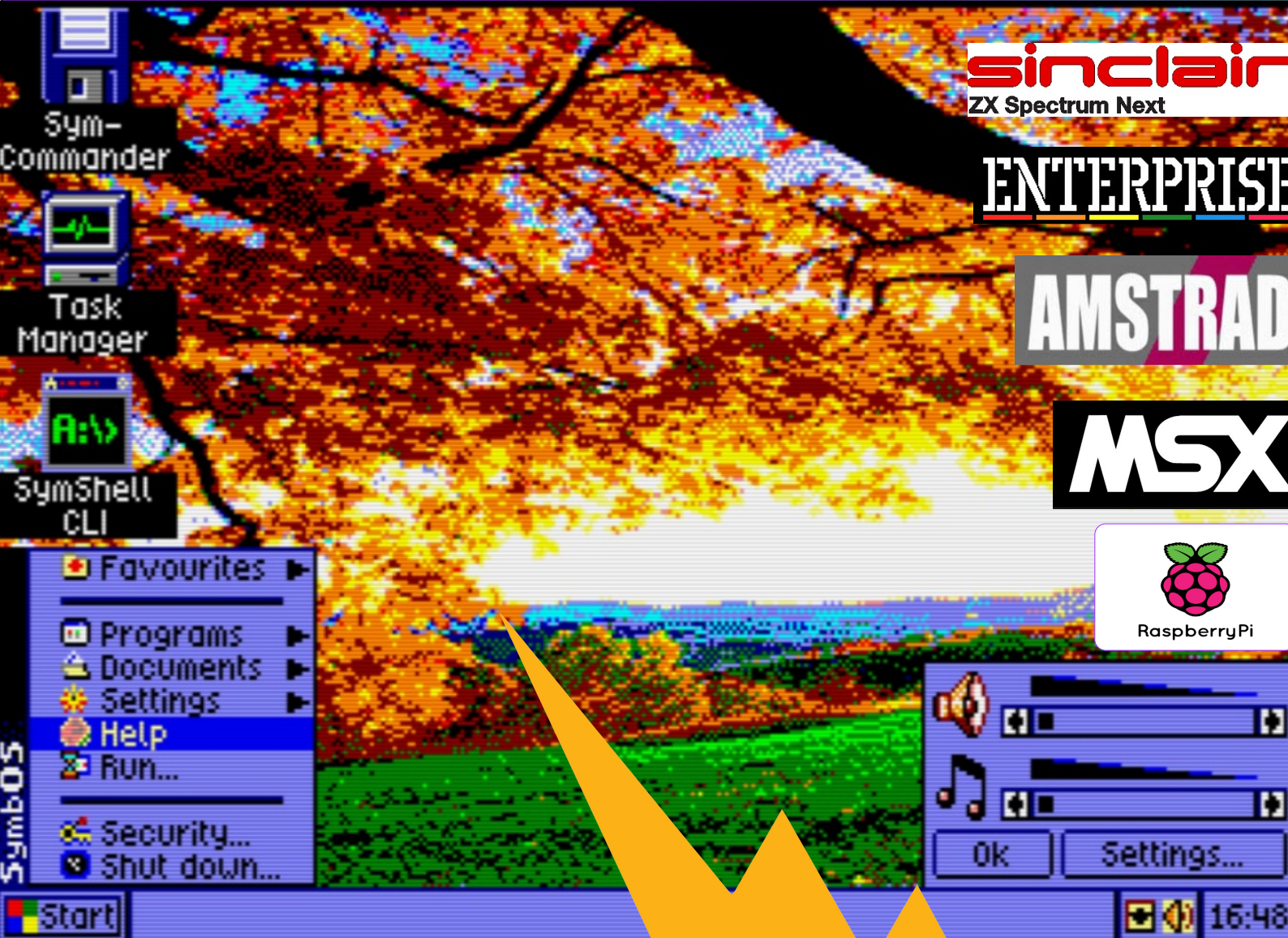


SYMBOS

Document version : 31-01-2025



4.0

Installation manual for SymbOS



WWW.SYMBOS.ORG

.. SY.mbiosis M.ultitasking B.ased O.perating S.ystem ..

"Connects Z80ties together forever"



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I.0 Introduction to SymbOS 4.0



SymbOS is a multitasking operating system with a graphical user interface for Z80-based home computers. It provides a Windows-like GUI and is built around a microkernel with preemptive multitasking. It supports up to 1024KB RAM for data and code execution and includes a FAT12/16/32 filesystem implementation for accessing data storage of up to 2 Terabytes. Since version 3.0, SymbOS is fully network-enabled. The purpose of this document is to describe how you can use and install the SymbOS operating system.



I.1 Supported hardware

If you are planning to install SymbOS on your home computer it is a good idea to check if your hardware is supported by the operating system.



I.1.1 Supported Z80/R800 models:

Models - SymCalc					
File Edit View Format Table ?					
D17 $f_x = $					
	A	B	C	D	E
1	MSX Models	AMSTRAD CPC	AMSTRAD PCW	ENTERPRISE	SPECTRUM
2	MSX1 (69k)	CPC 6128	PCW 8256	ENTERPRISE 64	NEXT
3	MSX2	CPC 6128+	PCW 8512	ENTERPRISE 128	
4	MSX2+	CPC 464	PCW 9256		
5	TURBO-R	CPC 464+	PCW 9512		
6	OCM	CPC 664	PCW 9512+		
7		CPC Trex	PCW 10		
8	AMSTRAD NC	SYMBOS VM			
9	NC100	Pi InsaneOS			
10	NC150	Windows			
11	NC200	Linux			
12		MAC			
13		SDL2			
14					
				Sum 0; Avg 0	

* On MSX models only one memory mapper is used. When 2 memory mappers are inserted the biggest is used. (by default).
On turbo-r systems only the internal memory can be used.



1.1.2 Supported hardware per system

MSX

1	MSX Hardware	RAM 128KB-1024KB	Z80 / R800		
2					
3	Audio	Screenmode	Input devices	Storage	Network
4	PSG AY-8910	256x212 16 colors	Keyboard	Sunrise IDE	GR8NET*
5	OPL4 Wavetable	512x212 16 colors	MSX Mouse	MegaFlashRom	Denyonet
6	OPL2-FM	512x212 4 colors	Joystick	GR8NET	
7	MP3MSX/SEONE	384x240 V9990	NYRIKKI Ps/2	WD2793 FDC	
8	Darky Dual AY	512x212 V9990	Rookie USB	Microsol FDC	
9		768x240 v9990		MB8877A FDC	
10		1024x212 v9990		Toshiba FDC	
11				Panasonic FDC	
12				SVI WD1793	
13				Beer IDE	
14					
15					
16					

* By default the GR8NET does not boot Nextor. If you want to use GR8NET as your primary storage device you need to activate the (24,1) mapper mode.

When Nextor is active on the GR8NET you can use nextor to boot SymbOS. The GR8NET acts like a slot expander in mapper mode.

The storage device is always in sub slot 0 (on GR8NET.) So it will be 1-0 or 2-0. On the MSX sub slots are numbered from 0 till 3. (4 in total per primary

This can be done by the following commands. In MSX basic :

Set the mapper mode:

CALL NETSETMAP (24,1) [SET THE MAPPER IN NEXTOR MODE WITH 512k MEMORY]

CALL NETSETMAP (16) [SET THE MAPPER BACK IN STANDARD MODE, WITHOUT NEXTOR]

To save the mapper mode to flash give the following commands. After this it will be start by default.

CALL NETTGTMAP (24,1) [SET THE DEFAULT MAPPER MODE, (24,1) or (16)]

CALL NETSAVE [SAVE 'USER DEFAULT' MODE TO GR8NET FLASH RAM]

To remove mapper mode set the mapper to 0

GR8NET was tested against flash v.00.07 (2017/8/22) and Engine v.00.07 (2017/8/18). Current version can be displayed by using command CALL NETVERSION in MSX basic. To update your GR8NET, use CALL NETBROWSE and download the latest versions. (FPWG+ROM) Update can be done with CALL NETFWUPDATE(3) and CALL NETFPGAUPD. If you have issues downloading from the internet it could be useful to minimize the network buffer by using the command CALL NETVARRWTH (,1024) Please see the GR8NET manual for all update instructions regarding the GR8NET.



Amstrad CPC

1	Amstrad CPC	RAM 128KB-1024KB	Z80
2			
3	Audio	Screenmode	Input devices
4	PSG AY-8910	320x200 4 colors	Keyboard
5	OPL4 Wavetable	640x200 2 colors	Albireo USB Mouse
6	OPL2-FM	384x240 V9990	Joystick
7	MP3M5X/SEONE	512x212 V9990	MultiPlay Amiga Mouse
8	PlayCity Dual AY	768x240 v9990	AMX Mouse / Joystick
9	SYMBiFACE3-MP3	1024x212 v9990	SYMBiFace II Ps/2 Mouse
10			SYMBiFace 3 USB Mouse
11			
12			
13			
14			
15			
16			

1	More CPC		
2			
3	Mass Storage	Real Time Clock	Network
4	Standard Floppy FDC 765	SYMBiFACE 3 RTC	M4 Board Wifi
5	SYMBiFACE 3 USB Stick	SYMBiFACE II RTC	SYMBiFACE 3 M4mode
6	USIFAC II/ULIFAC USB Stick	Nova RTC	Net4CPC
7	M4 Board SD Card Reader	Dobbertin Smartwatch RTC	
8	SYMBiFACE II IDE	M4Board NTP RTC	
9	CPC IDE, X-MASS		
10	HxC direct SD card access		
11			
12			
13			
14			
15			
16			



Amstrad PCW

1	Amstrad CPC	RAM 256KB-1024KB	Z80 4 Mhz
2			
3	Audio	Screenmode	Input devices
4	DKTronics AY sound generator	720x256 2 colors	Keyboard
5			AMX Mouse
6			Kempston Mouse
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

1	More PCW		
2			
3	Mass Storage	Real Time Clock	Network
4	Standard floppy FDC 765	N/A	N/A
5	VIDE16		
6	HxC direct SD card access		
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			



ENTERPRISE

ENTERPRISE COMPUTER

1	Enterprise	RAM 128KB-1024KB	Z80
2			
3	Audio	Screenmode	Input devices
4	PSG DAVE	320x200	Keyboard
5	OPL4 Wavetable	4 colors and 4 for taskbar	SYMBiFace 3 USB Mouse
6	OPL2-FM	640x200	Joystick
7	MP3MSX/SEONE	2 colors and 2 for taskbar	EnterMice PS/2 mouse
8	SYMBiFACE3-MP3	384x240 16 color 69k	BoxSoft mouse
9		512x212 16 color 69k	
10		768x240 16 color 69k	
11		1024x212 16 color 69k	
12			
13			
14			
15			
16			

1	More Enterprise		
2			
3	Mass Storage	Real Time Clock	Network
4	Standard Floppy WD1772	SYMBiFACE3 RTC	
5	Enterprise SD Premium	Native OS RTCs	
6	SYMBiFACE3 USB		
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			



Amstrad NC Models

1	Amstrad NC Models	RAM	1024KB	Z80
2	NC-100 NC-150 NC-200			
3	Audio	Screenmode	Input devices	
4	2Channel Speaker	480x128 2 colors visable	Keyboard	
5		480x192 2 colors virtual	Serial Mouse	
6		480x255 2 colors virtual		
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

1	More Amstrad NC		
2			
3	Mass Storage	Real Time Clock	Network
4	256-512KB RAMDISC	Internal NC100/150 RTC	N/A
5		Internal NC200 RTC	
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			



sinclair

ZX Spectrum Next

Sinclair ZX Spectrum Next

1	ZX Spectrum Next	RAM 640KB-1024KB	Z80
2			
3	Audio	Screenmode	Input devices
4	PSG AY-8910	512x212 16 colors	Keyboard
5	TurboSound Dual AY	640x226 16 colors	PS/2 Mouse
6		640x256 16 colors	
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

1	More ZX Spectrum Next		
2			
3	Mass Storage	Real Time Clock	Network
4	SD Card Reader	Internal RTC	N/A
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			



INSANE

SymbOS Virtual Machine

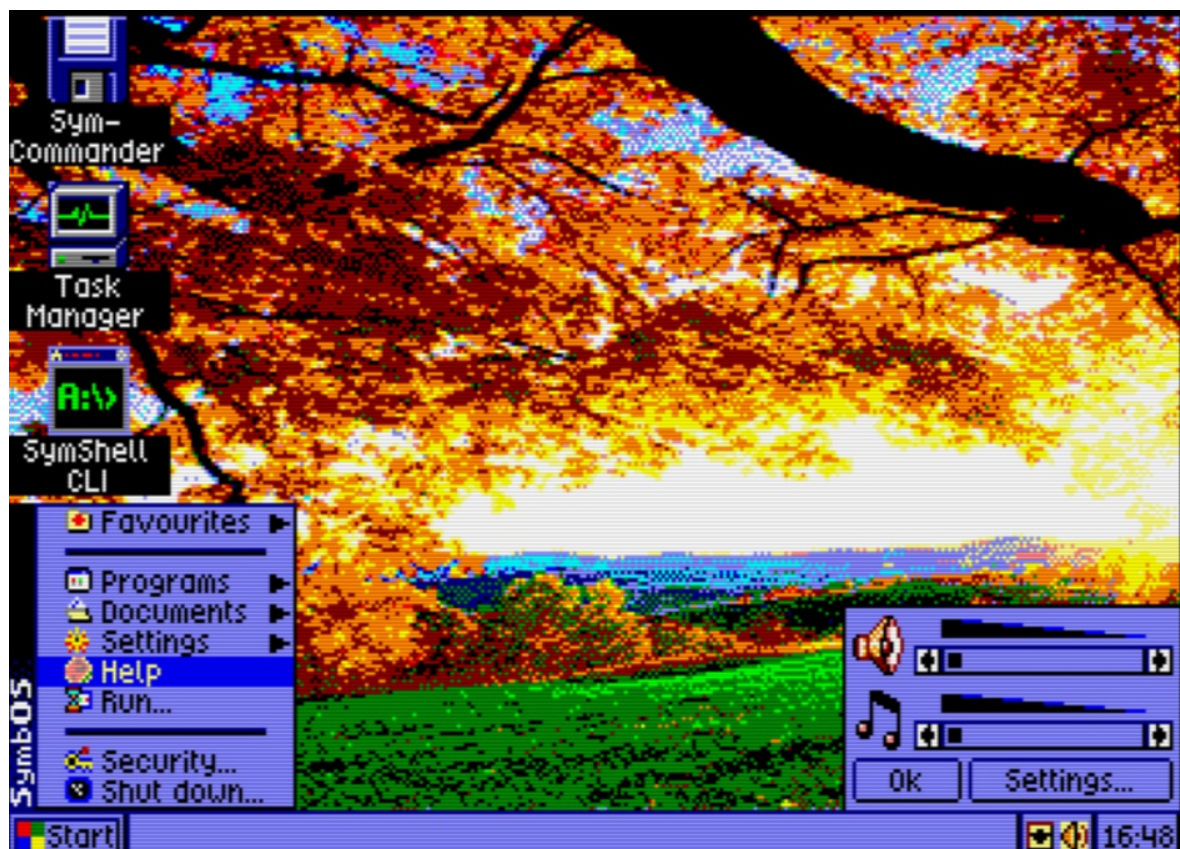
1	SymbOS Virtual Machine	RAM 128KB-1024KB	2 Ghz
2			
3	Mass Storage	Screenmode	Input devices
4	FAT Mounted image	320x200 16 color	Keyboard
5	Fat Mounted drive	512x256 16 color	Mouse
6		640x480 16 color	
7		640x512 16 color	
8		800x480 16 color	Host OS
9		860x360 16 color	InSaneOS
10		960x540 16 color	Windows
11		1280x720 16 color	Linux
12		1280x1024 16 color	Mac
13		1720x720 16 color	SDL2-enabled platforms
14		1920x1080 16 color	
15		2440x1440 16 color	
16		3820x1600 16 color	



1.1.3 Most important SymbOS screenmodes:



Screen	Resolution	Color support
0	768 x 255	2
1	320 x 200	4
2	640 x 200	2
3		
4	256 x 212 (Pattern mode)	64 (16 colors per layer)
5	256 x 212	16
6	512 x 212	4
7	512 x 212	16
8	384 x 240	16
9	512 x 212	16
10	768 x 240	16
11	1024 x 212	16



1.1.4 Warning for use SymbOS



Important /WARNING note: Backing up your old files

Most SymbOS setups are easy and trouble-free: however, any time you update your home-computer's operating system, it is possible that errors could occur (such as system failure due to incompatible hardware, or a power failure) that may temporarily or permanently prevent access to data. Before you set up SymbOS, you might want to back up certain files!! We could not be responsible to harm your home computer or yourself in any way !!!

