Apple II
Technical Notes

GS/OS
#1:   Contents of System Software Distribution Disks

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Revised:	August 2015
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Written by: Matt Deatherage	November 1988

This Technical Note describes the contents of the disks System.Disk and System.Tools and the minimum files necessary to boot GS/OS starting with System Software 5.0.
Changes since August 2015: Now describes System Software 6.0.4.
Changes since June 1992: Now describes System Software 6.0.3.
Changes since January 1991: Now describes System Software 6.0. Changed the title to not reflect disk names.

This Note gives a description of each of the files in the Apple IIGS System Software 6.0.4 package. This package includes eight floppy disks: Install, SystemTools1, SystemTools2, SystemTools3, Fonts, Fonts2, synthLAB and System.Disk. There is also a single disk Live.Install. System Software 6.0.4 requires at least 1 MB of memory, one 3.5" drive and another storage device, or a storage interface such as the CFFA 3000 or SPVHD capable of mounting multiple disk images or partitions. 2 MB of memory and a hard disk are highly recommended. The Live.Install requires at least 2 MB of memory.

System.Disk is a pre-configured boot disk for floppy-based users. Because all the files on System.Disk appear on other disks in the 6.0.4 set, they are only listed and not described a second time.

Contents of Live.Install

Adv.Disk.Util	The Advanced Disk Utility program which allows for partitioning of SCSI hard disks, as well as erasing, initializing, and zeroing volumes or partitions.
AppleTalk	This directory contains additional AppleTalk files and utilities for AppleShare and AppleTalk.
Boot.Driver	A driver for AppleShare that GS/OS loads before the other drivers are loaded and which remains resident in memory after the boot process is finished. Installed on servers by the Installer script Server.Sys.File.
Display.0	An update to the Aristotle program installed by the "Aristotle.Patch" script.
QuickLogoff	An initialization file used to add a quick logoff feature to AppleShare.

Start	The AppleShare startup program which is installed instead of the standard Start program on AppleShare volumes. It allows the user to log on and then launches the server startup program for the user's machine.
Archiver	A GS/OS based backup and restore program.
BASIC.System	The ProDOS 8 BASIC command interpreter.
CLOCK.PATCH	An AppleSoft BASIC application that will patch the ProDOS 8 ThunderClock driver to handle a new span of years.
Developers	This directory contains the customized Installer and script for the use of software developers.
Installer	The customized Installer application for software developers.
Scripts	Home to the customized Installer's Install scripot.
Install	The customized Install script for software developers.
Goodies	A directory with files that are only related to system software in the vaguest sense.
Apple.Bowl	A GS/OS conversion of an old Apple II bowling game.
Read.Me	Documentation on Apple Bowl.
Icons	The directory containing all the Finder's old-style icon files as well as new Desktop database files and file type descriptors.
AppleBowl.Icon	Icons used by Apple.Bowl.
FType.Apple	The file type names used by the Finder (on all systems).
SL.Icons	Icons used by synthLAB.
Installer	The Apple IIGS Installer program. This program makes use of scripts found in the Scripts directory on this disk to install parts of the system, as well as third-party applications, without the user needing to copy individual files.
ProDOS	Every file system boots differently; the boot blocks for ProDOS disks look for a file named ProDOS. This is that file. It is the GS/OS file system stub necessary to start the boot process.
Read.Me	Last-minute news and information about the System Software. Read with Teach.
Reference	A Teach document with the electronic manual for synthLAB.
Scripts	This directory contains all the scripts for the Installer. On launch, the Installer looks in its parent directory for the Scripts directory and the scripts it contains. It also reads `MessageCenter` message #1.
A2.RAMCard	Script to install the driver for the Apple II Memory Expansion Card (the slot-based, or "slinky" card).
Adv.Disk.Util	Script to install the Advanced Disk Utility program.
Apple.Bowl	Script to install the Apple Bowl game.
Apple.MIDI	Script to install the Apple MIDI Interface driver and tool set.
AppleDisk5.25	Script to install the 5.25" disk driver for GS/OS.
AppleShare	Script to install AppleShare.

AppleShare3.5	Script that creates an 800K or 1440K GS/OS startup disk which contains AppleShare.
Archiver	Script to install Archiver, the new GS/OS-based backup program.
Aristotle.Patch	Script to install a change to Aristotle for easier class transition.
ATImageWriter	Script to install the ImageWriter printer driver for the Print Manager, as well as the files necessary to work with AppleTalk.
ATImageWriterLQ	Script to install the ImageWriter LQ printer driver for the Print Manager, as well as the files necessary to work with AppleTalk.
Calculator	Script to install the Calculator new desk accessory.
Card6850.MIDI	Script to install the 6850-based MIDI Interface card driver.
CDROM	Script to install the High Sierra FST as well as the SCSI Manager and SCSI CD-ROM driver for GS/OS.
CloseView	Script to install the CloseView NDA, which makes the screen more legible to some visually-impaired users.
DCImageWriter	Script to install the ImageWriter printer driver for the Print Manager, as well as the files necessary to connect it to a serial port.
DCImageWriterLQ	Script to install the ImageWriter LQ printer driver for the Print Manager, as well as the files necessary to connect it to a serial port.
DOS3.3.FST	Script to install the read-only DOS 3.3 file system translator.
Easy.Access	Script to install the EasyAccess init, which provides sticky keys and keyboard mouse to ROM 01 users.
Epson	Script to install the Epson printer driver for the Print Manager, as well as the parallel card driver.
FindFile	Script to install the FindFile NDA, which finds files on volumes GS/OS can read.
Fonts	Script to install the minimum suggested font set.
Fonts.Max	Script to install all fonts provided with System 6.0.4.
Fonts.Std	Script to install the standard font set.
HFS.FST	Script to install the Hierarchical File System (HFS, used on the Macintosh) file system translator.
Inst.Sys.Min	Script to install a minimal GS/OS system on an 800K volume. Note that this is **different** than 5.0.x's "Inst.Sys.Min" script, the 6.0.4 version of which is in the file named "AppleShare3.5".
Inst.SysF.NoFin	Script to install a minimal GS/OS system, without the Finder, on a given destination volume.
Instal.Sys.File	Script to install a complete System Software 6.0.4 configuration, including new features, on a given destination volume.
LaserWriter	Script to install the LaserWriter printer driver for the Print Manager, as well as the files necessary to work with AppleTalk.

