to split screen mode and display the Terminal Options menu.
- 2) DOS Options - Allows sending disk commands, viewing directories, read files (sequential only) and set the current device number (for up/down transfers).



- 3) Term Parameters - Used to set Translation between PETASCII and ASCII, set Graphics Mode to CBM or IBM, set one of five file transfer protocols, set your baud rate between 1200 and 38400, toggle between Pulse and Tone Dial, set Line Feeds On/Off and define the function keys for use in the term program. (Note: Terminal function keys are currently awaiting an ml upgrade before they become functional)



- 4) Phone Book - Allows you to define up to 20 entries by name and phone number. (Note: Image Term Phonebook only works with numbers. You must set up a phone number to telnet address translation table in BBS Server or tcpser in order to dial out using the Term Phonebook)
- 5) Disconnect - This option will disconnect a current online session by dropping carrier.
- 6) Upload - Used for uploading prg and seq files from the current drive assignment to the BBS you are connected to in any of the available protocols.
- 7) Download - Same as for upload except for receiving files to the current drive.
- 8) Multi-Upload - Only available in Punter protocol. Used for selecting and uploading multiple prg and seq files.
- 9) Multi-Download – Same as for Multi-Upload except for receiving multiple files.
- 0) Return to BBS - Disconnects any online session that may be in progress, closes Image Term and returns to the BBS System Idle screen.

Final Notes

Included in the Image 3.0 package is a games disk containing several ready to install games converted to Image 3.0 format. Load and run the “run me” file (Image Reader) which will allow you to read the installation instructions for all the games included on the disk.

Also included in the Image 3.0 package is a weed mod disk. Load and run the “run me” file (Image Reader) which will allow you to read the installation instructions for all the files included on the disk.

This package also includes a 3.0 Utilities disk containing several programs that run in Basic which you will find helpful when working with Image. Use the image reader program on the disk to read about how to use the included programs on the disk.

If you would like to run Image 3.0 in a VICE environment, we suggest you download the BBS On A Stick project by Bucko (Al DeRosa), that will include everything needed to run this BBS Software inside a Vice environment. (Note: Due to the currently numerous variations of VICE including Lt. Kernal and CMD HD emulations as of November 2020, Image 3.0 BBS on a Stick may or may not come to fruition)

These instructions were written for real hardware but Image 3.0 will run well in WinVice. In fact, much of the development and testing of this software was done in VICE.

Enjoy the files. Many thousand man/hours have gone into their creation and what they are today.

I will answer questions and provide tech support for this software as needed.

Contact X-TEC at node 1 of the NISSA Network or larryhedman@gmail.com.

Larry Hedman

Al DeRosa