Important note: Make sure your partition-table / file system meets the standards

Some users reported bugs in partition-sizes. Some early Nextor versions (MSX) created wrong partitions sizes. This is fixed in later versions of Nextor, however it could be that your partition setup was created wrong in the past. SymbOS will fail to read such partitions. Please be sure that your partition table is correctly setup according Microsoft FAT standards!!!

1.1.5 Supported additional graphics cards (V9990)

The SymbOS GFX9000/V9990 version supports high resolutions and virtual wide screens. (also called virtual dual-screens).

Supported bitmap screens are 8,9,10, and 11

Supported pattern screen mode is screen 4 (multilayer pattern mode)

The V9990 is supported in SymbOS and works on most of the supported platforms. This includes the MSX, Amstrad CPC, Enterprise. The V9990 enhances the graphical capabilities of these systems, allowing for more advanced and visually appealing applications and games.

SymbOS supports full-screen pattern game mode for the V9990 using the Quigs game engine. This feature is still in development, but more updates are expected soon.



SYMBOS

Unleash Your Creativity with Quigs!

Ready to take your SymbOS projects to the next level? Meet Quigs, the ultimate development platform for SymbOS! Whether you're a coding wizard or just getting started, Quigs makes it easy and fun to create amazing applications. With powerful tools and a user-friendly interface, you'll be building like a pro in no time. So why wait? Dive into the world of Quigs and let your imagination run wild!

Modern easy development for an old 8-bit computer? Quigs makes it possible!

Quigs for Symbos - v0.9.120125
By Trebmint 2025 - Help from Prevetenet, Hans, Timo, Geco, Edo & Prodatron

Welcome to Quigs oh Symbos and G9k developer!
Please wait. Opening... C:\Users\edozm\OneDrive\Quigs\00_MMM_MENU.qpf
Opened Project... C:\Users\edozm\OneDrive\Quigs\00_MMM_MENU.qpf

```
250
251
252 If GameMode=1 Then
253   If MoveMade>0 Then
254     If MoveMade=70 Then
255       StoreSelected
256     EndIf
257   If MoveMade=60 Or MoveMade=40 Or MoveMade =20 Then
258     ClearSelected
259     DrawBoard
260   EndIf
261   If MoveMade=50 Or MoveMade=30 Or MoveMade=10 Then
262     ReStoreSelected
263     DrawBoard
264   EndIf
265   MoveMade=MoveMade-1
266   If MoveMade=0 Then
267     ClearSelected
268     DrawBoard
269     Turn=(Turn+1) And 1
270     If Turn=0 Then
271       Label19.Text.RSet "White Move"
272       IncrementMoveDisplay
273     Else
274       Label19.Text.RSet "Black Move"
275     EndIf
276   If Turn=1 And PlayAsWhite.Selected.Get Then
277     HuntKing(1)
278     DrawBoard
279     CalcMove(0,Skill1,Skill2,Skill3)
280     RemoveScrBoard ;Removes Board Score from king hunt
281   EndIf
282
```

Ln:295 Cl:1 Cmd:
Caps:OFF Ln:1612

Quigs for Symbos - v0.9.120125
By Trebmint 2025 - Help from Prevetenet, Hans, Timo, Geco, Edo & Prodatron

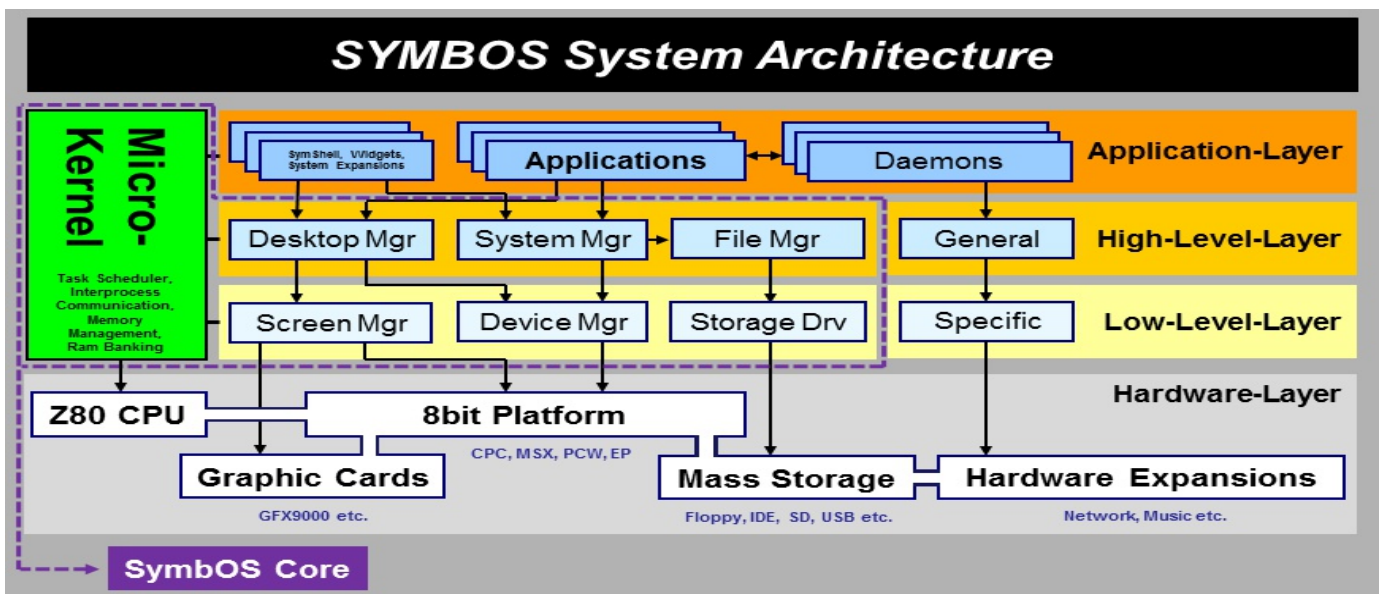
Welcome to Quigs oh Symbos and G9k developer!
Please wait. Opening... C:\Users\edozm\OneDrive\Quigs\00_MMM_MENU.qpf
Opened Project... C:\Users\edozm\OneDrive\Quigs\00_MMM_MENU.qpf

SYMBOS

The following diagram shows the internal system-architecture of SymbOS. As you can see, SymbOS consists of three different layers. Only the low-level-layer communicates directly with the Z80 based hardware.

1.2 SymbOS Features

Micro kernel	Power	System manager	Power
Maximum amount of supported RAM	1024 KB	Maximum number of applications	24
Maximum number of processes	32	Maximum application core size	63k
Number of different process priorities	9		
Maximum number of timers	32		
Maximum number of open messages	64		
Desktop manager	Power	File manager	Power
Maximum number of active windows	32	Maximum hard disc size	2 TB
Maximum number controls in window	1000	Maximum file size	2 GB
Maximum possible screen resolution (32.000x 32.000 pixels)		Maximum number of devices	8
		Maximum number of open files	7



SymbOS supports preemptive multitasking. Preemptive multitasking allows the computer system to more reliably guarantee each process a regular "slice" of operating time. It also allows the system to rapidly deal with important external events like incoming data, which might require the immediate attention of one or another process.



2 How can I install SymbOS ?



2.1 Installation on MSX based machines

To boot or install SymbOS on your MSX based machine you need to boot your MSX within a MSXDOS1/MSXDOS 2 or NEXTOR configuration. Please refer to the corresponding manual about booting your MSX in DOS mode. SET EXPERT ON could be needed in some situations. For MSXDOS2 installation use COMMAND v2.42. or lower.

When using a large storage device on your MSX normally MSX-DOS2 or NEXTOR is recommended. When you have a standard MSX2, without large storage device and only floppy drives, you probably will use MSX-DOS1 to install/start SymbOS.

After booting SymbOS the MSX-DOS kernel is removed from memory and the SymbOS kernel takes over control of your machine. Before you start your installation please download the latest SymbOS version from our website. Depending on your situation, copy the installation files (SYMSETUP.COM and SYMSETUP.DAT) to your floppy drive or your large storage device.

If you have an old version of SymbOS already installed remove it as 3.1 has a complete new file structure. Remove also symbos.ini from your root drive if exists.

STEP 1: Boot your MSX and start MSX-DOS and start SYMSETUP.COM

```
MSX-DOS version 1.03
Copyright 1984 by Microsoft

COMMAND version 1.11

A>dir
SYMSETUP COM      15678 30-08-14  3:25p
SYMSETUP DAT     344756 30-08-14  3:25p
MSXDOS  SYS        2432 30-08-14  3:28p
COMMAND  COM       6656 30-08-14  3:28p
      4 files  358400 bytes free
A>symsetup.com
```



STEP 2: Press [I] if you want to install or upgrade SymbOS



How can I install SymbOS ?



STEP 3: Choose the destination drive (or full path when using MSX-DOS2 [A:\SYMBOS\])



STEP 4: Setup is copying files to the destination



STEP 5: Detection of storage devices



SymbOS will automatically detect your storage devices. (which are currently supported by SymbOS.)

Choose the drivers you want to load for SymbOS.

Choose **[1]** till **[4]** to enable or disable the device driver. Press **[S]** to save your configuration.

You can load a maximum of 2 storage device drivers in SymbOS. Each storage device could contain multiple partitions or drives which can be mounted to driver letters in SymbOS.

Primary partitions (first 4) and unpartitioned media are supported by SymbOS with a maximum of 8 (4 slave, 4 master) for each device driver. You can have a total of 8 drive letters in SymbOS. Extended partitions are not supported.

If you change the device hardware configuration (to another slot) in your MSX you have to update the SymbOS configuration again. This will be detected by SymbOS during startup. (But needs to be changed manually by starting SYMSETUP from the SymbOS directory)



How can I install SymbOS ?



STEP 6: Set your boot drive



Because SymbOS is an operating system it will not use the MSX-bios or MSX-DOS after SymbOS boots. Because of this you need to define the location for SymbOS. (In the first step of the setup procedure we set the installation path "Destination path"). Please select on which storage device the destination path is created. Press **[1]** or **[2]** This will be the boot device of SymbOS



If the destination path is on a large storage device please select on which IDE channel **[M]** master or **[S]** slave the destination path is created. This will be the boot drive for SymbOS.



If the destination path is on a large storage device please select the (primary partition or unpartitioned media) for the destination drive. Most of the time this is **[1]**(nextor) or **[4]** (sunrise) when the destination drive is A in MSXDOS. Note that sunrise IDE partitions are mixed up compared to the Microsoft FAT standard. You could also use MSXDOS A: drive as C: in SymbOS which is more standard.



STEP 7 : Please review your settings and save when it is correct. **[Y]** yes to save.

How can I install SymbOS ?



SymbOS will now save all your settings. When **SYMSETUP.COM** is finished you can start SymbOS by going to the destination path and type **SYM** (or **SYMG9K (GFX9000 VERSION)**)

```
A:\SYMBOS>sym █
```



How can I install SymbOS ?



2.2 Installation on MSX based machines (Change Settings)



When SymbOS is detecting a hardware change while booting it will abort the boot process and goes back to MSX-DOS. If this is the case you have to re-run **SYMSETUP.COM** which is located in the SymbOS directory. (Do not use the one from the initial installation that is not in the SymbOS path)

Choose **[2]** Change settings to change the existing driver configuration:



How can I install SymbOS ?



In this screen you can change your devices settings.

You can load 2 drivers for device storage. **SYMSETUP.COM** will detect the available Mass Storage Devices. You have to select manually the devices you want to use it for SymbOS.

Press **[D]** devices to select 1 or 2 devices.



- Select the driver place you want to use **[1]** or **[2]**
- Select the device that is detected by SymbOS **[1],[2],[3]** or **[4]**
- Select the driver that you want to use for the device. Use the arrow keys to select.
- Select an other driver if need (You can load max. 2)

How can I install SymbOS ?



- Select **[B]** to set the boot location
- Select the correct driver you want to use as BOOT DEVICE. **[1]** or **[2]**
- Select the correct drive mapping you want to use **[A]** till **[Z]**
- Select the correct partition you want to use **[0]** till **[4]**.
(Note: Sunrise IDE has number 4 as the first partition in MSXDOS, 3 as second.. etc.)
- Select if the device supports 'Removable option' Press **[N]** when you not sure.



If everything is correct **[S]** save the configuration and start SymbOS again with the new drivers active.



2.3 Installation on CPC based machines

INSTALLATION AND BOOTING ON THE CPC

SymbOS can be booted from floppy disc, mass storage or ROM. The choice of the best method depends on the hardware available:

- Booting from mass storage: This is always recommended if your mass storage can also be used in Amsdos.
- Booting from ROM: This is recommended if you have a ROM extension but no Amsdos compatible mass storage device. It boots the core part in about 3 seconds and loads the remaining parts from floppy or, if available, from mass storage.
- Booting from floppy: This is required if you don't have either of the first two options.

Using SymbOS with a mass storage device

This is the easiest method. First copy the full platform independent SymbOS package to your storage and then complete it with the CPC specific mass storage package.

Now go to the /SYMBOS directory and type

RUN"SYM [+return]

or

RUN"SYMG9K [+return] (Graphics9000 version)
to boot SymbOS. That's all..



Using the ROM version on the CPC

The ROM version consists of the files SYM-ROMA.ROM, SYM-ROMB.ROM, SYM-ROMC.ROM and SYM-ROMD.ROM, so you need 64 KB of ROM space. The first ROM (SYM-ROMA.ROM) must be inserted into any slot between 1 and 15. All other ROMs can be inserted anywhere between 1 and 63 in no particular order. After installing the ROMs, you should get a message when you turn on your CPC.

Type
|SYM [+return]
to boot SymbOS.

With the ROM version, no floppy disc is needed to start SymbOS. However, if you don't have a mass storage device either, after booting you will only have the default configuration. So insert a floppy disk or connect a hard disk/CF/SD that contains at least your configuration (SYMBOS.INI) and, if installed, the desktop background graphic, extended desktop, screen saver and more. Please also read the next paragraph if you only have a floppy disk drive.



How can I install SymbOS ?



Using the floppy disc version on the CPC

Insert the boot disc and type
RUN"SYM [+Return]
to boot SymbOS.

SymbOS will start and read the configuration file (**SYMBOS.INI**). If there is extended memory, it will load the desktop background graphics, screen saver, extended desktop and more from disc. Now you can change the configuration via the Control Panel. When making configuration changes, always insert the boot disc and always save it before moving to another disc.

Please note that the Graphics9000 version is only included in the CPC-specific mass storage package. If you only have a G9K and a floppy disk but no mass storage, you can use the standard boot disc and replace the "SYM." and "SYMBOS.BIN" files with the G9K-specific boot files "SYMG9K." and "SYMG9K.BIN".



How can I install SymbOS ?