Local.Net.Boot	Script to create a 3.5" floppy disk with minimal system software that boots into a server selection program (the network "Start" program from the AppleTalk folder).
MediaControl	Script to install the Media Control toolset and all Media Control drivers supplied with System 6.0.4.
MediaCtrl.CDSC	Script to install the Media Control toolset and the drivers to work with the Apple CD SC drive.
MediaCtrl.P2000	Script to install the Media Control toolset and the drivers to work with the Pioneer 2000 series laserdisc players.
MediaCtrl.P4000	Script to install the Media Control toolset and the drivers to work with the Pioneer 4000 series laserdisc players.
MSDOS.FST	Script to install the read-only MS-DOS file system translator.
Namer	Script to install the printer Namer Control Panel. Namer II (a ProDOS 8 application) is not included with System 6.0.4.
Pascal.FST	Script to install the read-only Apple II Pascal file system translator.
Quick.Logoff	Script to add a quick logoff feature to AppleShare.
RAM5	Script to install the RAM5 disk driver.
SCSI.Hard.Disk	Script to install the SCSI Manager and SCSI hard disk driver for GS/OS.
SCSI.Scanner	Script to install the SCSI Manager and SCSI scanner driver for GS/OS.
SCSI.Tape	Script to install the SCSI Manager and SCSI tape driver for GS/OS.
Server.Sys.File	Script to install System Software 6.0.4 on an AppleShare File Server.
Sounds.All	Script to install all sounds provided with System Software 6.0.4 into the "System:Sounds" folder of the designated volume.
StyleWriter	Script to install the StyleWriter printer driver for the Print Manager, as well as the files necessary to connect it to a serial port.
synthLAB	Script to install the application synthLAB, which plays synthesized music files, and a set of sample sequences and instruments.
Teach	Script to install the application Teach, which displays and edits Teach files, text files, AppleWorks files, MacWrite files and Installer scripts.
UniDisk3.5	Script to install the UniDisk 3.5 driver for GS/OS.
VideoKeyboard	Script to install the Video Keyboard new desk accessory, which allows users to type by using the pointing device instead of the keyboard.
VideoMix	Script to install the latest versions of the Apple II VideoMix software and tools.
Seq.and.Instr	A directory containing demonstration sequences (files that end in ".seq"), wave forms (files that end in ".wav") and sound banks (files that end in ".bnk") for use with synthLAB and MIDI Synth. The files are only listed; their sound is not described here.
Synth.bnk	

Synth.seq
Synth.wav
Bee.seq
Capri.seq
Combo.bnk
Combo.wav
Demo.bnk
Demo.wav
Fugue.seq
Midsummer.seq
Orch.bnk
Orch.wav
Piano.bnk
Piano.wav
Rhythm.seq
Sonata.seq

Shortcuts	A Teach file with time-saving system tips and information.
synthLAB	The synthLAB application, a demonstration sequencer for the MIDI Synth toolset.
System	The directory containing most of the GS/OS files.
CDevs	The directory containing all Apple IIGS Control Panel Devices (CDevs) required for installing 6.0.4.
AppleShare	Allows users to choose and log onto AppleShare file servers.
DirectConnect	Allows selection of direct-connected printers.
FolderPriv	Allows users to set default folder privileges on AppleShare file server volumes.
General	Allows setting of general system parameters.
Keyboard	Sets keyboard parameters.
MediaControl	Allows users to set up the Media Control tool set and the drivers they wish to use.
Modem	Controls modem port settings.
Monitor	Sets 40-column or 80-column mode, monochrome or color mode, and the color of text, text background, and borders.
MIDI	The MIDI Control Panel. Lets you choose a MIDI driver.
Namer	Allows users to rename AppleTalk-based ImageWriter, ImageWriter LQ and LaserWriter printers.
NetPrinter	Allows users to choose AppleTalk-based ImageWriter, ImageWriter LQ and LaserWriter printers.
Network	Allows users to choose which operqating system the computer should boot over AppleTalk.
Printer	Controls printer port settings.
RAM	Controls the size of the RAM disk and the GS/OS Disk Cache.
SetStart	Lets you choose which application to boot into.
Slots	Allows selection of slot settings and startup slot.
Sound	Sets user preference for sound pitch and volume. Also allows the user to assign digitized sounds to events that happen while using the computer.

Time	Sets the internal clock's time and display format and optionally tracks Daylight Savings Time.
Desk.Accs	The directory containing all the classic and new desk accessory files to be loaded at boot time.
Calculator	A calculator new desk accessory.
CDRemote	An updated version of the CD Remote new desk accessory which ships with the AppleCD SC.
ControlPanel	The New Desk Accessory which allows users to control almost all system parameters and choose printers and file servers.
FindFile	A new desk accessory that finds files on volumes GS/OS can read.
MediaControl	A new desk accessory that's like a "super" remote control for all devices the Media Control toolset can control.
VideoKeyboard	A new desk accessory that allows users to type with the pointing device instead of with the keyboard.
VideoMix	An updated version of the VideoMix new desk accessory which ships with the Apple II Video Overlay Card.
Drivers	The directory containing all device drivers needed by GS/OS and the Toolbox (including the Print Manager and MIDI Tools).
A2.RAMCard	The GS/OS driver for slot-based memory expansion cards. This driver is not required to use these cards with GS/OS, but it does provide a substantial speed improvement.
Apple.MIDI	The Apple MIDI Interface driver for the MIDI Tools.
AppleDisk3.5	The Apple 3.5 Drive device driver for GS/OS. Also drives SuperDrives connected to the Apple II SuperDrive interface card.
AppleDisk5.25	The driver for Apple 5.25" disk drives, including Disk II drives and Apple UniDisk 5.25 drives. This driver is required for GS/OS to recognize 5.25" disk drives.
AppleTalk	The AppleTalk port driver for the Print Manager. It works with either serial port when configured for AppleTalk.
ATalk	The main AppleTalk GS/OS driver.
ATP1.ATROM	AppleTalk protocols to patch the IIGS ROM.
ATP2.ATRAM	AppleTalk protocols not in ROM.
Card6850.MIDI	The driver for 6850-based MIDI interface cards for the MIDI Tools.
Console.Driver	The text screen and keyboard device driver for GS/OS.
Epson	The Epson® printer driver for the Print Manager.
ImageWriter	The ImageWriter driver for the Print Manager.
ImageWriter.LQ	The ImageWriter LQ driver for the Print Manager. Starting with System Software 5.0.3, this driver uses all the capabilities of the ImageWriter LQ.
IWEM	PostScript® program which allows a LaserWriter emulate an ImageWriter. A user can load it into the LaserWriter with the LaserWriter Control Panel, and it is automatically invoked when printing through the slot associated with AppleTalk.

	LaserWriter	The LaserWriter driver for the Print Manager. This driver works with any LaserWriter with PostScript (at least Level 1 and 2). It does not work with the LaserWriter IISC or Personal LaserWriter LS.
	Media.Control	Drivers for the Media Control toolset
	AppleCDSC	Media Control driver for the Apple CD SC drive.
	Pioneer2000	Media Control driver for the Pioneer 2000 series of laserdisc players.
	Pioneer4000	Media Control driver for the Pioneer 4000 series of laserdisc players.
	Modem	The modem port driver for the Print Manager.
	Parallel.Card	A driver for some parallel printer interface cards for the Print Manager. This driver works with the Apple Parallel Interface Card, as well as several other parallel interface cards.
	Printer	The printer port driver for the Print Manager.
	RAM5	The GS/OS driver for a RAM disk using system memory.
	SCC.Manager	The GS/OS supervisory driver that arbitrates hardware-level usage of the serial communications controller in the Apple IIGS.
	SCSI.Manager	The GS/OS SCSI Manager, the supervisory driver that arbitrates hardware-level usage of Apple's Apple II SCSI cards.
	SCSICD.Driver	The GS/OS driver for the AppleCD SC drive. This driver is required for GS/OS to recognize CD-ROM drives.
	SCSIHD.Driver	The GS/OS driver for SCSI hard disks. This driver is required for GS/OS to recognize SCSI hard disks.
	SCSIScan.Driver	The GS/OS driver for the Apple Scanner or OneScanner. This driver is required for GS/OS to recognize Apple's scanners.
	SCSITape.Driver	The GS/OS driver for the Apple Tape Backup 40SC. This driver is required for GS/OS to recognize Apple's now-discontinued Tape Backup 40 SC.
	StyleWriter	The StyleWriter driver for the Print Manager.
	UniDisk3.5	The GS/OS driver for UniDisk 3.5 drives. This driver is required for proper operation of UniDisk 3.5 drives. Using the UniDisk with GS/OS without this driver eventually corrupts media.
Error.Msg		A compiled file containing all error messages required by GS/OS. This file is separate from the GS.OS file to provide easier support for localization.
Finder		The Apple IIGS Finder, version 6.0.4.
FinderExtras		Directory to contain extensions to the Finder's functionality.
Fonts		The directory containing all system fonts to be used.
	Courier.09	9-point Courier font.
	Courier.10	10-point Courier font.
	Courier.12	12-point Courier font.
	Courier.14	14-point Courier font.
	Courier.18	18-point Courier font.
	Courier.20	20-point Courier font.
	Courier.24	24-point Courier font.
	Courier.27	27-point Courier font.

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Courier.28	28-point Courier font.
Courier.30	30-point Courier font.
Courier.36	36-point Courier font.
Courier.42	42-point Courier font.
Courier.48	48-point Courier font.
Courier.56	56-point Courier font.
Courier.72	72-point Courier font.
Courier.96	96-point Courier font.
FastFont	This makes Shaston 8 text drawing much faster.
Geneva.10	10-point Geneva font.
Geneva.12	12-point Geneva font.
Geneva.14	14-point Geneva font.
Geneva.16	16-point Geneva font.
Geneva.18	18-point Geneva font.
Geneva.20	20-point Geneva font.
Geneva.24	24-point Geneva font.
Helvetica.09	9-point Helvetica font.
Helvetica.10	10-point Helvetica font.
Helvetica.12	12-point Helvetica font.
Helvetica.14	14-point Helvetica font.
Helvetica.18	18-point Helvetica font.
Helvetica.20	20-point Helvetica font.
Helvetica.24	24-point Helvetica font.
Helvetica.27	27-point Helvetica font.
Helvetica.28	28-point Helvetica font.
Helvetica.30	30-point Helvetica font.
Helvetica.36	36-point Helvetica font.
Helvetica.42	42-point Helvetica font.
Helvetica.48	48-point Helvetica font.
Helvetica.56	56-point Helvetica font.
Helvetica.60	60-point Helvetica font.
Helvetica.72	72-point Helvetica font.
Helvetica.96	96-point Helvetica font.
Shaston.16	16-point Shaston font.
Symbol.09	9-point Symbol font.
Symbol.10	10-point Symbol font.
Symbol.12	12-point Symbol font.
Symbol.14	14-point Symbol font.
Symbol.18	18-point Symbol font.
Symbol.24	24-point Symbol font.
Symbol.36	36-point Symbol font.
Symbol.40	40-point Symbol font.
Symbol.48	48-point Symbol font.
Symbol.56	56-point Symbol font.
Symbol.72	72-point Symbol font.
Symbol.96	96-point Symbol font.
Times.09	9-point Times font.
Times.10	10-point Times font.
Times.12	12-point Times font.
Times.14	14-point Times font.
Times.18	18-point Times font.
Times.20	20-point Times font.
Times.24	24-point Times font.
Times.27	27-point Times font.
Times.28	28-point Times font.