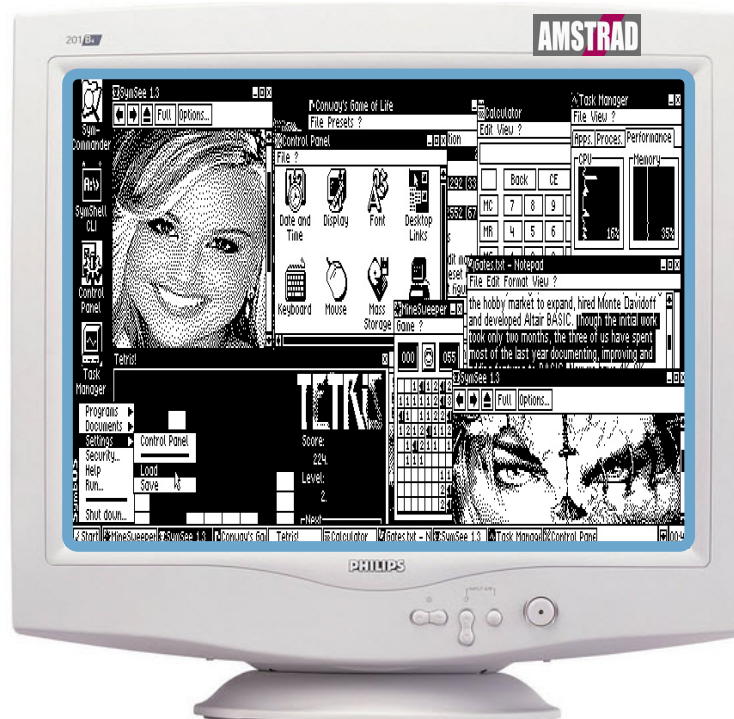
2.4 Installation on PCW based machines



Dump the SymbOS-PCW.DSK (side A) and SymbOS-PCW-System.DSK (side B) files to a 3" floppy disc.

Boot CP/M on your PCW, then insert the Side A of the SymbOS disc and type

SYM [+enter]



After loading SymbOS you can insert Side B and configure the system. Insert Side A again when you made changes in the Control Panel and want to save the settings again. See 3.0

2.5 Installation on ENTERPRISE based machines



Copy the files to your storage device and start SymbOS by typing: RUN "SYM" for the standard version or RUN "SYMG9K" for the Grapic9000 version



After loading SymbOS you can configure the system path and other system settings. See 3.0

How can I install SymbOS ?



2.6 Installation on Spectrum based machines

If you are a lucky owner of the ZX Spectrum Next, you can run SymbOS on it! The installation is very easy.

Just copy the SYMBOS.INI, SYMBOS.NEX and /SYMBOS/*.
* files into the root of your Spectrum Next SD card. Use the Next browser and execute the SYMBOS.NEX file. This will boot SymbOS on your Spectrum Next..

sinclair
ZX Spectrum Next

After starting, you can do the following:

Controlling the mouse pointer:

The best way is to use a PS/2 mouse; even the mouse wheel works.

Use a joystick at port 1:

Fire1 = left click

Fire2 = right click

Or use the keyboard like this:

Extend Mode + Arrow Keys = move

Extend Mode + Space = left click

Extend Mode + Graph = right click

Keyboard usage:

SymbOS uses the following Spectrum Next keys as replacements for special keys of more usual keyboards:

Shift = Caps Shift

Control = Symbol Shift

Alt = Extend Mode

Esc = Break

Tab = True Video

Small Enter = Graph

Edit = Clear

The keyboard is defined in the ZX Spectrum way, which means that all non-alphanumeric characters are reached by "symbol shift" (=Control).

"Extend mode" (=Alt) + letter will generate control codes 1-26.



How can I install SymbOS ?



2.7 Installation for Amstrad NCxxx hardware

To install SymbOS on your Amstrad NC device, you need at least a PCMCIA SRAM PC card.

The SRAM is used as mass storage and as internal memory to operate SymbOS on the NC devices. Be sure to use a supported SRAM PC card that is compatible with the NC device. The SymbOS only supports a 1024 KB SRAM card. Download the SRAM image from the SymbOS website and write the SRAM image on your SRAM PC card. There are several software programs to do this. We suggest using the Memory Card Explorer tool from Elan, which is free to use. You need a PC to write the image to the SRAM card. Once the card is written with the image, put it in your NC device and start the machine.



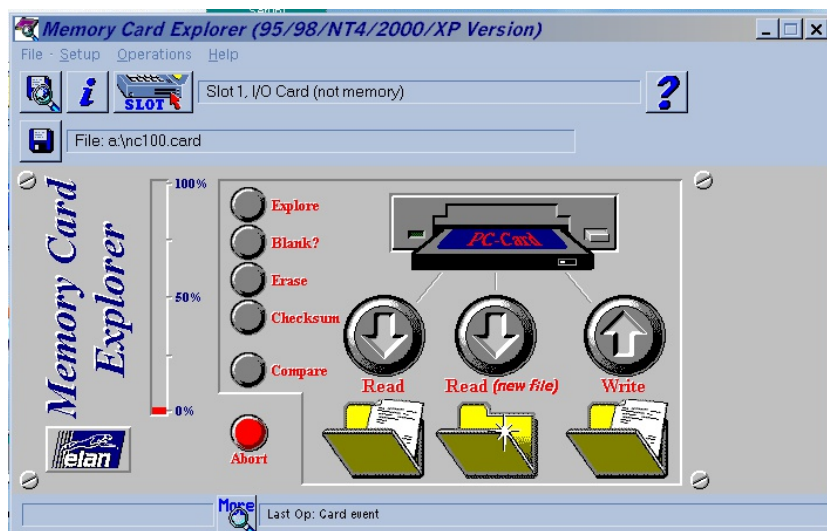
By default, the NC starts its own operating system. To boot SymbOS, press Function+X to execute SymbOS from the SRAM card. After booting, you can use SymbOS as follows:

Press Symbol + Arrow keys to control the mouse, Symbol + Space/Menu for left/right mouse button

Press Function for scrolling the screen. Press Shift + Function to turn joystick emulation on and off; in joystick emulation, Arrow keys and Space/Menu will be directly used for controlling the mouse pointer, which is more comfortable

The screen will scroll automatically if the mouse pointer reaches an invisible area

If you have a Microsoft-compatible serial mouse, we highly recommend connecting it to your device. SymbOS just operates better with a mouse.



Memory card Explorer from Elan can be used to write your SRAM card. Just load the image file and press write and validate your SRAM image.

How can I install SymbOS ?



2.8 Installation for SymbOS Virtual Machine

SymbOSVM is a fast Z80 virtual machine developed by **INSANE** / altair ^ rabenaug ^ tsc.

It is designed to run SymbOS on modern 32 and 64-bit hardware with the highest possible performance. Unlike common emulators for vintage computers, there is only a very thin layer between the Z80 environment and the host system, and there are almost no limitations on speed, memory, and graphics.

The original idea was to run SymbOS bare-metal like on a Raspberry Pi. Insane has been working on his own operating system called "InsaneOS" for several years, which runs directly on 32-bit Raspberry Pi systems. One of its main purposes is to run emulators of vintage computers, music and video players of classic formats, and things like ScummVM directly on the ARM CPU without lag, as there are no layers and host-OS interrupts in between. This makes it the perfect base for SymbOSVM. By using SDL2, it is also possible to run it on Windows, Linux, or other modern operating systems.

For more information we suggest you to look at <https://insane.tsc.de/insaneos/>



3.0 Troubelshooting after booting



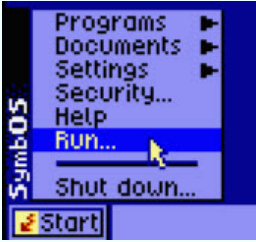
3.1 Symbos SYSTEM PATH not correct

After successfully installing SymbOS on your system it could happen that you running in some troubles when opening system applications. This could happen when you did not set the SYSTEM PATH correctly during the installation. To check the system path do the following steps:



If you got an error “FILE NOT FOUND:THE FILE OR THE PATH DON’T EXITS” while trying to run a program from the desktop or from the start menu it makes sense to check the SYSTEM PATH. The SYSTEM PATH is the default path that SymbOS uses to find its internal programs, like the Task Manager.

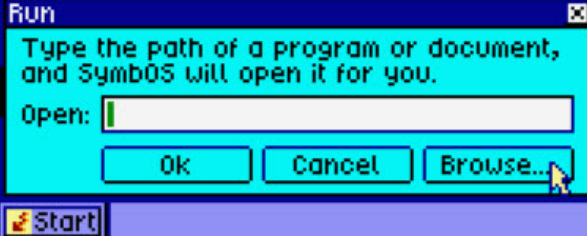
1



Open the START menu, using the mouse or keyboard shortcut [CTRL+ ESC]

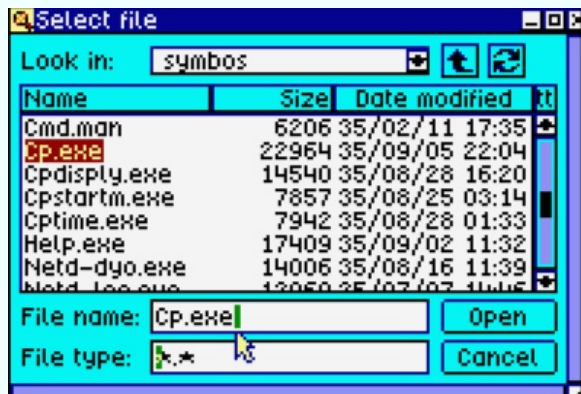
Browse to 'RUN' using the mouse or the arrow keys [UP/DOWN] and press [SPACE]

2



Browse to the button [BROWSE] using the mouse or keyboard 3x [TAB] + [SPACE]

3

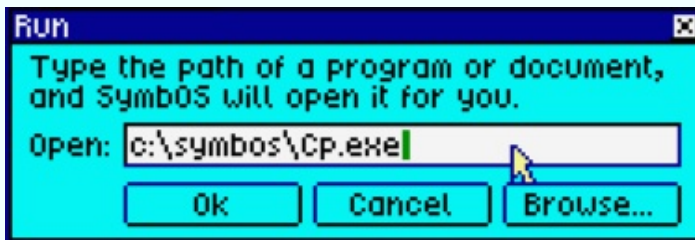


Name	Size	Date modified
Cmd.man	6206	35/02/11 17:35
Cp.exe	22964	35/09/05 22:04
Cpdisply.exe	14540	35/08/28 16:20
Cpstartm.exe	7857	35/08/25 03:14
Cptime.exe	7942	35/08/28 01:33
Help.exe	17409	35/09/02 11:32
Netd-dyo.exe	14006	35/08/16 11:39
Netd-tee.exe	13050	35/07/07 11:06

Browse to the button [BROWSE] using the mouse or keyboard 3x [TAB] + [SPACE]

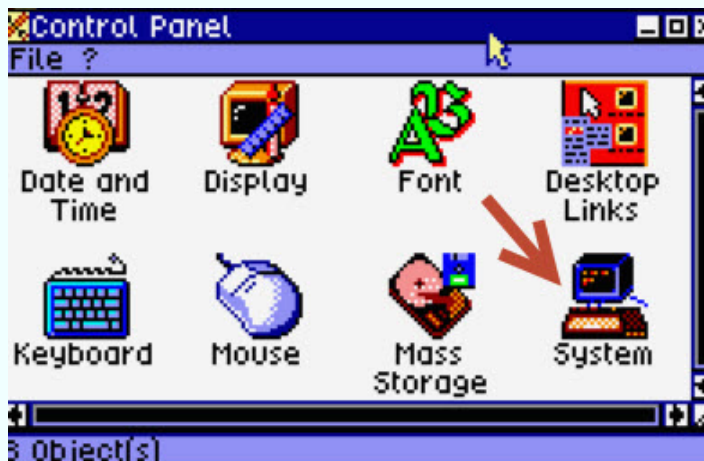
If you can NOT browse your file system your device drivers for storage are not successfully loaded. Please review your SymbOS installation again. (See 3.2 for error codes) If you can access your file system browse to your SymbOS directory and find the file CPEXE (SymbOS Control Panel) and open it.

4



Browse to 'OK' using the mouse or the arrow keys [UP/DOWN] and press [SPACE] or [ENTER]
This will execute the Control Panel

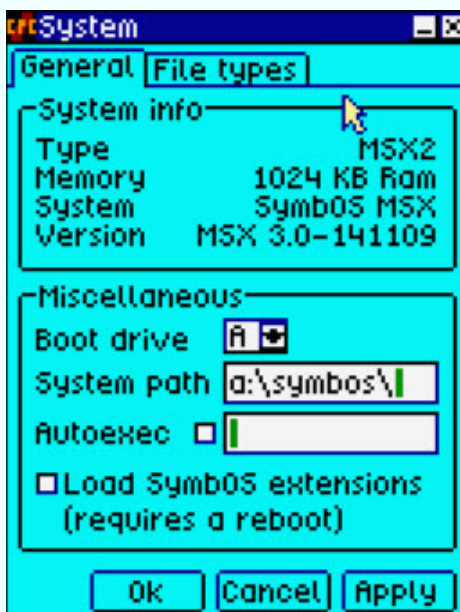
5



Browse to 'SYSTEM' program using the mouse or the arrow keys [UP/DOWN] and press [SPACE] or [ENTER]

This will open the System configuration

6



Change the SYSTEM PATH to the correct one. Check your Mass Storage drive mapping for the correct drive and path.

In this example it's set to "A:\SYMBOS"
Be sure you have a \ at the end of the path

Press [OK]

7



Save your settings in the control panel menu or in the startmenu [SETTINGS] [SAVE]

A new SYMBOS.INI will be created in the root folder of your system drive.

3.2 Errors while booting or when accesing drives

If you got an error after booting SymbOS your file system is probably not accessible. Probably you did not load the correct device driver or selected the wrong partition during the setup procedure. Review the error in the list below. On the MSX you can use SYMSETUP.COM to setup your settings again.

Error Code	Description
000	Device does not exist
002	Device not initialised
003	Media is damaged
004	Partition does not exist
005	Unsupported media or partition
006	Error while sector read/write
007	Error while positioning
008	Abort while volume access
009	Unknown volume error
010	No free filehandler
011	Device does not exist
012	Path does not exist
013	File does not exist
014	Access is forbidden
015	Invalid path or filename
016	Filehandler does not exist
017	Device slot already occupied
018	Error in file organisation
019	Invalid destination name
020	File/path already exist
021	Wrong sub command code
022	Wrong attribute
023	Directory full
024	Media full
025	Media is write protected
026	Device is not ready
027	Directory is not empty
028	Invalid destination device
029	Not supported by file system
030	Unsupported device
031	File is read only
032	Device channel not available
033	Destination is no directory
034	Destination is no file
255	Undefined Error

3.3 SymbOS is not starting with full color support and Advanced desktop

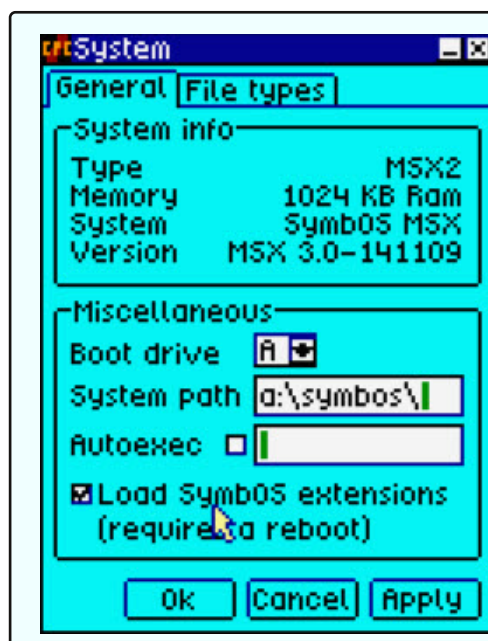
If SymbOS is not started with the advanced desktop feature or without full color support (for icons) than SymbOS extensions is not loaded. The SymbOS advanced desktop feature need more memory to load. If your system does not have enough memory the advanced desktop will be disabled. More then 128KB is needed to load the advanged desktop feature. If you want to use the advanged desktop change the setting in the control panel (System Settings). SAVE your settings and reboot your system. This feature is enabled by default when you system have enough memory during installation.



System running without "Advanged Desktop"



System running with "Advanged Desktop"



Open the Control panel:

Browse to 'SYSTEM'

Enable the SymbOS extensions.
[SAVE] setttings and restart
SymbOS.


3.4 Change driverletters in SymbOS

There is a possibility to change your drive letters in SymbOS. A mapped drive letter means that you map your partition or storage media, like a floppy disk to a drive letter.

In SymbOS you could choose drive [A] till [Z].

If you change your SymbOS BOOT drive (letter) be aware that need to change the SYSTEM PATH also. Drive letters can be changed in the control panel.

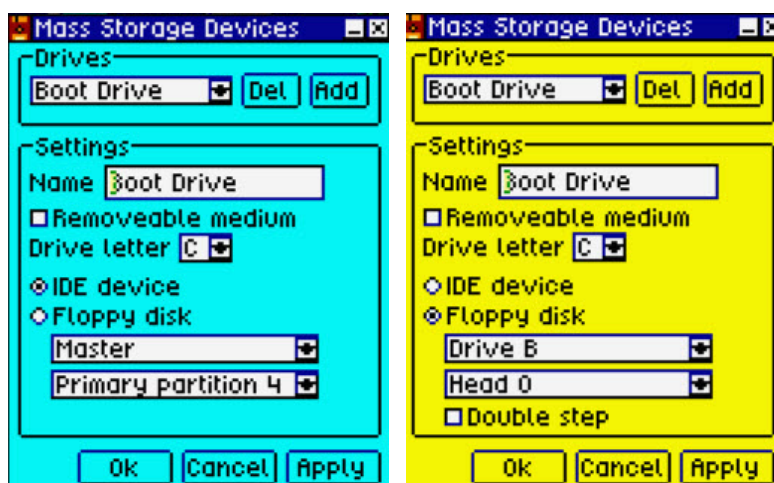
This screen look different depending of your configuration (loaded storage drivers):



Open the Control panel:

Browse to 'Mass Storage'

Change settings and 'Save' your settings in the control panel window or using the start menu [SAVE] settings option.



You can change the label and drive letter or add/remove new mappings. Depending of loaded drivers you can find here floppy settings or mass storage settings or both.

Change the settings and [SAVE] the configuration. A restart is not needed.

Some applications, like SymCommander, needs to be re-configured as well.

4.0 How to use SymbOS



4.1 Move the mouse or use the keyboard



SymbOS is an OS with a graphical user interface (GUI). Like Microsoft Windows, SymbOS uses a mouse device to operate the OS. Proper care and use of your mouse mainly requires common sense. Use your mouse on a clean, smooth surface. Make sure you have adequate desktop space to manipulate your mouse, so you don't have to constantly pick up and reposition it. Don't hold the mouse by its cord, or let the body of the mouse hang off the table. A mouse don't react well to being dropped. The mouse features a ball on the underside that is rolled upon a flat surface to manipulate the onscreen activity, and two fire buttons. What you can actually do with your mouse depends on the software program you use it with. You can select icons, draw pictures, move a cursors or play games --- just about anything you need a controller for. The left fire button is the button which is usually active. The right fire button may also be functional, depending on the application that is started. Plug the mouse into either of the JOYSTICK CONTROL PORTS exactly as you would plug in a joystick.



Other Key combinations you can use:

* Only in Extended mode

CTRL+ENTER	(Toggle fullscreen)
CTRL+ESC	(Open startmenu)
CTRL+SHIFT+ESC	(Start Task Manager)
CTRL+SHIFT+CLR	(Lock screen)*
ARROW keys	(To browse controls)
ALT+ESC	(Switch to next window)
ALT+F4	(Quit Application)
ALT+M	(Open Window Menu)
ALT+R	(Open Run Dialogue)
ALT+TAB	(Switch Task forwards)*
ALT+TAB+SHIFT	(Switch Task backwards)*
TAB	(Switch to next Control)
SPACE	(Select Control)

Special MSX keys:

GRAPH+SELECT (Rescan joystick ports)

A mouse is the preverted way to have control over your SymbOS home- computer however there is support for the keyboard as well if you don't have a pointing device. You can move your mouse pointer by using your mouse device **or press ALT and use the arrow keys on the keyboard.**

Depending of your computer the **ALT** and **ENTER** key can be found as:

ALT-KEY

CPC = Copy
MSX = Graph
PCW = Alt
EP = Alt

Left Click
ALT+SPACE

ENTER KEY

CPC = Enter
MSX = Code
PCW = Enter
EP = INS

Right Click
ALT+ENTER

4.2 Getting Started! What is SymbOS ?

SymbOS is a program that makes it easy for you to tell your home- computer what to do. Instead of memorizing commands and typing them at a prompt, you tell the computer what to do by selecting buttons, pictures (called "icons"), and commands from menus. Most of the time, you use your home-computer's mouse to make the selections; choosing a command is as easy as pointing at an option and clicking a button on the mouse. SymbOS is designed to be easy to learn and easy to use.

With SymbOS, you can run more than one application at a time. Each application you run, such as Notepad, Calculator, or Telnet, appears in a separate window, as if you had several computer screens but just one monitor. By learning to manage the different windows, you can easily work on several different programs at the same time. The way you work with these windows is very consistent, so you can apply what you learn here to any applications you run in SymbOS.

Different Strokes for Different Folks!

One major feature of SymbOS is its flexibility. You can do a task in several different ways, and we'll show you one or two of the options. In addition, each user can set up SymbOS in a unique way to make getting to particular applications and files easier. This means you have tremendous flexibility, but it also means that what you see on your computer and what you see in this document will likely be different.

What You See When You Start SymbOS

When you turn on a home- computer with SymbOS installed, you first see a screen called the desktop. Each window you open sits on this desktop. Sometimes windows are so large you can't see the desktop behind them, but it's always there. The desktop is just like your own desk: you can keep it as orderly or as messy as you like. SymbOS does give you a tool that makes it easier to keep things tidy as you move from task to task: the Taskbar at the bottom of the window:



When you run different programs, the program icons show up on the Taskbar, making it easy for you to switch between programs. You'll see more about this later. At the far left side of the Taskbar is the button for the Start menu. The Start menu is, as the name implies, the place you generally go to start any programs. You can also shut down your computer from this menu.



4.3 Using the Mouse to tell your home- computer What to DO!

You'll use your mouse to make selections and tell the computer what to do with those selections. For example, you might use your mouse to select a file you want to open, or a button to close a window, or a graphic you want to move to another location. How do you use your mouse to make these selections? The first step is to point to what you want.

Begin with the mouse on a flat surface, such as a mousepad sitting on a desk or table. When you move the mouse with your hand on the mousepad, you move a pointer on the computer screen at the same time. If you pick the mouse up in the air and move it, the pointer doesn't move at all. Knowing this can help you move the pointer around comfortably on the screen; if your mouse doesn't have room to run on your mousepad, simply pick it up, reposition it, and start again.

You have two mouse buttons; when the "tail" of the mouse, that is, the mouse's cord, points away from you at 12 o'clock, one mouse button is on the left and one is on the right. You'll use your left mouse button most of the time. (Note to left-handers: You may want to make the right mouse button your "primary" button; you can change mouse settings from the Control Panels.

Select with the Left Mouse Button (Point and Click slow twice)



You'll point and click with your left mouse button to select buttons, menus, commands, and other items. To make a selection with your left mouse button, just point at the item, hold you mouse still, and click once. For example, try clicking on one of the icons to select it. After you select something, you can tell the computer to act on it in some way. For now, we'll leave the icons alone, and look at the Start menu instead.

Wanna Drag?

You can click and drag to perform many tasks, including these:

- Moving windows, icons, graphics, and other objects from one place to another
- Resizing windows and other objects
- Copying and moving files from one directory to another
- Creating Program and document "Shortcuts"
- Moving graphics or Videos



The key to clicking and dragging is to keep your mouse button pressed down until you've completed the action. Specifically, to click and drag, point at an object, hold down the left mouse button, and move the mouse on the mousepad. Try it with one of the icons on the desktop. When the icon is in the position you want, release the mouse button, and the icon appears in a new location. By the way, clicking and dragging is also called "dragging and dropping" in various contexts.

4.4 Ready to START ?

Click on Start. Your Start menu probably includes the following choices:

Programs:

You can set up this menu to show applications, such as Games and SymCommander, that you frequently use.



Documents:

This menu lists up to 5 of the last documents you've worked on, so you can get to them quickly. It's a bit quirky: it doesn't list documents you open from within programs. For example, if you open a document while you're using Notepad, it doesn't show up in this menu.



Settings:

Select options from this menu to change different settings on your computer. For example, you can control your diskdrives from here, or change the pattern on your desktop.



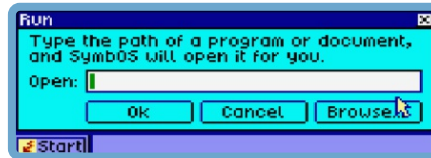
Help:

Use this option to find information about SymbOS. Individual applications have their own Help menus.



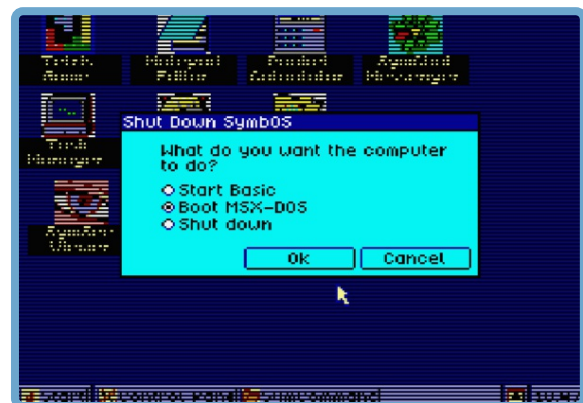
Run:

Use this application to run applications that aren't listed in your Programs menu. You can type the command line for the program or click Browse ... to look for the program icon and select it.



Shut Down:

Choose this option to begin shutting down SymbOS



Notice that some of the options in the Start menu, such as Programs, have arrows next to them.



When you move your pointer to those options, another list of options displays. You're working now with nested menus or folders, with one folder tucked inside another. When you get to an option that doesn't have a black arrow, you've actually found a file, not a folder. If you click on one of these options, you run the program or open the document.

If you don't find anything in the Start menu that you like, just click outside the menu without selecting anything. The menu closes.

Basic Window Structure and Function

The windows you see in SymbOS have many essential features in common. We'll use the Control Panel window to show examples of the following features:

Title Bar:



A title bar does more than display the name of the window. To move a window, click on the title bar and drag. To close the window, double-click on the icon in the left corner of the title bar.

Minimize Button:



Click on this button to shrink the window so you can see other items on your desktop. A button for the minimized window now appears in the Taskbar. To work with the window again, just click on its button on the Taskbar.

Maximize Button:



Clicking on this button enlarges the window so that it fills the entire screen.

Restore Button:



This button only appears when a window is maximized. Goldilocks would have liked this button: to make a window not too big, not too small, but just right, click on the Restore button.

Close Button:



Clicking on this button closes the window. If you're running a program, it closes the program. If you'd rather pause in your work than exit the program, use the minimize button instead.

Resizing Border:

The border appears all around a window. You'll have trouble seeing it if a window is maximized. Resize the window by clicking on the border and dragging. When you move the pointer arrow over the border, it changes shape to a double headed arrow. Click and drag to change the shape and size of the window.

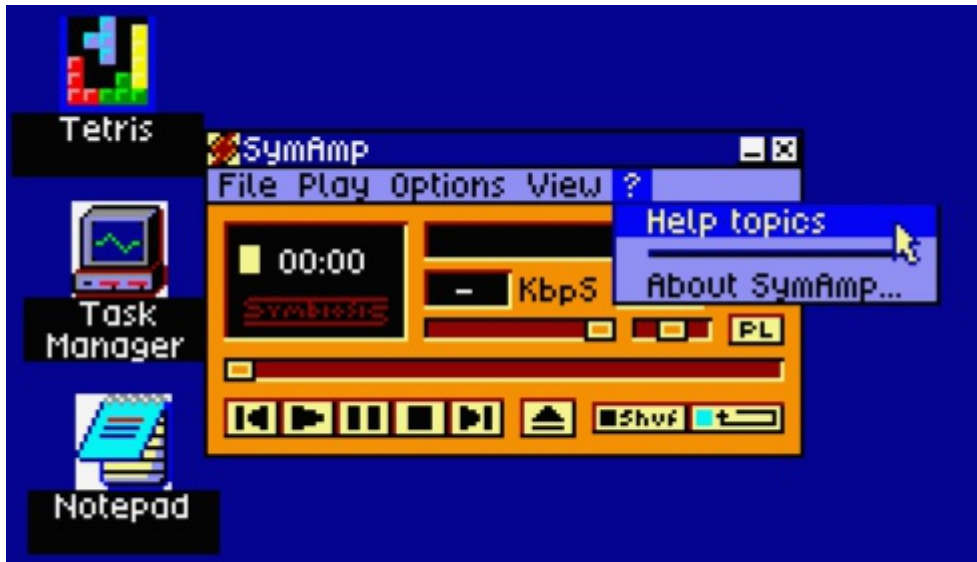
Scroll Bars:

When a window is too small to show everything in it, scroll bars appear along the right edge or the bottom edge of the window or both. When you click on the arrows at either end of the scroll bar, you scroll through the window, and the scroll bar moves. You can also drag the scroll bar to move quickly through a window; this is especially handy when you're working with long documents.

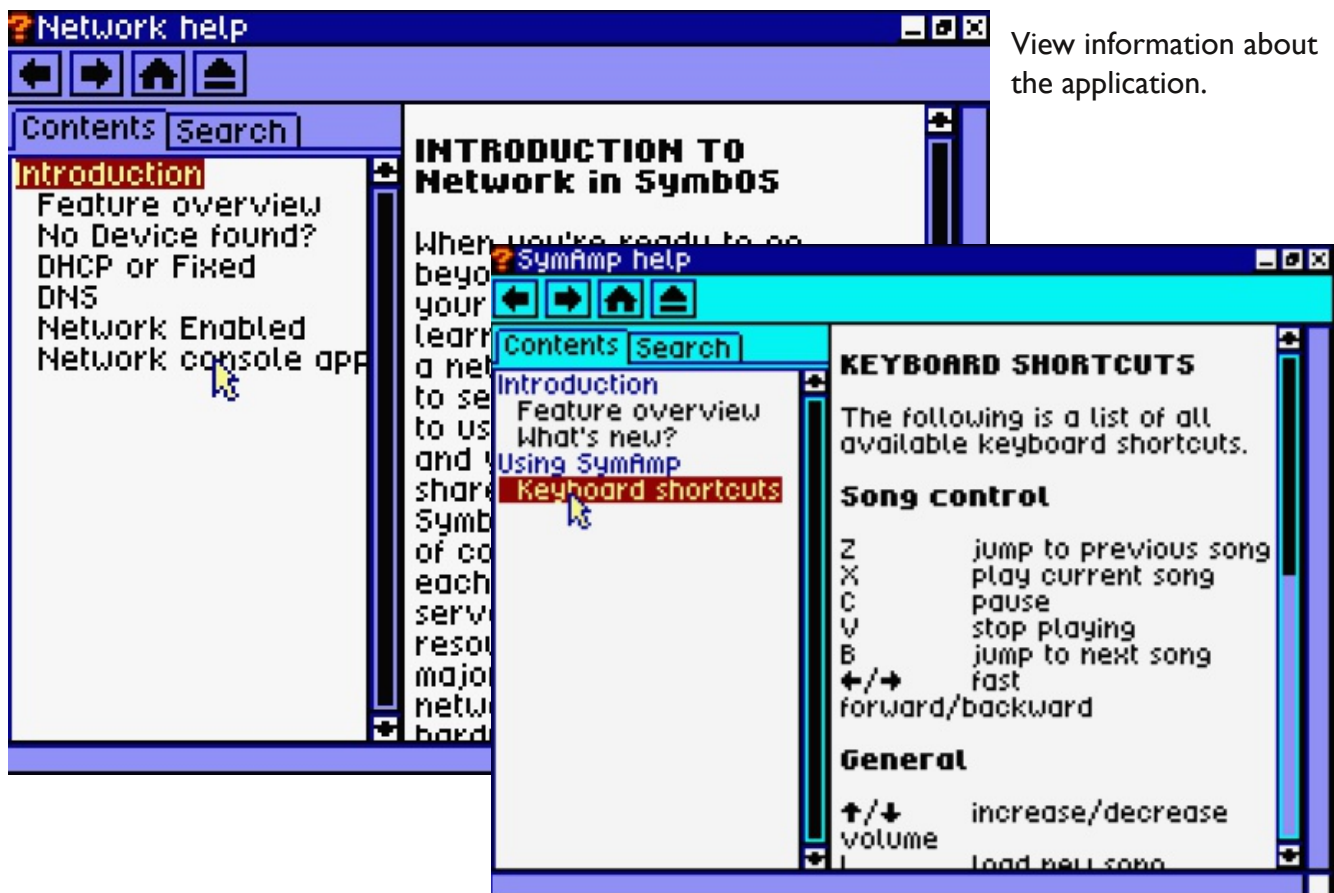


4.4.1 Need Online Help in Applications ??

Most SymbOS application do have an in build help function. This help feature is very usefully when you want to have more information about the application. itself. The help function is a HTML based help browser which allow you to search in HTML based help files.