	Times.30	30-point Times font.
	Times.36	36-point Times font.
	Times.42	42-point Times font.
	Times.48	48-point Times font.
	Times.56	56-point Times font.
	Times.60	60-point Times font.
	Times.72	72-point Times font.
	Times.96	96-point Times font.
	Venice.12	12-point Venice font.
	Venice.14	14-point Venice font.
	Venice.24	24-point Venice font.
FSTs		The directory containing the file system translators to be loaded at boot time.
	AppleShare.FST	The AppleShare FST which allows GS/OS to access AppleShare file servers.
	Char.FST	The character device FST.
	DOS.3.3.FST	The DOS 3.3 FST, which allows GS/OS to access 5.25" disks formatted in DOS 3.3 format. This FST is read-only; it only performs read operations.
	HFS.FST	The HFS FST, which allows GS/OS to read and write any disk in the Macintosh's HFS format.
	HS.FST	The High Sierra FST, which allows GS/OS to access CD-ROM discs formatted in the international standard High Sierra or ISO 9660 formats. This FST is read-only; it only performs read operations.
	MSDOS.FST	The MS-DOS FST, which allows GS/OS to access any disk formatted in the MS-DOS's FAT 12 format. This FST is read-only; it only performs read operations.
	Pascal.FST	The Apple II Pascal FST, which allows GS/OS to access any disk formatted in Apple II Pascal format. This FST is read-only; it only performs read operations.
	Pro.FST	The ProDOS FST.
GS.OS		The remainder of GS/OS.
GS.OS.Dev		The GS/OS Device Manager and associated core routines. Separate from GS.OS for speed reasons.
P8		The ProDOS 8 operating system.
Sounds		A folder with sounds provided for the Sound Control Panel. The file names are fairly self-explanatory; the sounds are not described here.
	Ahh	
	Basso	
	Blow	
	Boing	
	Bottle	
	Chirp	
	ChuToy	
	Clack	
	Clavichord	
	Click	
	Cow	
	Doorbell	
	Droplet	
	Eastern	

FastWhoosh
Flute
Frog
Funk
Glass
GoodDog
Guitar
Harpsichord
Hero
HowAreYou
Indigo
Laugh
Logjam
Lore
Morse
Ping
PipeOrgan
Pong2003
Pop
Purr
Quack
Shutter
SimpleBeep
SingleClick
Sosumi
Submarine
Swish
Temple
Tink
Trumpets
Uhoh
Voltage
Whit
Whoosh
WildEep

Start		The boot program. If this file exists, GS/OS always launches it upon booting. Under 6.0.4, this program usually reads the SetStart.data file and launches the indicated application.
Start.GS.OS		The file containing the GLoader and GQuit routines. It loads the files GS.OS and GS.OS.Dev, which contain the rest of the operating system.
System.Setup		The directory containing all the initialization files to be executed at boot time.
	AppleIIVOC	An initialization file used by the Apple IIGS Video Overlay Card tool set.
	ATInit	The AppleTalk initialization file.
	ATResponder	The AppleTalk Responder, used for AppleTalk network management.
	CloseView	A new desk accessory (installed by an init) that magnifies the screen to make it more visible to some users with visual impairments.
	EasyAccess	An initialization file that brings Sticky Keys and Keyboard Mouse to ROM 01 users.

	EasyMount	An initialization file that creates file server aliases in the Finder.
	Resource.Mgr	The Resource Manager. This is an initialization file; the design of the Resource Manager requires it to be present even when an application has not specifically loaded it. The system does not boot if this file is not present.
	Sys.Resources	A file containing system resources, available to the system software and to applications.
	Tool.Setup	A required file that loads files which contain all the patches to tools in ROM for ROM levels 01 (TS2) and 3 (TS3). Tool.Setup would attempt to load TS1 if executed on a machine with ROM level 00, but GS/OS does not boot on such a machine, therefore, TS1 is not included. Tool.Setup also contains patches common to both ROM 01 and ROM 3.
	TS2	Patches to ROM tools for ROM 01.
	TS3	Patches to ROM tools for ROM 3.
Tools		The directory containing tool files for all tools not in ROM.
	Tool014	Window Manager .
	Tool015	Menu Manager.
	Tool016	Control Manager.
	Tool018	QuickDraw Auxiliary.
	Tool019	Print Manager.
	Tool020	LineEdit.
	Tool021	Dialog Manager.
	Tool022	Scrap Manager.
	Tool023	Standard File.
	Tool025	Note Synthesizer.
	Tool026	Note Sequencer.
	Tool027	Font Manager.
	Tool028	List Manager.
	Tool029	ACE Tools.
	Tool032	MIDI Tools.
	Tool033	VideoMix toolset (for the Video Overlay Card).
	Tool034	TextEdit.
	Tool035	MIDI Synth toolset.
	Tool038	Media Control toolset.
Teach		A simple editor that uses TextEdit to display and edit text files, Teach files, Installer scripts and AppleWorks and MacWrite documents.
Whats.New		A Teach file that describes the new features in System Software 6.0.4.

Contents of Install

ProDOS	Every file system boots differently; the boot blocks for ProDOS disks look for a file named ProDOS. This is that file. It is the GS/OS file system stub necessary to start the boot process.

System		The directory containing most of the GS/OS files.
	CDevs	The directory containing all Apple IIGS Control Panel Devices (CDevs) required for installing 6.0.4.
		General — Allows setting of general system parameters.
		RAM — Controls the size of the RAM disk and the GS/OS Disk Cache.
		SetStart — Lets you choose which application to boot into.
	Desk.Accs	The directory containing all the classic and new desk accessory files to be loaded at boot time.
		ControlPanel — The New Desk Accessory which allows users to control almost all system parameters and choose printers and file servers.
	Drivers	The directory containing all device drivers needed by GS/OS and the Toolbox (including the Print Manager and MIDI Tools).
		AppleDisk3.5 — The Apple 3.5 Drive device driver for GS/OS. Also drives SuperDrives connected to the Apple II SuperDrive interface card.
		AppleDisk5.25 — The driver for Apple 5.25" disk drives, including Disk II drives and Apple UniDisk 5.25 drives. This driver is required for GS/OS to recognize 5.25" disk drives.
		Console.Driver — The text screen and keyboard device driver for GS/OS.
		SCSI.Manager — The GS/OS SCSI Manager, the supervisory driver that arbitrates hardware-level usage of Apple's Apple II SCSI cards.
		SCSIHD.Driver — The GS/OS driver for SCSI hard disks. This driver is required for GS/OS to recognize SCSI hard disks.
		UniDisk3.5 — The GS/OS driver for UniDisk 3.5 drives. This driver is required for proper operation of UniDisk 3.5 drives. Using the UniDisk with GS/OS without this driver eventually corrupts media.
	Error.Msg	A compiled file containing all error messages required by GS/OS. This file is separate from the GS.OS file to provide easier support for localization.
	Fonts	The directory containing all system fonts to be used.
		FastFont — This makes Shaston 8 text drawing much faster.
	FSTs	The directory containing the file system translators to be loaded at boot time.
		Char.FST — The character device FST.
		Pro.FST — The ProDOS FST.
	GS.OS	The remainder of GS/OS.
	GS.OS.Dev	The GS/OS Device Manager and associated core routines. Separate from GS.OS for speed reasons.
	P8	The ProDOS 8 operating system.
	SetStart.data	An invisible file created by the SetStart Control Panel, indicating which application the system should boot into. On this disk, this points to the Installer.
	Start	The boot program. If this file exists, GS/OS always launches it upon booting. This program usually reads the SetStart.data file and launches the indicated application.

	Start.GS.OS	The file containing the `GLoader` and `GQuit` routines. It loads the files GS.OS and GS.OS.Dev, which contain the rest of the operating system.
	System.Setup	The directory containing all the initialization files to be executed at boot time.
	Resource.Mgr	The Resource Manager. This is an initialization file; the design of the Resource Manager requires it to be present even when an application has not specifically loaded it. The system does not boot if this file is not present.
	Sys.Resources	A file containing system resources, available to the system software and to applications.
	Tool.Setup	A required file that loads files which contain all the patches to tools in ROM for ROM levels 01 (TS2) and 3 (TS3). Tool.Setup would attempt to load TS1 if executed on a machine with ROM level 00, but GS/OS does not boot on such a machine, therefore, TS1 is not included. Tool.Setup also contains patches common to both ROM 01 and ROM 3.
	TS2	Patches to ROM tools for ROM 01.
	TS3	Patches to ROM tools for ROM 3.
	Tools	The directory containing tool files for all tools not in ROM.
	Tool014	Window Manager .
	Tool015	Menu Manager.
	Tool016	Control Manager.
	Tool018	QuickDraw Auxiliary.
	Tool019	Print Manager.
	Tool020	LineEdit.
	Tool021	Dialog Manager.
	Tool022	Scrap Manager.
	Tool023	Standard File.
	Tool027	Font Manager.
	Tool028	List Manager.
	Tool034	TextEdit.
Icons		The directory containing all the Finder's old-style icon files as well as new Desktop database files and file type descriptors.
	FType.Apple	The file type names used by the Finder (on all systems).
Installer		The Apple IIGS Installer program. This program makes use of scripts found in the Scripts directory on this disk to install parts of the system, as well as third-party applications, without the user needing to copy individual files.
Scripts		This directory contains all the scripts for the Installer. On launch, the Installer looks in its parent directory for the Scripts directory and the scripts it contains. It also reads `MessageCenter` message #1.
	A2.RAMCard	Script to install the driver for the Apple II Memory Expansion Card (the slot-based, or "slinky" card).
	Adv.Disk.Util	Script to install the Advanced Disk Utility program.
	Apple.Bowl	Script to install the Apple Bowl game.
	Apple.MIDI	Script to install the Apple MIDI Interface driver and tool set.

AppleDisk5.25	Script to install the 5.25" disk driver for GS/OS.
AppleShare	Script to install AppleShare.
AppleShare3.5	Script that creates an 800K or 1440K GS/OS startup disk which contains AppleShare.
Archiver	Script to install Archiver, the new GS/OS-based backup program.
Aristotle.Patch	Script to install a change to Aristotle for easier class transition.
ATImageWriter	Script to install the ImageWriter printer driver for the Print Manager, as well as the files necessary to work with AppleTalk.
ATImageWriterLQ	Script to install the ImageWriter LQ printer driver for the Print Manager, as well as the files necessary to work with AppleTalk.
Calculator	Script to install the Calculator new desk accessory.
Card6850.MIDI	Script to install the 6850-based MIDI Interface card driver.
CDROM	Script to install the High Sierra FST as well as the SCSI Manager and SCSI CD-ROM driver for GS/OS.
CloseView	Script to install the CloseView NDA, which makes the screen more legible to some visually-impaired users.
DCImageWriter	Script to install the ImageWriter printer driver for the Print Manager, as well as the files necessary to connect it to a serial port.
DCImageWriterLQ	Script to install the ImageWriter LQ printer driver for the Print Manager, as well as the files necessary to connect it to a serial port.
DOS3.3.FST	Script to install the read-only DOS 3.3 file system translator.
Easy.Access	Script to install the EasyAccess init, which provides sticky keys and keyboard mouse to ROM 01 users.
Epson	Script to install the Epson printer driver for the Print Manager, as well as the parallel card driver.
FindFile	Script to install the FindFile NDA, which finds files on volumes GS/OS can read.
Fonts	Script to install the minimum suggested font set.
Fonts.Max	Script to install all fonts provided with System 6.0.4.
Fonts.Std	Script to install the standard font set.
HFS.FST	Script to install the Hierarchical File System (HFS, used on the Macintosh) file system translator.
Inst.Sys.Min	Script to install a minimal GS/OS system on an 800K volume. Note that this is **different** than 5.0.x's "Inst.Sys.Min" script, the 6.0.4 version of which is in the file named "AppleShare3.5".
Inst.SysF.NoFin	Script to install a minimal GS/OS system,without the Finder, on a given destination volume.
Instal.Sys.File	Script to install a complete System Software 6.0.4 configuration, including new features, on a given destination volume.
LaserWriter	Script to install the LaserWriter printer driver for the Print Manager, as well as the files necessary to work with AppleTalk.

Local.Net.Boot	Script to create a 3.5" floppy disk with minimal system software that boots into a server selection program (the network "Start" program from SystemTools2).
MediaControl	Script to install the Media Control toolset and all Media Control drivers supplied with System 6.0.4.
MediaCtrl.CDSC	Script to install the Media Control toolset and the drivers to work with the Apple CD SC drive.
MediaCtrl.P2000	Script to install the Media Control toolset and the drivers to work with the Pioneer 2000 series laserdisc players.
MediaCtrl.P4000	Script to install the Media Control toolset and the drivers to work with the Pioneer 4000 series laserdisc players.
MSDOS.FST	Script to install the read-only MS-DOS file system translator.
Namer	Script to install the printer Namer Control Panel. Namer II (a ProDOS 8 application) is not included with System 6.0.4.
Pascal.FST	Script to install the read-only Apple II Pascal file system translator.
Quick.Logoff	Script to add a quick logoff feature to AppleShare.
RAM5	Script to install the RAM5 disk driver.
SCSI.Hard.Disk	Script to install the SCSI Manager and SCSI hard disk driver for GS/OS.
SCSI.Scanner	Script to install the SCSI Manager and SCSI scanner driver for GS/OS.
SCSI.Tape	Script to install the SCSI Manager and SCSI tape driver for GS/OS.
Server.Sys.File	Script to install System Software 6.0.4 on an AppleShare File Server.
Sounds.All	Script to install all sounds provided with System Software 6.0.4 into the "System:Sounds" folder of the designated volume.
StyleWriter	Script to install the StyleWriter printer driver for the Print Manager, as well as the files necessary to connect it to a serial port.
Teach	Script to install the application Teach, which displays and edits Teach files, text files, AppleWorks files, MacWrite files and Installer scripts.
UniDisk3.5	Script to install the UniDisk 3.5 driver for GS/OS.
VideoKeyboard	Script to install the Video Keyboard new desk accessory, which allows users to type by using the pointing device instead of the keyboard.
VideoMix	Script to install the latest versions of the Apple II VideoMix software and tools.