Go to the Help function in the application to get more info about the application.



View information about the application.

How to use SymbOS



4.4.2 Change your desktop background

In SymbOS you can simply change your background picture. Desktop backgrounds only work when you have enough memory free available. 1. Click right on the desktop and go to properties, 2. Go to the desk. tab and click browse. Use the file dialog to select a background (SGX file). If you want to know how to use the file dialog please see (3.1)

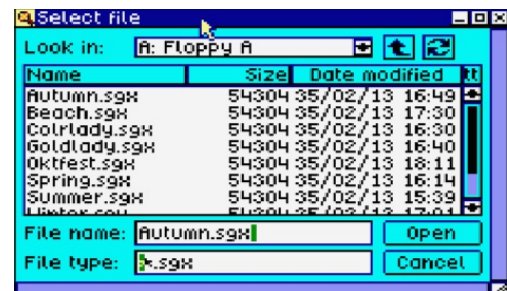
1.



2.



3.



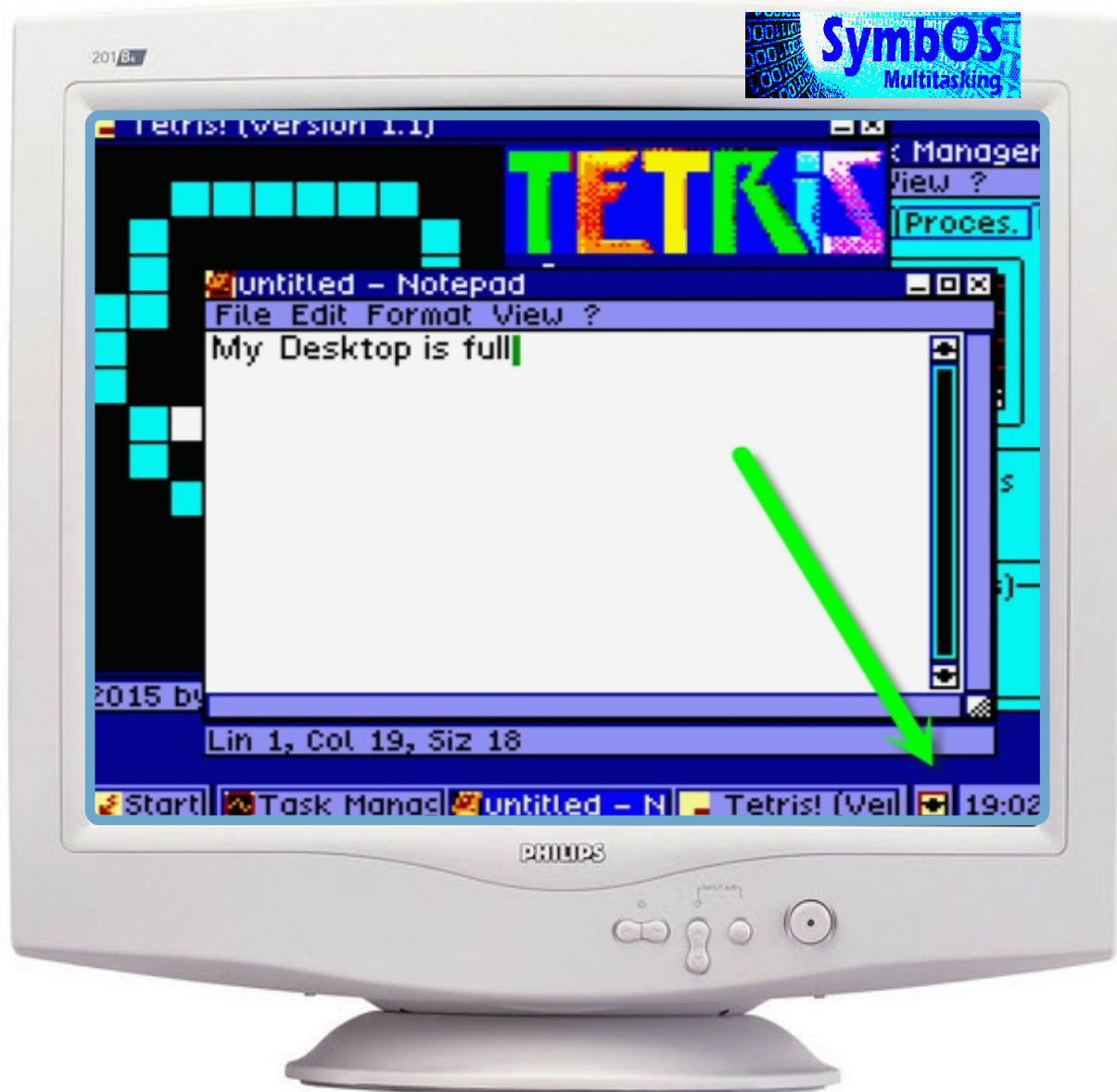
5.3 Examples of desktop backgrounds





Save your settings in the control panel menu or in the startmenu [SETTINGS] [SAVE]

A new SYMBOS.INI will be created in the root folder of your system drive.



Help! I Can't Find My Desktop!

It's easy to lose sight of your desktop under stacks of windows. Let's say, for instance, that you're working with a notepad, a File-processing program, and the Control Panel window. To tidy things up, first pull up a shortcut menu for the Taskbar to minimize all the windows by choosing Minimize All icon. You'll probably be able to see your desktop now. (Note: dialog boxes don't close when you choose Minimize All Windows.)

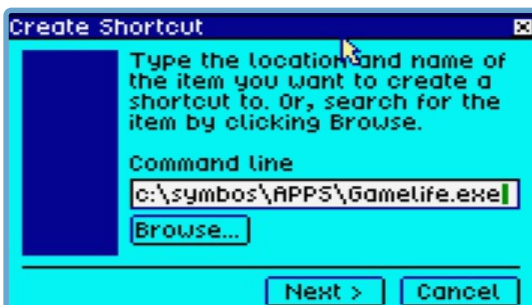
4.5 Putting a Shortcut on the Desktop

Shortcuts provide easy access to the documents and programs you use most often. For example, suppose you keep track of your activities in a text document called Daily Log. You can place a shortcut to Daily Log on the SymbOS desktop. You can then open the text document without having to find it first, by double-clicking the shortcut icon. A shortcut does not change a file's location; it just lets you open the file quickly. You can create a shortcut to any program.

To create a new shortcut do the following: (Using SymbOS extensions)



Click with the mouse right on a empty place on the desktop. Choose New -> Shortcut



Insert the path to the location of the file or use the browse button to browse to the system path.

Click 'Next' to continue



Insert the name of the shortcut. You can define your own name and you can use two text lines of it.

Click 'Next' to continue



Select a new icon using the 'Select Icon Button' or keep the default file icon.

Click 'Finish' to create your shortcut.

4.6 Change a Shortcut on the Desktop

To change an existing shortcut do the following:



Click with the mouse right button on a shortcut icon on the desktop. Choose 'Properties'

If you only want to change the name of the shortcut simply click slow on the text or choose rename in the properties windows.



In the general tab you can see the properties of the icon.

Click 'Shortcut ' to change the values



In the shortcut tab you can define the path of the target and the icon. Change your data and press OK to save it.

Click 'OK'

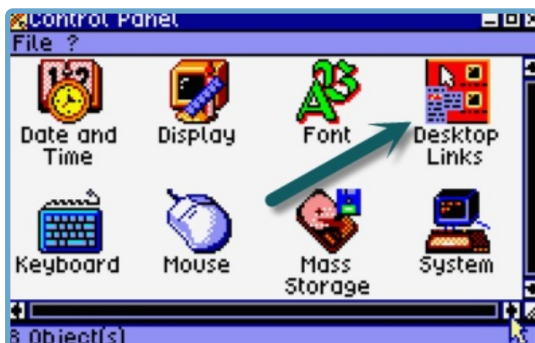
4.7 Change a Shortcut on the Desktop (Using the classic startmenu and desktop)

If you are not using the advanced start menu/desktop because of SymbOS extensions is disabled you still can define your desktop icons and start menu items using the control panel icon. However without running SymbOS extensions the amount of items is limited and there is no 16 color support for desktop icons. SymbOS extensions need additional memory to load. By disabling SymbOS extensions SymbOS can still run on home computer with less memory.

To modify your icons/startmenu do the following:



Use START and then Control Panel



In the control panel start "DESKTOP LINKS"



-You can switch between desktop and startmenu mode using the radio items

- Type ADD to create a new item depending of the mode this is a icon or a startmenu item

- Click the new item you want to change or click a item that you want to change.

- In the Edit entry change the name of the item and use the browse button to browse to the executable file.

-Press Apply to make it visible on the desktop or startmetnu. Be aware that you have to save the settings using the control panel or the save option in the startmenu. Without saving your setting it is lost after a reboot. You can also use the Autosave function in the contol panel.

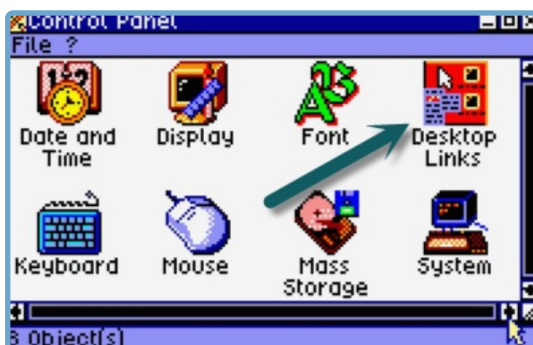
4.8 Change a Shortcut on the Desktop (Using the Advanced startmenu and desktop)

If you are using the advanced start menu/desktop because of SymbOS extensions is enabled you can define your desktop icons and start menu items using the control panel icon. You can make a max. of 40 icons and 100 startmenu items when SymbOS extensions is enabled.

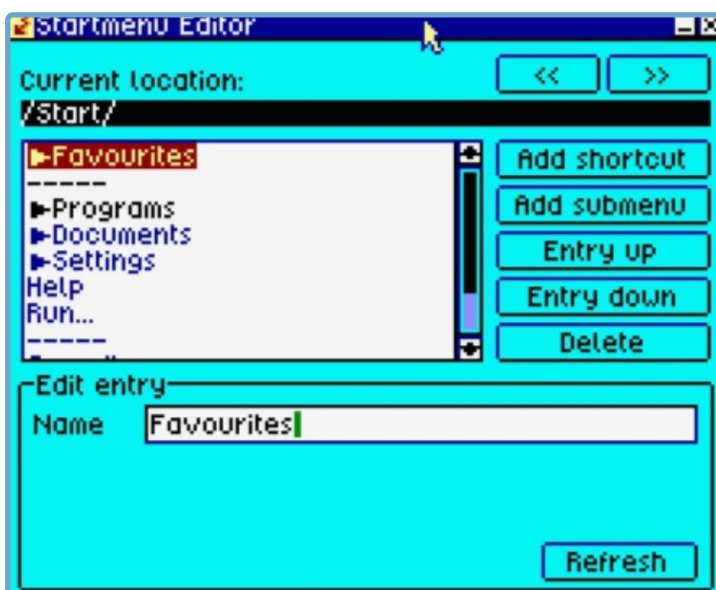
To modify your startmenu do the following: (for icons see 4.4)



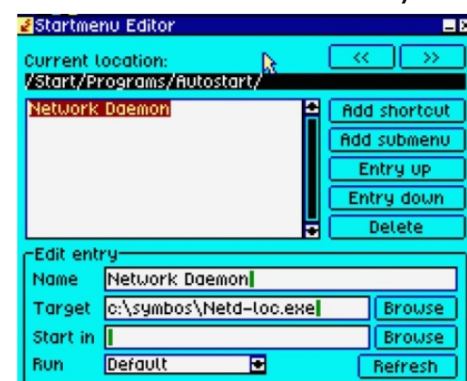
Use START and then Control Panel



In the control panel start "DESKTOP LINKS"

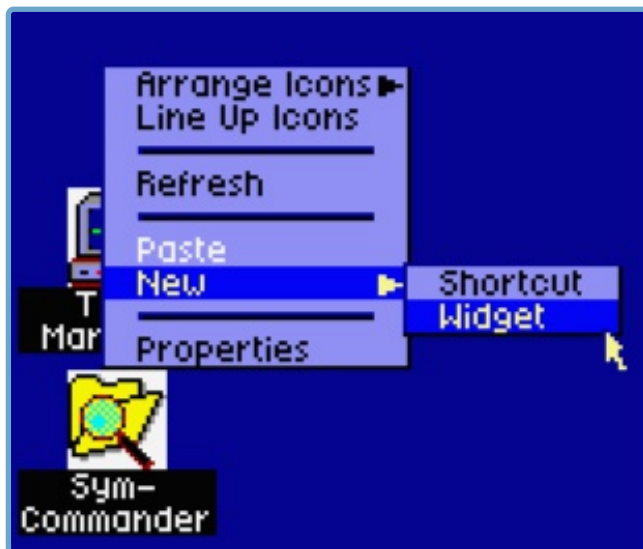


SymbOS will display the “Advanced” Start Menu editor. You can define shortcuts and submenus by using the ADD shortcut/submenu buttons. Use the << and >> buttons to browse to the Start Menu structure. Blue Items are “Read only” and cannot be changed. Shortcuts placed in the “Autostart” folder are programs that will be started automatically when SymbOS boots. For example you can use the Network Daemon to start automatically.



4.9 Using widgets in SymbOS 3.0

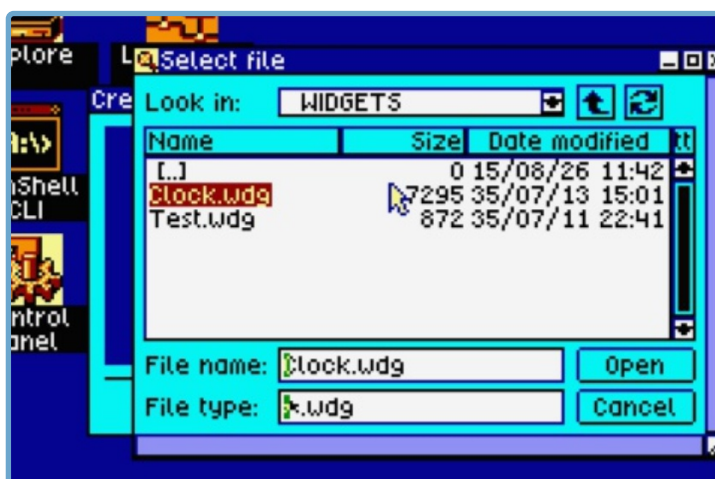
When SymbOS extentsions is active (see 3.3 how to activate SymbOS extentions) you can use widget applications in SymbOS. Widget applications are small programs that are embedded into the desktop's background. You can use max. 8 widgets.



Use 'Right Click' on a empty point on the desktop and choose NEW -> Widget



The create new Widget wizzard will start. Use the browse button to browse to the widget application that you want to start/load.

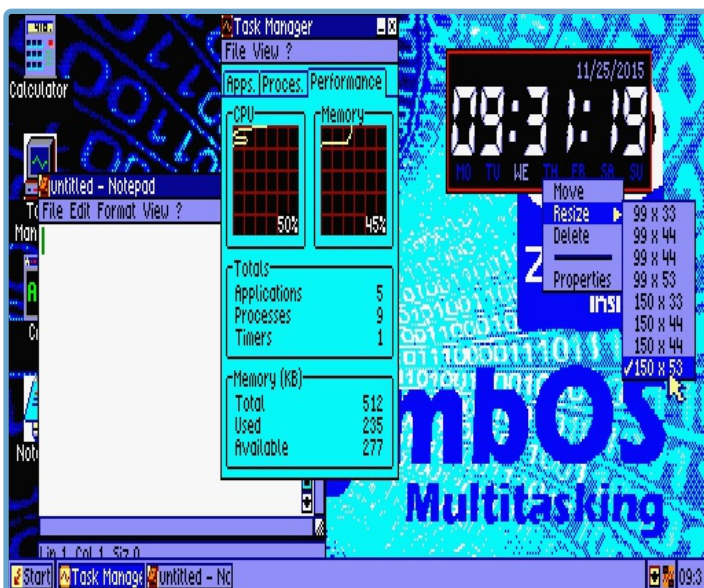


Select the Widget application. Widget applications can be find as WDG applications.

How to use SymbOS



Use 'Right Click' on the Widget, to delete, move, resize it.



Depending on which widget you load it can have different sizes and display options. You can move your widget where you want by using the mouse. Don't forget to save the settings using the start-menu.



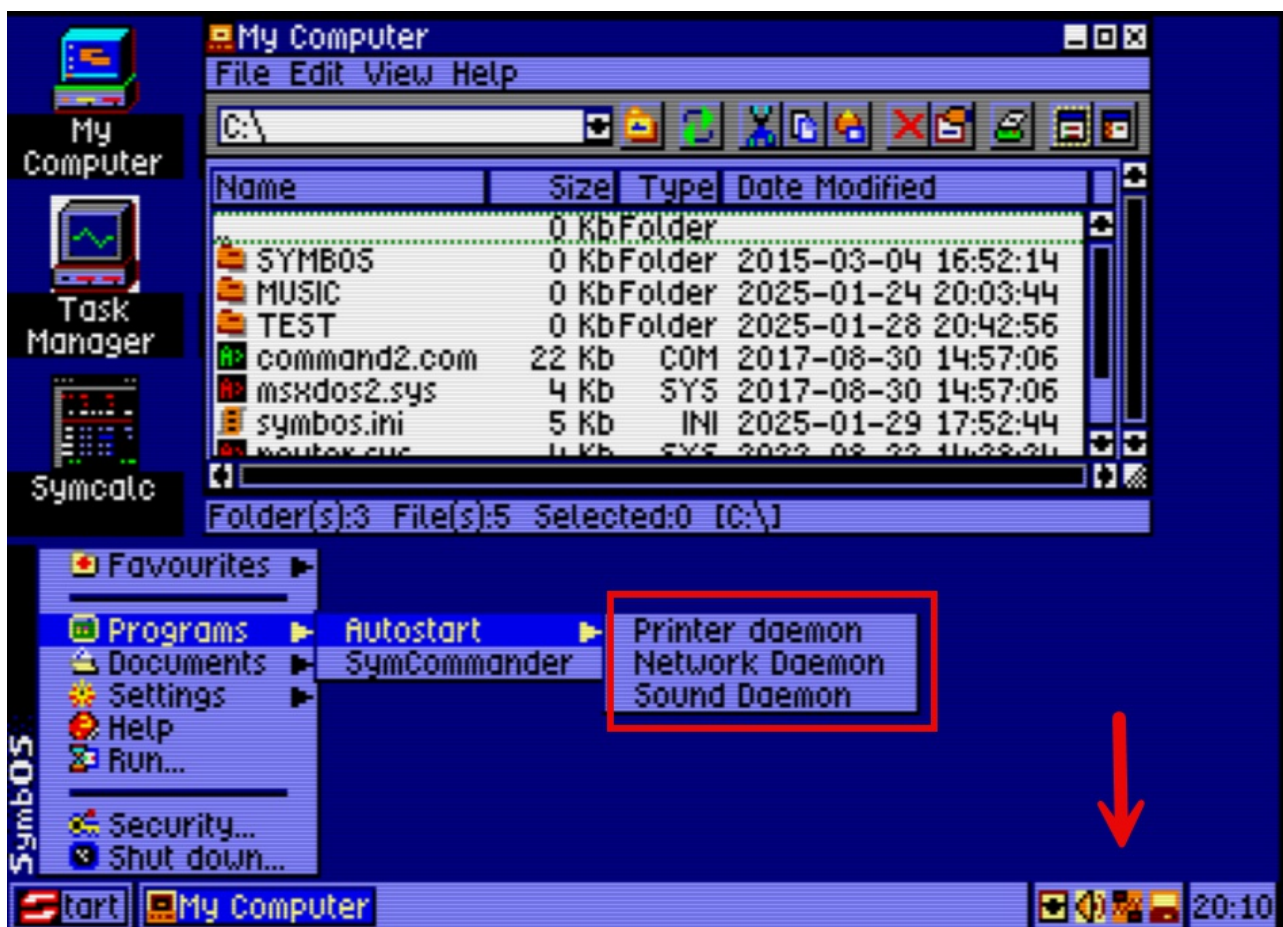
4.10 Using Daemons in SymbOS

In SymbOS, daemons are background services that provide essential functions for the operating system. Currently, there are three daemons in SymbOS: Network, Printer, and Sound. These daemons run in the background and need to be autostarted to function properly.

It's important to note that daemons consume memory, which can be a concern on an 8-bit machine with limited memory. SymbOS supports up to 1024 KB of memory, which is usually sufficient. However, if you have less memory, it might not be advisable to autostart all daemons. To autostart daemons, use the autostart feature in the start menu.

Daemons can usually be configured and minimized to a system tray icon. As long as they are active as a system tray icon, they will continue to run. If you want to exit a daemon, you need to close it from the application itself.

If you want to use programs that support network, printing or sound, always ensure that the respective daemons are running. Without the necessary daemons, these programs may encounter issues.



Systray ICON can be find next to the time in the taskbar. Click on a systay icon (right or left depening on the application) to see the action and change settings to your daemon. Sound devices, sound schemas and print devices can be changed this way. (See 4.8 how to save startmenu items)



With the introduction of the Sound Daemon in SymbOS 4.0, you can now enjoy enhanced sound capabilities for their applications. The Sound Daemon provides platform-independent sound services, allowing applications to load and play music and sound effect collections. Additionally, it plays GUI event-driven sound effects using a standardized set of system sounds. To adjust the volume for effects and music, follow these steps: Locate the Sound Icon: The sound icon is located in the system tray (systray) of SymbOS. Click on the sound icon to open the Sound Daemon interface. Adjust Volume Levels: In the Sound Daemon interface, you will find options to adjust the master volumes for both effects and music. Use the sliders or input fields to set the desired volume levels.



In SymbOS, you have the option to choose between two sound devices: the OPL4 (wave) and the PSG. The PSG is more efficient in terms of memory usage compared to the OPL4, making it a great choice for systems with limited memory. However, the OPL4 offers impressive, high-quality sounds that can greatly enhance your audio experience.

Some games or applications support both chips. By selecting your preferred sound device (PSG or OPL4) in the settings, you can inform programs of your preference. If a program or game only supports one type of sound chip, it will automatically switch to the supported chip.



In SymbOS, you can load a sound scheme or create your own for system sounds. It's up to you to decide what to use. You can choose to have sounds for every action in SymbOS or only for specific events. It's also possible to make your own sounds. For instructions on how to create your own sounds, visit the SymbOS website

How to use SymbOS (Sound)



In SymbOS, you can load sound files by selecting the SPX or SWX file for wave or PSG effects using the file dialog. This allows you to customize your sound experience by choosing the appropriate sound files for your system.

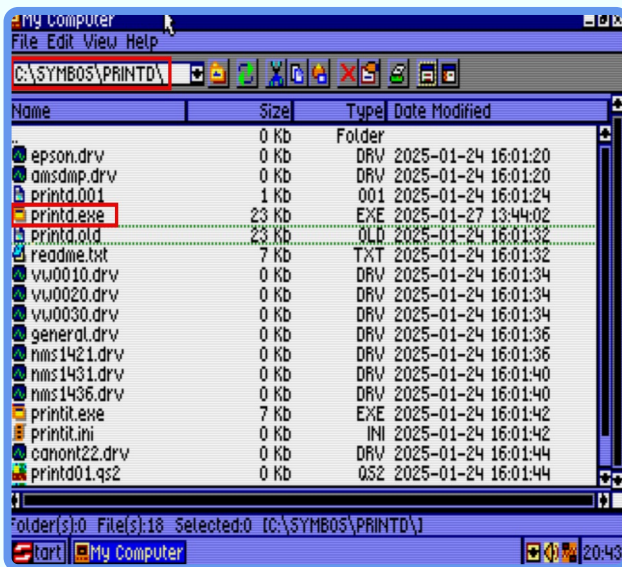


In SymbOS, there is also a tab where you can see the memory usage for sound support. The OPL4 has its own wave memory, and you can check how much is free. For the OPL4, only one app is allowed to play music at a time. If the first app is using the sound device, the next app cannot use it. Unfortunately, the OPL4 cannot load and play simultaneously, which is the reason for this limitation. SymAmp is fully supporting the sound Daemon now. Please be sure you download the latest version to avoid issues.



If you want to hide the sound daemon during startup please select the "Hide on Startup" option in the file menu and don't forget to save your settings.

How to use SymbOS (Printer)



Setting Up the Printer Daemon in SymbOS

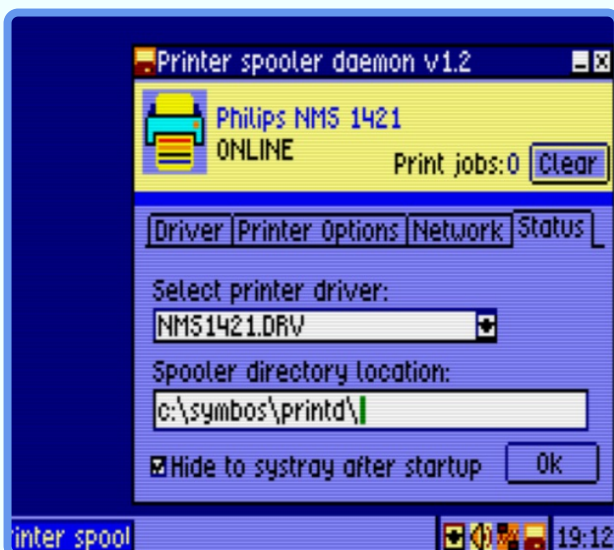
In SymbOS, you need to create a spooler path for the Printer Daemon. This path is always located in the system folder, which is recognized by the system. You should define this folder on every system. It must be named "printd"

Download the Printer Daemon package from the SymbOS website and place all files in this folder, for example, c:\symbos\printd\

Place the printd.exe in your autostart if you would like to start the daemon automatically if SymbOS starts.



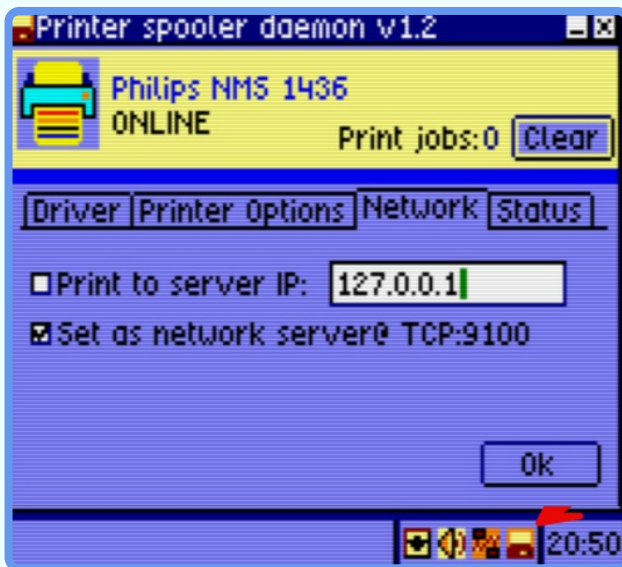
After starting the Printer Daemon, the settings will pop up. The first time, you need to select a printer driver from the driver tab. By default, no printer driver is selected. All drivers should be placed in the spooler directory. During startup, the daemon will check for new drivers. Make sure you select the correct driver and set the spooler location here as well. This location must be the same as the one defined earlier.



After selecting the printer driver, the printer will be shown as online if it is correctly installed. Make sure to restart the Printer Daemon to apply the changes.

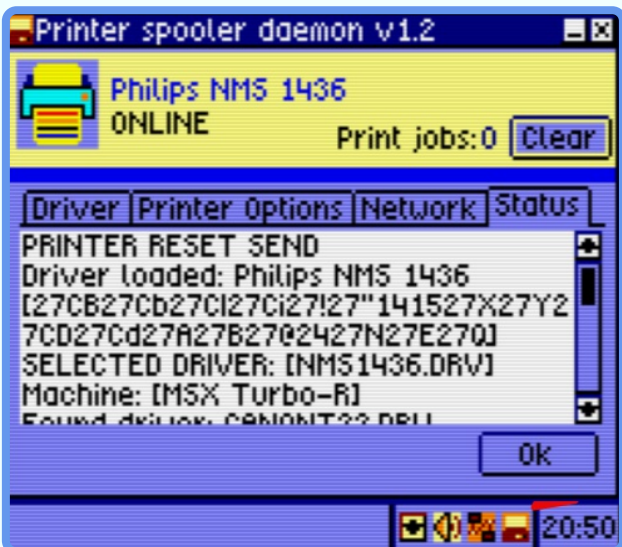
If you want to hide the daemon during startup please select the checkbox "Hide to systray after startup" By clicking OK your settings will be saved.

How to use SymbOS (Printer)

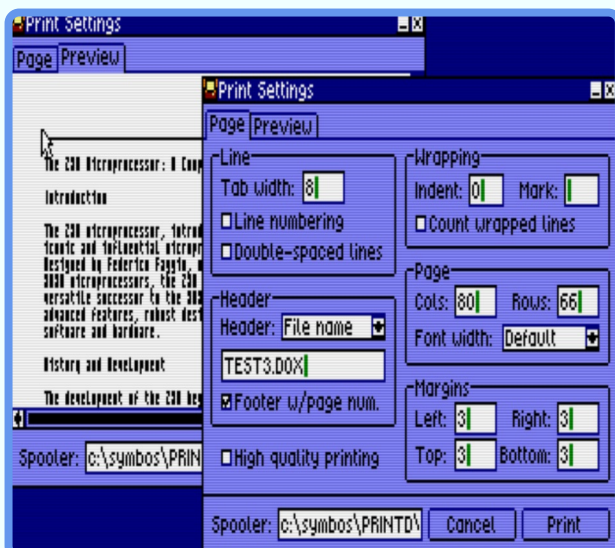


It is also possible to use the SymbOS workstation as a print server. If you want to use it as a print server, you need to configure the Network Daemon as well. Make sure the network is started before startup. For network configuration, see the network section.

In the Print Daemon, select the checkbox at the network tab and choose "Set as Network Server." This will allow other SymbOS workstations on the network to print to the print server. It is still possible to print local jobs on the print server while the network is active. On the client, install the Print Daemon the same way. However, on the client, you don't need to specify a driver. You only need to set the spooler location and configure it as a network client printer.