Contents of SystemTools1

Icons	Additional icons for the Finder. This folder is currently empty.

System		A directory containing additional parts of the system software.
	Finder	The Apple IIGS Finder, version 6.0.4.
	CDevs	Directory with additional Control Panel Devices.
	DirectConnect	Allows selection of direct-connected printers.
	Keyboard	Sets keyboard parameters.
	Modem	Controls modem port settings.
	Monitor	Sets 40-column or 80-column mode, monochrome or color mode, and the color of text, text background, and borders.
	Printer	Controls printer port settings.
	Slots	Allows selection of slot settings and startup slot.
	Sound	Sets user preference for sound pitch and volume. Also allows the user to assign digitized sounds to events that happen while using the computer.
	Time	Sets the internal clock's time and display format and optionally tracks Daylight Savings Time.
	Desk.Accs	Directory with additional desk accessories.
	CDRemote	An updated version of the CD Remote new desk accessory which ships with the AppleCD SC.
	FindFile	A new desk accessory that finds files on volumes GS/OS can read.
	Calculator	A calculator new desk accessory.
	Drivers	Directory with additional device drivers for GS/OS and the Toolbox.
	A2.RAMCard	The GS/OS driver for slot-based memory expansion cards. This driver is not required to use these cards with GS/OS, but it does provide a substantial speed improvement.
	Apple.MIDI	The Apple MIDI Interface driver for the MIDI Tools.
	Card6850.MIDI	The driver for 6850-based MIDI interface cards for the MIDI Tools.
	Epson	The Epson® printer driver for the Print Manager.
	ImageWriter	The ImageWriter driver for the Print Manager.
	ImageWriter.LQ	The ImageWriter LQ driver for the Print Manager. Starting with System Software 5.0.3, this driver uses all the capabilities of the ImageWriter LQ.
	Modem	The modem port driver for the Print Manager.
	Parallel.Card	A driver for some parallel printer interface cards for the Print Manager. This driver works with the Apple Parallel Interface Card, as well as several other parallel interface cards.
	Printer	The printer port driver for the Print Manager.
	RAM5	The GS/OS driver for a RAM disk using system
	SCSI.Manager	The GS/OS SCSI Manager, the supervisory driver that arbitrates hardware-level usage of Apple's Apple II SCSI cards.
	SCSICD.Driver	The GS/OS driver for the AppleCD SC drive. This driver is required for GS/OS to recognize CD-ROM drives.
	SCSIScan.Driver	The GS/OS driver for the Apple Scanner or OneScanner. This driver is required for GS/OS to recognize Apple's scanners.

	SCSITape.Driver	The GS/OS driver for the Apple Tape Backup 40SC. This driver is required for GS/OS to recognize Apple's now-discontinued Tape Backup 40 SC.
	StyleWriter	The StyleWriter driver for the Print Manager.
Fonts		Directory with additional fonts.
	Courier.09	9-point Courier font.
	Courier.10	10-point Courier font.
	Courier.12	12-point Courier font.
	Courier.14	14-point Courier font.
	Courier.18	18-point Courier font.
	Courier.20	20-point Courier font.
	Courier.24	24-point Courier font.
	Geneva.10	10-point Geneva font.
	Geneva.12	12-point Geneva font.
	Geneva.14	14-point Geneva font.
	Geneva.16	16-point Geneva font.
	Geneva.18	18-point Geneva font.
	Geneva.20	20-point Geneva font.
	Geneva.24	24-point Geneva font.
	Helvetica.09	9-point Helvetica font.
	Helvetica.10	10-point Helvetica font.
	Helvetica.12	12-point Helvetica font.
	Helvetica.14	14-point Helvetica font.
	Helvetica.18	18-point Helvetica font.
	Helvetica.20	20-point Helvetica font.
	Helvetica.24	24-point Helvetica font.
	Shaston.16	16-point Shaston font.
	Times.09	9-point Times font.
	Times.10	10-point Times font.
	Times.12	12-point Times font.
	Times.14	14-point Times font.
	Times.18	18-point Times font.
	Times.20	20-point Times font.
	Times.24	24-point Times font.
	Venice.12	12-point Venice font.
	Venice.14	14-point Venice font.
	Venice.24	24-point Venice font.
FSTs		Directory with additional File System Translators.
	DOS.3.3.FST	The DOS 3.3 FST, which allows GS/OS to access 5.25" disks formatted in DOS 3.3 format. This FST is read-only; it only performs read operations.
	MSDOS.FST	The MS-DOS FST, which allows GS/OS to access any disk formatted in the MS-DOS's FAT 12 format. This FST is read-only; it only performs read operations.
	HS.FST	The High Sierra FST, which allows GS/OS to access CD-ROM discs formatted in the international standard High Sierra or ISO 9660 formats. This FST is read-only; it only performs read operations.
	HFS.FST	The HFS FST, which allows GS/OS to read and write any disk in the Macintosh's HFS format.
	MSDOS.FST	The MS-DOS FST, which allows GS/OS to access any disk formatted in the MS-DOS's FAT 12 format. This FST is read-only; it only performs read operations.

	Pascal.FST	The Apple II Pascal FST, which allows GS/OS to access any disk formatted in Apple II Pascal format. This FST is read-only; it only performs read operations.
Tools		Directory with additional tools.
	Tool025	Note Synthesizer.
	Tool026	Note Sequencer.
	Tool029	ACE Tools.
	Tool032	MIDI Tools.
Adv.Disk.Util		The Advanced Disk Utility program which allows for partitioning of SCSI hard disks, as well as erasing, initializing, and zeroing volumes or partitions.
BASIC.System		The ProDOS 8 BASIC command interpreter.