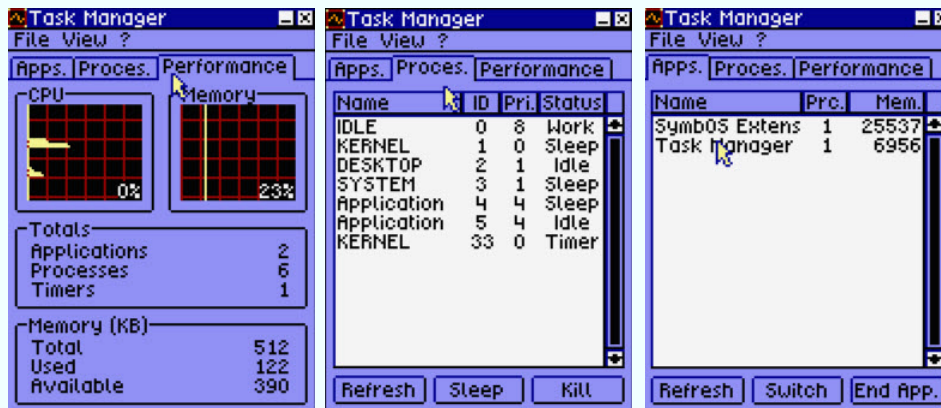


The status of the daemon and log is shown in the status tab. Please note that during a print job, the Print Daemon can be a bit unresponsive as it takes CPU time to complete the print job.



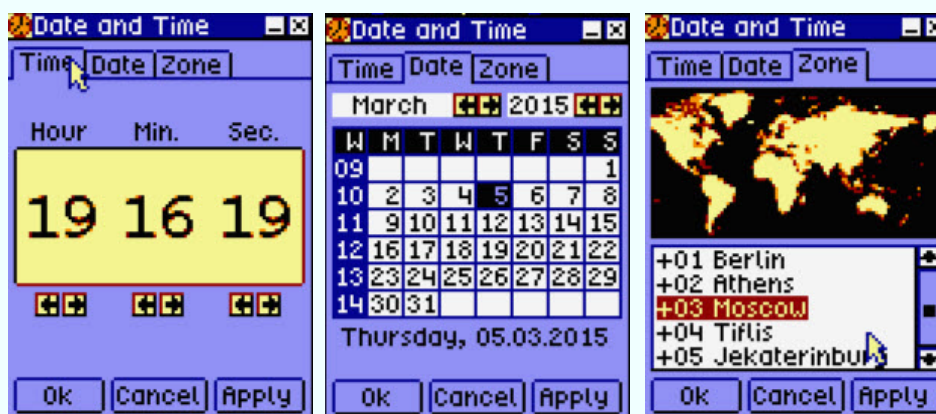
There is a tool available called PrintIt, which allows you to print standard text-based print jobs. PrintIt can reorganize your print layout, perform word wrapping, and let you set various settings like page layouts. Additionally, it provides a preview of your print job, so you can see how it will look before printing.

Task Manager [TASKMGR.EXE]



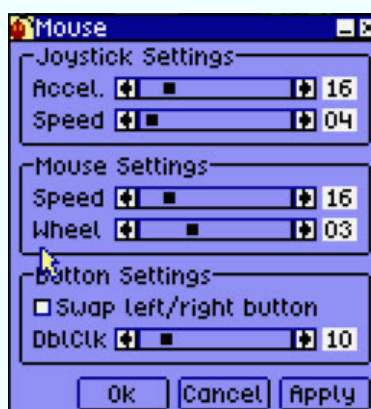
With the task manager you can have a view about the utilization of the system, memory uses and process and applications. There is also the possibility to start are stop applications or processes.

Control Panel (Date and Time) [CPTIME.EXE]



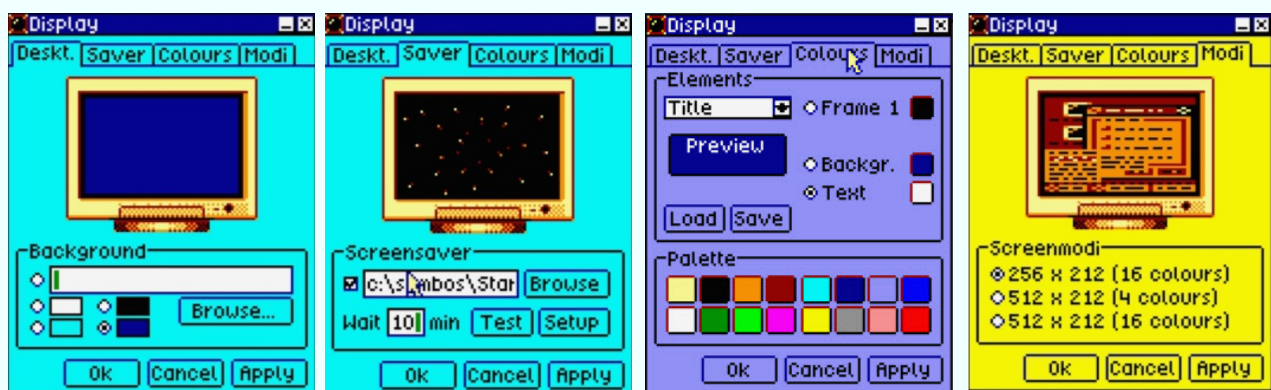
You can setup the date and time in the control panel or by clicking on the time bottom right in the taskbar.

Control Panel (Mouse settings) [CPEX.EXE]



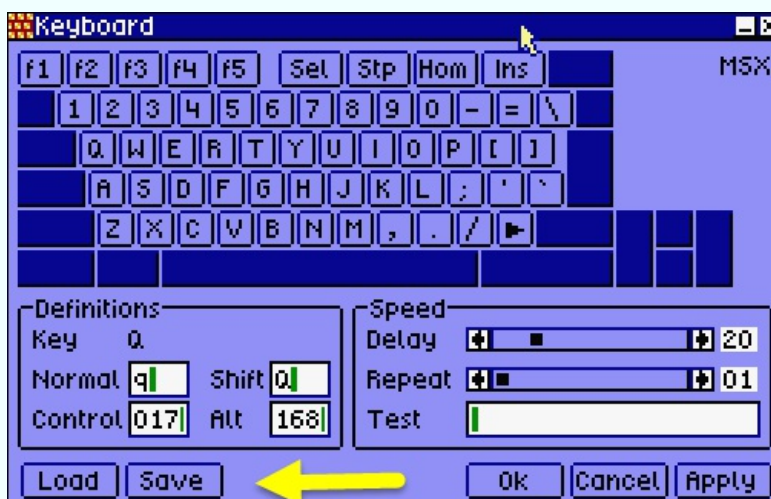
In the control panel you can change the mouse and joystick speed settings. Press OK and then [SAVE] SymbOS settings in the control panel or start menu.

Control Panel (Display Settings) [CPDISPLY.EXE]



In the display section you can change the background, screensave, content colors and resolution. Depending on your hardware different colors and resolutions are possible. See supported SymbOS resolutions. Press OK and then [SAVE] SymbOS settings in the control panel or start menu.

Control Panel (Keyboard settings) [CPEXE]



In the keyboard section you can map keys to characters. Each system comes with different layouts. Press OK and then [SAVE] SymbOS settings in the control panel or start menu to apply the settings. You can also load and save keyboards. There are already some standard layouts which you can load.

Control Panel (Font settings) [CPEXE]

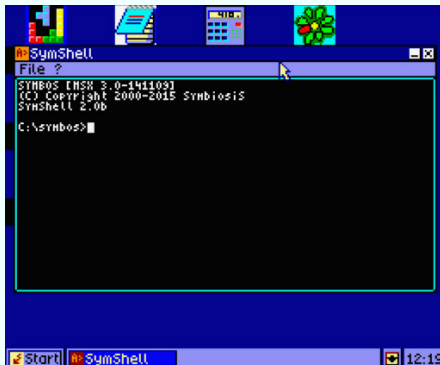


In the control panel you can change the font. There are several font available for SymbOS. Load you font by browsing to the font file and click [LOAD] Press OK and then [SAVE] SymbOS settings in the control panel or Start Menu.

6.0 SymbOS Shell



SymbOS SHELL [CMD.EXE]



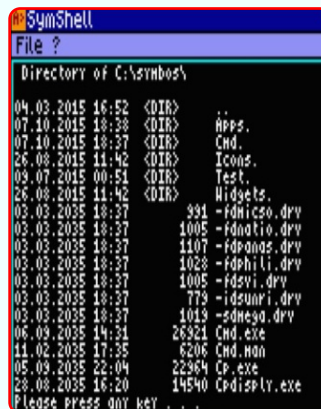
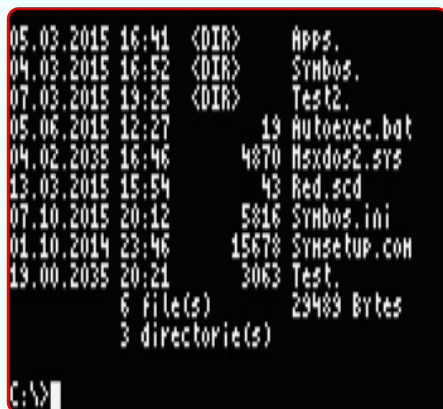
```
SYMBOS [MSX 3.0-1411091]
(C) Copyright 2000-2015 SymbiosiS
SymShell 2.0b

C:\symbos>full

C:\symbos>
```

SYMSHELL is a DOS based commandline shell. Which can be run in a window or full screen. Type [FULL] + [ENTER] to switch between fullscreen or window mode (or GRAPH+ENTER on MSX) [TAB] to autofill [HELP] to display help [HELP COMMAND] to display help about a command or [COMMAND %?] to display help about a command

SymbOS SHELL [CMD.EXE] (Browsing files and directories)



[DIR]	display files
[DIR %h]	display hidden files
[DIR %s]	display system files
[DIR %f]	calculate free disk space
[DIR %p]	pause
[DIR *.exe]	wildcards filters
[DIR fi*.ex*]	wildcards filters
[CD]	display directory
[CD \]	browse to root
directory	
[CD ..]	go one directory back
[CD folder]	browse to folder
[CLS]	clear screen

SymbOS SHELL [CMD.EXE] (deleting files and directories, Add directory)



[DEL filename.ext]	delete file
[DEL *.ext]	delete with filter
[DEL fil*.ex*]	delete with filter
[rmdir directory]	delete empty directory
[mkdir directory]	make new directory

SymbOS SHELL [CMD.EXE] (date and time)

```
20.11.2034 21:51 3938 SYMVER.exe
25.08.2035 13:48 7622 TASKMGR.exe
29 File(s) 356571 Bytes
6 directorie(s)

C:\symbos>DATE
Current date is Wed 2015-10-14
Enter new date (YY-MM-dd):
```

[DATE]

display or set date

```
20.11.2034 21:51 3938 SYMVER.exe
25.08.2035 13:48 7622 TASKMGR.exe
29 File(s) 356571 Bytes
6 directorie(s)

C:\symbos>TIME
Current time is 18:10:22
Enter new time:
```

[TIME]

display or set time



(Date and time can also be changed by double click on the time in the taskbar)

SymbOS SHELL [CMD.EXE] (Rename, attrib)

```
20.11.2034 21:51 3938 SYMVER.exe
25.08.2035 13:48 7622 TASKMGR.exe
29 File(s) 356571 Bytes
6 directorie(s)

C:\symbos>REN *.EXE *.BCH
```

[REN filename newname]

Rename files or directories

[REN *.TXT *.BAK]

rename files with wildcards

```
20.11.2034 21:51 3938 SYMVER.exe
25.08.2035 13:48 7622 TASKMGR.exe
29 File(s) 356571 Bytes
6 directorie(s)

C:\symbos>ATTRIB FILENAME Z-r Z+h
```

[ATTRIB] filename (Display current settings)

[ATTRIB] filename %R, %+R, %-H, %+H, %-S, %+S

Add[%+] or Remove [%-] file attributes

H = Hidden

S = System

R = Read only

SymbOS SHELL [CMD.EXE] (copy, move files)

```
20.11.2034 21:51 3938 SYMVER.exe
25.08.2035 13:48 7622 TASKMGR.exe
29 File(s) 356571 Bytes
6 directorie(s)

C:\symbos>COPY C:\TEST\*.EXE C:\TEST2\
```

[COPY source destination]

copy files

[COPY source.* destination.*]

copy files using wildcards

```
20.11.2034 21:51 3938 SYMVER.exe
25.08.2035 13:48 7622 TASKMGR.exe
29 File(s) 356571 Bytes
6 directorie(s)

C:\symbos>MOVE C:\TEST\*.EXE C:\TEST2\
```

[MOVE source destination]

move files

[MOVE source.* destination.*]

move files using wildcards

SymbOS SHELL [UNZIP.COM (Extract ZIP or GZ files)]



```

C:\symbos>cd cmd
C:\symbos\cmd>unzip
UNZIP 1.0 for SymbOS (c)oded 2015 by Prodatron / Symbiosis
Based on ideas & code by Grauw and Mouter
Missing parameter(s)
At least a command and the archive has to be specified.
Please type UNZIP H for help
C:\symbos\cmd>

```

With UNZIP.COM you can extract ZIP or GZ files with SymbOS.

TYPE: UNZIP H to display the commandline options and switches.

UNZIP e ZIPNAME will extract the ZIPPED archive.

```

<Commands>
e Extract <files> from <archive> (without using director
y names)
l List <files> of <archive>
t Test integrity of <files> in <archive>
x Extract <files> from <archive> with full paths
i display detailed <files> information
h show Help
<Switches>
%o:<file>
Concatenate output(s) to <file>
%f Fast mode (no CRC check)
%o Overwrite existing files
%z Short list (file names only)
%t adopt Timestamps

An archive can be a Gzip (*.GZ) or a Zip (e.g. *.ZIP) file.
C:\symbos\cmd>

```

```

C:\symbos\cmd>UNZIP e BACK.ZIP
C:\symbos\cmd>
UNZIP 1.0 for SymbOS (c)oded 2015 by Prodatron / Symbiosis
Based on ideas & code by Grauw and Mouter

Processing archive: BACK.ZIP

Extracting Z80.SGX [53K, OK]
Extracting SYMBOS.SGX [53K, OK]
Extracting WINBACK1.SGX [53K, OK]

Extracted: 3 (Size: 162912, Compressed: 42373)
Skipped: 0
Corrupt: 0

C:\symbos\cmd>

```

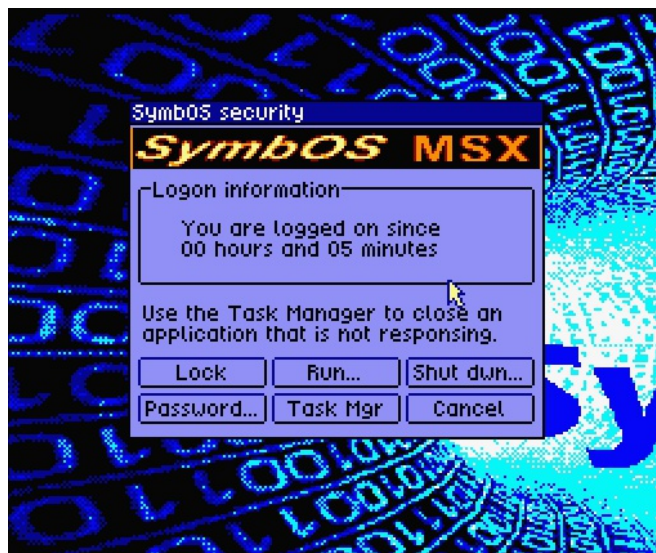
Security "Lock your screen"



SymbOS user desktop may be locked for security reasons by manually choosing to lock the computer. Once the computer screen lock is invoked, access to the computer will only be allowed to the SymbOS user whose account is currently an authorized administrator. To lock your screen do the following:



Open the start menu and choose "security". This feature can only be used if the extended desktop is loaded.



If this is the first time, or if you want to change your password, choose the password option in the lock screen.



For the SYMBOS (administrator user) choose a new password. By default the password is blank.