Contents of SystemTools2

Icons		Additional icons for the Finder. This folder is currently empty.
AppleTalk		This directory contains additional AppleTalk files and utilities for AppleShare and AppleTalk.
	Boot.Driver	A driver for AppleShare that GS/OS loads before the other drivers are loaded and which remains resident in memory after the boot process is finished. Installed on servers by the Installer script Server.Sys.File.
	Display.0	An update to the Aristotle program installed by the "Aristotle.Patch" script.
	QuickLogoff	An initialization file used to add a quick logoff feature to AppleShare.
	Start	The AppleShare startup program which is installed instead of the standard Start program on AppleShare volumes. It allows the user to log on and then launches the server startup program for the user's machine.
System		A directory containing additional parts of the system software.
	CDevs	Directory with additional Control Panel Devices.
	AppleShare	Allows users to choose and log onto AppleShare file servers.
	FolderPriv	Allows users to set default folder privileges on AppleShare file server volumes.
	MediaControl	Allows users to set up the Media Control tool set and the drivers they wish to use.
	Namer	Allows users to rename AppleTalk-based ImageWriter, ImageWriter LQ and LaserWriter printers.
	NetPrinter	Allows users to choose AppleTalk-based ImageWriter, ImageWriter LQ and LaserWriter printers.
	Network	Allows users to choose which operqating system the computer should boot over AppleTalk.

Desk.Accs		Directory with additional desk accessories.
	MediaControl	A new desk accessory that's like a "super" remote control for all devices the Media Control toolset can control.
	VideoKeyboard	A new desk accessory that allows users to type with the pointing device instead of with the keyboard.
	VideoMix	An updated version of the VideoMix new desk accessory which ships with the Apple II Video Overlay Card.
Drivers		Directory with additional device drivers for GS/OS and the Toolbox.
	AppleTalk	The AppleTalk port driver for the Print Manager. It works with either serial port when configured for AppleTalk.
	ATalk	The main AppleTalk GS/OS driver.
	ATP1.ATROM	AppleTalk protocols to patch the IIGS ROM.
	ATP2.ATRAM	AppleTalk protocols not in ROM.
	IWEM	PostScript® program which allows a LaserWriter emulate an ImageWriter. A user can load it into the LaserWriter with the LaserWriter Control Panel, and it is automatically invoked when printing through the slot associated with AppleTalk.
	LaserWriter	The LaserWriter driver for the Print Manager. This driver works with any LaserWriter with PostScript (at least Level 1 and 2). It does not work with the LaserWriter IISC or Personal LaserWriter LS.
	Media.Control	Drivers for the Media Control toolset
	AppleCDSC	Media Control driver for the Apple CD SC drive.
	Pioneer2000	Media Control driver for the Pioneer 2000 series of laserdisc players.
	Pioneer4000	Media Control driver for the Pioneer 4000 series of laserdisc players.
	SCC.Manager	The GS/OS supervisory driver that arbitrates hardware-level usage of the serial communications controller in the Apple IIGS.
Fonts		Directory with additional fonts. Currently, this directory on this disk is empty.
FSTs		Directory with additional file system translators.
	AppleShare.FST	The AppleShare FST which allows GS/OS to access AppleShare file servers.
Sounds		A folder with sounds provided for the new Sound Control Panel. The file names are fairly self-explanatory; the sounds are not described here.
	Ahh	
	Doorbell	
	Droplet	
	Eastern	
	Frog	
	PipeOrgan	
	Quack	
	SimpleBeep	
	Sosumi	
	Swish	
	Trumpets	

	Whoosh	
System.Setup		Directory with additional initialization files.
	AppleIIVOC	An initialization file used by the Apple IIGS Video Overlay Card tool set.
	ATInit	The AppleTalk initialization file.
	ATResponder	The AppleTalk Responder, used for AppleTalk network management.
	CloseView	A new desk accessory (installed by an init) that magnifies the screen to make it more visible to some users with visual impairments.
	EasyAccess	An initialization file that brings Sticky Keys and Keyboard Mouse to ROM 01 users.
	EasyMount	An initialization file that creates file server aliases in the Finder.
Tools		Directory with additional tools.
	Tool033	VideoMix toolset (for the Video Overlay Card).
	Tool038	Media Control toolset.
Archiver		A GS/OS based backup and restore program.
CLOCK.PATCH		An AppleSoft BASIC application that will patch the ProDOS 8 ThunderClock driver to handle a new span of years.
Teach		A simple editor that uses TextEdit to display and edit text files, Teach files, Installer scripts and AppleWorks and MacWrite documents.
Read.Me		Last-minute news and information about the System Software. Read with Teach.
Shortcuts		A Teach file with time-saving system tips and information.

Contents of SystemTools3

System	A directory containing additional parts of the system software.
Sounds	A folder with sounds provided for the Sound Control Panel. The file names are fairly self-explanatory; the sounds are not described here.

        Basso
        Blow
        Boing
        Bottle
        Chirp
        ChuToy
        Clack
        Clavichord
        Click
        Cow
        FastWhoosh
        Flute
        Funk
        Glass
        GoodDog
        Guitar
        Harpsichord
        Hero
        HowAreYou
        Indigo
        Laugh
        Logjam
        Lore
        Morse
        Ping
        Pong2003
        Pop
        Purr
        Shutter
        SingleClick
        Submarine
        Temple
        Tink
        Uhoh
        Voltage
        Whit
        WildEep

Fonts	Directory with additional fonts.
Times.96	96-point Times font.

Contents of Fonts

Goodies	A directory with files that are only related to system software in the vaguest sense.
Apple.Bowl	A GS/OS conversion of an old Apple II bowling game.

	Read.Me	Documentation on Apple Bowl.
Icons		Additional icons for the Finder.
	AppleBowl.Icon	The icon for the Apple Bowl game.
System		A directory containing additional parts of the system software.
	Fonts	Additional fonts.
	Courier.27	27-point Courier font.
	Courier.28	28-point Courier font.
	Courier.30	30-point Courier font.
	Courier.36	36-point Courier font.
	Courier.42	42-point Courier font.
	Helvetica.27	27-point Helvetica font.
	Helvetica.28	28-point Helvetica font.
	Helvetica.30	30-point Helvetica font.
	Helvetica.36	36-point Helvetica font.
	Helvetica.42	42-point Helvetica font.
	Helvetica.48	48-point Helvetica font.
	Helvetica.56	56-point Helvetica font.
	Helvetica.60	60-point Helvetica font.
	Helvetica.72	72-point Helvetica font.
	Helvetica.96	96-point Helvetica font.
	Times.27	27-point Times font.
	Times.28	28-point Times font.
	Times.30	30-point Times font.
	Times.36	36-point Times font.
	Times.42	42-point Times font.
	Times.48	48-point Times font.
	Times.56	56-point Times font.
	Times.60	60-point Times font.

Contents of Fonts2

System		A directory containing additional parts of the system software.
	Fonts	Additional fonts.
	Courier.48	48-point Courier font.
	Courier.56	56-point Courier font.
	Courier.72	72-point Courier font.
	Courier.96	96-point Courier font.
	Symbol.09	9-point Symbol font.
	Symbol.10	10-point Symbol font.
	Symbol.12	12-point Symbol font.
	Symbol.14	14-point Symbol font.
	Symbol.18	18-point Symbol font.
	Symbol.24	24-point Symbol font.
	Symbol.36	36-point Symbol font.
	Symbol.40	40-point Symbol font.
	Symbol.48	48-point Symbol font.
	Symbol.56	56-point Symbol font.
	Symbol.72	72-point Symbol font.
	Symbol.96	96-point Symbol font.
	Times.72	72-point Times font.

Contents of synthLAB

Reference	A Teach document with the electronic manual for synthLAB.
synthLAB	The synthLAB application, a demonstration sequencer for the MIDI Synth toolset.
Seq.and.Instr	A directory containing demonstration sequences (files that end in ".seq"), wave forms (files that end in ".wav") and sound banks (files that end in ".bnk") for use with synthLAB and MIDI Synth. The files are only listed; their sound is not described here.

> Synth.bnk
> Synth.seq
> Synth.wav
> Bee.seq
> Capri.seq
> Combo.bnk
> Combo.wav
> Demo.bnk
> Demo.wav
> Fugue.seq
> Midsummer.seq
> Orch.bnk
> Orch.wav
> Piano.bnk
> Piano.wav
> Rhythm.seq
> Sonata.seq

System	A directory containing additional parts of the system software.
CDevs	Directory with additional Control Panel Devices.
MIDI	The MIDI Control Panel. Lets you choose a MIDI driver.
Tools	Directory with additional tools.
Tool035	MIDI Synth toolset.

Contents of System.Disk

Files are only listed here; they are described earlier in this Note where they first appeared.

ProDOS
System
    Start.GS.OS
    GS.OS
    Error.Msg
    GS.OS.Dev
    FSTs
        Pro.FST
        Char.FST
    Drivers
        AppleDisk3.5
        AppleDisk5.25
        Console.Driver

        System.Setup
                Tool.Setup
                TS2
                TS3
                Resource.Mgr
                Sys.Resources
        Desk.Accs
                ControlPanel
        CDevs
                Printer
                Time
        Start   This is the Finder, not the SetStart program or the
                                             AppleShare program.
        Tools
                Tool014
                Tool015
                Tool016
                Tool018
                Tool019
                Tool020
                Tool021
                Tool022
                Tool023
                Tool025
                Tool027
                Tool028
                Tool034
        Fonts
        P8
Icons
        Ftype.Apple
BASIC.System

Minimum GS/OS System Disk Requirements

The following files are required for GS/OS to boot from a local disk. This list does not address
files needed by the Finder or the IIGS Toolbox. Those files only required in certain circumstances
are noted as such. Those files that may be excluded **only** when disk space or memory limitations
make it **absolutely** necessary are marked with asterisks (*).

ProDOS
System
        Start.GS.OS
        GS.OS
        GS.OS.Dev
        Error.Msg
        FSTs
                Pro.FST
                *HS.FST   Required for High Sierra or ISO 9660 discs.
                Char.FST
                *AppleShare.FST   Required to use AppleShare file servers
                *DOS3.3.FST   Required to use DOS 3.3 disks
                *Pascal.FST   Required to use Apple II Pascal disks

	*HFS.FST	Required to use HFS disks
Drivers		
	*AppleDisk3.5	Required for Apple 3.5 Drives or SuperDrives.
	*AppleDisk5.25	Required for 5.25" drives.
	*UniDisk3.5	Required for UniDisk 3.5 drives.
	*SCSI.Manager	Required for SCSI devices.
	*SCSIHD.Driver	Required for SCSI hard disks.
	*SCSICD.Driver	Required for AppleCD SC drives.
	*SCSIScan.Driver	Required for Apple scanners.
	*SCSITape.Driver	Required for Apple Tape backup.
	Console.Driver	
	*ATalk	Required for AppleTalk (including AppleShare).
	*ATP1.ATROM	Required for AppleTalk (including AppleShare).
	*ATP2.ATRAM	Required for AppleTalk (including AppleShare).
	*SCC.Manager	Required for AppleTalk (including AppleShare).
System.Setup		
	Tool.Setup	
	TS2	
	TS3	
	Resource.Mgr	
	Sys.Resources	
CDevs		
	*AppleShare	Required for selecting AppleShare file servers.
	*NetPrinter	Required for choosing printers.
	*DirectConnect	Required for choosing printers.
	*General	
	*RAM	Should **always** be included if space allows. Provides the only way to set the size of the GS/OS Disk Cache.
Desk.Accs		Required for desk accessories; any desk accessories should be installed in this directory.
	*ControlPanel	Required if you ship any Control Panels (CDevs).
*Start		Must be present for GS/OS to boot or some other file that GS/OS can boot into must be present in its place.
Tools		Required for any of the RAM-based tools; any RAM-based tools should be installed in this directory.
Fonts		Required for the Font Manager.
	*FastFont	This makes Shaston 8 text drawing much faster and should be included unless absolutely impossible.
*P8		Required for ProDOS 8.
*BASIC.System		Required for AppleSoft BASIC.

Further Reference

- *GS/OS Reference*
- Apple IIGS Technical Note #100, VersionVille

Epson is a registered trademark of Seiko Epson Corporation.
PostScript is a registered trademark of Adobe Systems, Incorporated.