To unlock your SymbOS workstation, enter your password. If you forgot your password consult the system administrator ;)

7.0 Enable Network support



When you're ready to go beyond the home- computer on your desk, use this chapter to learn the basics of working on a network. You will learn how to set up your home- computer to use a network, and how you and your co-workers can share bits on the network using SymbOS. A network is a group of computers connected to each other or to a central server so they can share resources.

There are two major steps in setting up a network: setting up your hardware and setting up your software. Before setting up the software, be sure your network hardware is correctly installed. This includes the network adapter and cables.

TCP/IP is one of the most common networking protocols in use and is required for telnet, ftp, web access, and a number of other networked operations.



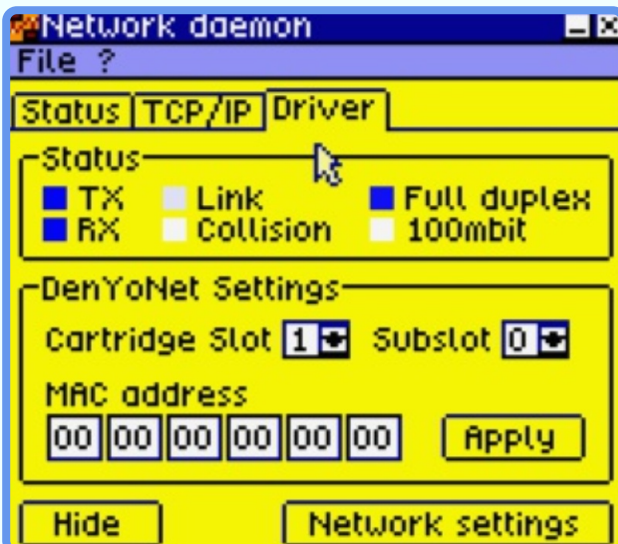


If you want to setup networking in SymbOS be sure your home- computer is running SymbOS network daemon.

Start the network daemon (netd-dyo.exe) if it is not started automatically during SymbOS startup. Please check the status of your network.

This could be for example:

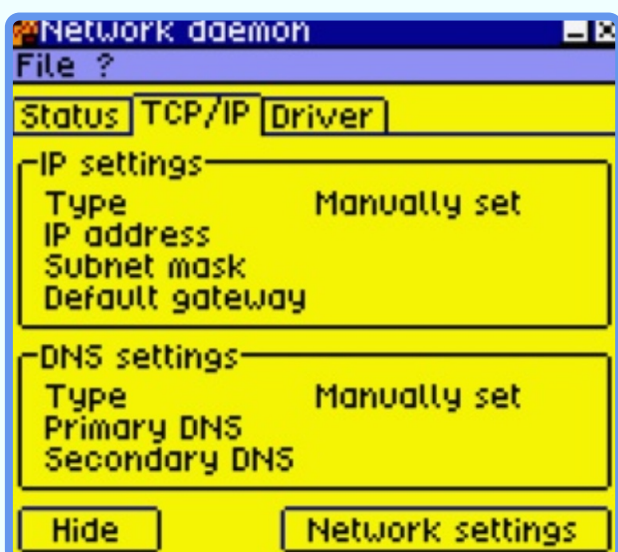
- Not detected
- No device
- No IP Setup
- Connected



If the status is 'No Device' go to the driver tab and set the correct settings for your device. Depending on which hardware is installed choose the correct settings for your network hardware.

When using a MSX model select the correct SLOT number where your network adapter is plugged in. If you are using a slot expander you have to define the SUBSLOT as well. After selecting the correct SLOT/SUBSLOT press the Apply button. The network daemon will try to communicate with the hardware.

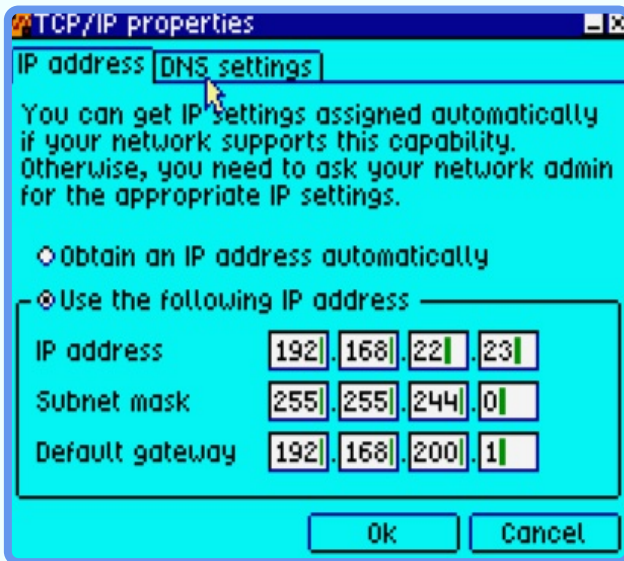
When successfully the MAC address is obtained from the ROM (when defined in the ROM). The status of the network daemon will change afterwards in the Status TAB.



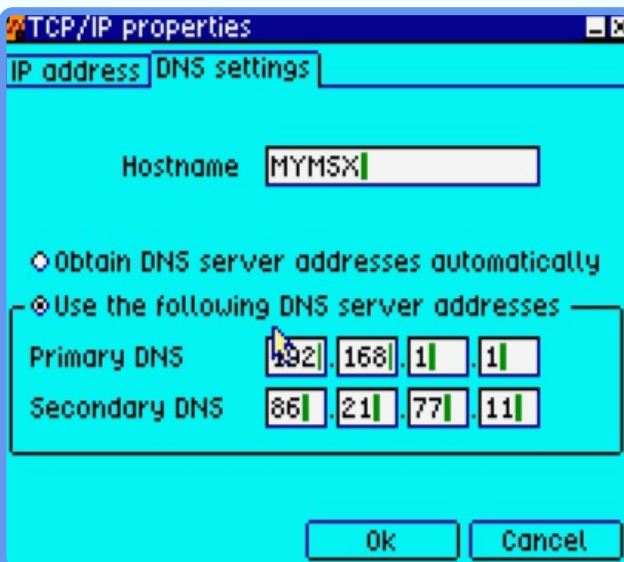
If the IP number is not correctly setup go to the TCP/IP tab and define a IP number using the Network settings button.



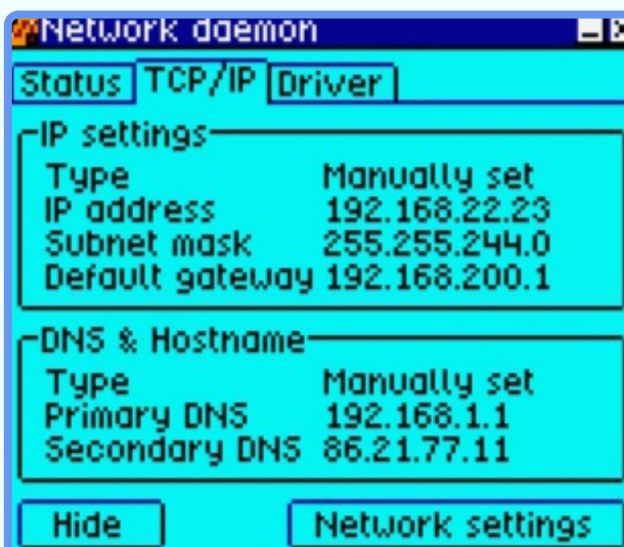
Use the HIDE button to hide the network daemon to the network icon in the taskbar. To open it again click the icon.



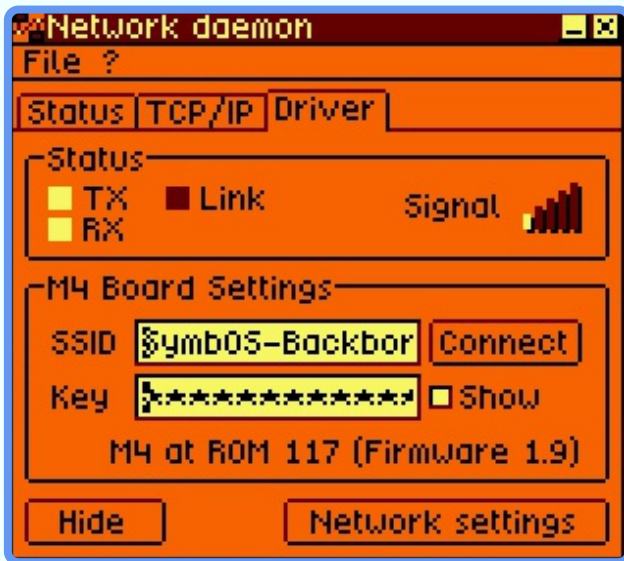
There are 2 options to setup an IP address. You can get IP settings assigned automatically if your network supports DHCP capability or you need to define a static IP. You need to ask your network administrator for the appropriate IP settings. Beware that you need a default gateway if you want to connect to systems outside your own network (also called subnet broadcast domain)



A DNS (Dynamic Name Server) is needed to translate hostnames to IP addresses. You can choose to obtain a DNS server addresses automatically or to use a static DNS server. Most of the time the DNS server is the same IP as your gateway. You need to ask your network administrator for the appropriate IP settings if you are not sure. You can define a max of 2 domain name servers.



If the IP number is correctly it will be displayed in the TCP/IP tab. If everything is correct you are connected to your local network or to the internet. with your Z80 home computer! If you not have a network hardware device and you want to play around with networking in SymbOS you could load a localhost driver. This localhost driver allows communication with applications using the network daemon. With the localhost driver loaded you can only connect/communicate to application that are loaded on your local machine.



When using a Wifi adapter you have to provide the SSID of your network and the password of your security mode. SymbOS shows you the signal strenght of your connection. Be sure you are using the last Firmware provide for the M4



If your Wifi is connected you get an Online in the status.



8.0 Use Network applications



After successfully enabled the network daemon in SymbOS you are able to use the TCP network applications with your home- computer like SYMTEL (telnet) or play a network game like Battle Ship. SymbOS can handle multiple connections (up to 4). Unify, (SymbOS IDE development Studio for Microsoft Windows), which is developed by Trebmint, supports network as well. Now everyone can make network applications/games with less knowledge about networking using Unify.



* Network daemon running on a MSX machine. (On real hardware as there is currently no network support for emulators.) There are 3 connections open. (3 telnet connections). SymbOS makes full advantage of multitasking in this case. With netstat.com you can see the open TCP connections.

```

SymbShell
File ?

A:\>netstat

Active Connections

Proto Local Address          Foreign Address         State
TCP   localhost:49152         59.83.32.182:23         ESTABLISHED
TCP   localhost:49153         142.34.111.241:23       ESTABLISHED
TCP   localhost:49155         13.64.230.139:23       ESTABLISHED

A:\>
    
```

Type NETSTAT.COM in symbshell to see the active network connections and status.

```

SymbShell
File ?

SYNShell 2.0beta
C:\symbos>cd cmd
C:\symbos\cmd>telnet

SYNTEL 1.0 TELNET FOR SYMBOS
Written in 2007,2015 by Prodatron (c)Symbiosis
Type SYNTEL Zh for command line parameter help

Current settings:
(P)ort : 23 (E)cho : off
(T)erminal : ANSI (L)ogfile : off
Line(F)eed : CR+LF

Please enter host IP or domain (CTRL+C quits at any time)
or press RETURN to change current settings
SYNTEL>bbs.hispamsx.org
    
```

With TELNET.COM (telnet client) you can connect to every telnet server you want. Type [telnet domain name or IP] to connect directly to the destination.

By default TCP port 23 is used. If you start SYMTEL without a domain name or IP you go to the SYMTEL console. In the SYMTEL console you can change settings like port number, echo settings, terminal type etc. by pressing the config key and Enter.

If you want to connect to a host just type the IP or DNS name and press enter to connect. Be aware that the network daemon must run in the background.

```

Synchronet BBS for Linux Version 3.16 Copyright 2014 Rob Swindell

CLIENT CONN: Telnet
ADDR: p19f5f526.dip0.t-ipconnect.de [217.245.245.38]
SERVER NAME: Hispamsx BBS
ADDR: bbs.hispamsx.org
NODE: 1 (of 4)
TIME: Sun Mar 29 2015 14:23:07 UTC+1:00
ADMIN: Karloch

If you are a new user to the system, type "New" now.
Otherwise, enter your user name or number now.

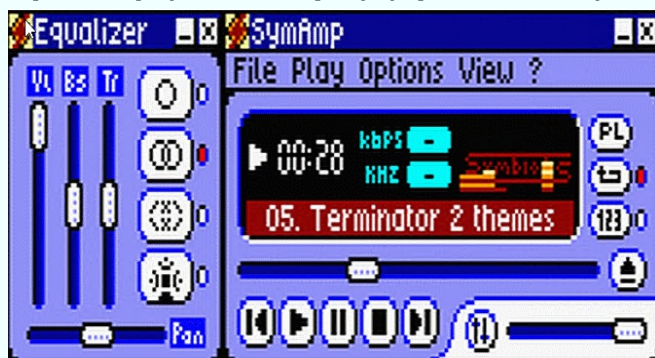
Enter User Name or Number or 'New' or 'Guest'
Login: New
Starting the new user registration process...
[Q] Use automatic terminal type detection? No
[Q] Does your terminal support ANSI? No
[Q] Does your terminal support IBM extended ASCII? No
[Q] Enter your full name or alias: Prodatron
[Q] Enter your full real name: Jo
    
```

To disconnect press CTRL-C or logoff in the remote system. Press CTRL-C also if you want to exit SYMTEL.

If you want to toggle between full screen mode and windowed mode press GRAP+ENTER. In full screen mode the performance is higher than in a windowed screen.

In this example we connect to bbs.hispamsx.org (telnet server) which is 24 hours online!

SymAmp (Music Player) (By Prodatron)



SymAmp is a multi-module multi-platform multi-hardware music jukebox-style player for SymbOS. It currently supports PSG-, wavetable- and stream-based audio hardware on all supported SymbOS platforms for playing compiled Starkos modules (SKM, this is the compiled version), Soundtrakker 128 modules (ST2, this also is the compiled version of *.128 files), PT3 modules (ZX Spectrum Protracker/6channel Vortex Tracker), MP3 files, Amiga MOD soundmodules and Surprise! Adlib Tracker 2 modules. Beside the internal PSG of the CPC and MSX machines it supports the Dave soundchip of the Enterprise 64/128, the CPC Playcity expansion, the MSX Darky cartridge, the Dk'tronics AY soundcard for the PCW, any MP3MSX compatible MP3 decoder on any platform, all Moonsound-compatible MSX OPL4 sound devices and the OPL3LPT device connected via the CPC Willy adapter. SymAmp provides a playlist with a full featured editor. Songs can also be played in random order. When the end of a song has been reached, the next one will be loaded and played automaticall

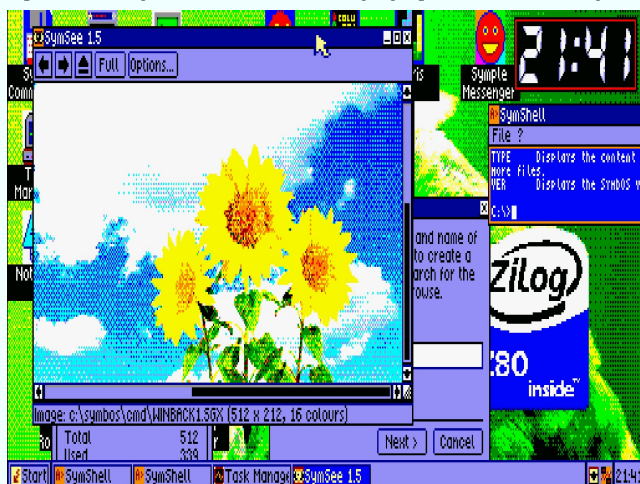
SymPlay (Video Player) (By Prodatron)



SymPlay is the first and only CPC application, which allows you to play videos from your hard disc or compact flash card. It supports any kind of resolution and data rate (frames per second). As it is completely independed from the hardware, it behaves on a 12MHz TREX like on an original 4MHz CPC - just with different playback quality. You can download "VID" video files playable with SymPlay and live videos, showing SymPlay in action, in the download area on www.symbos.de

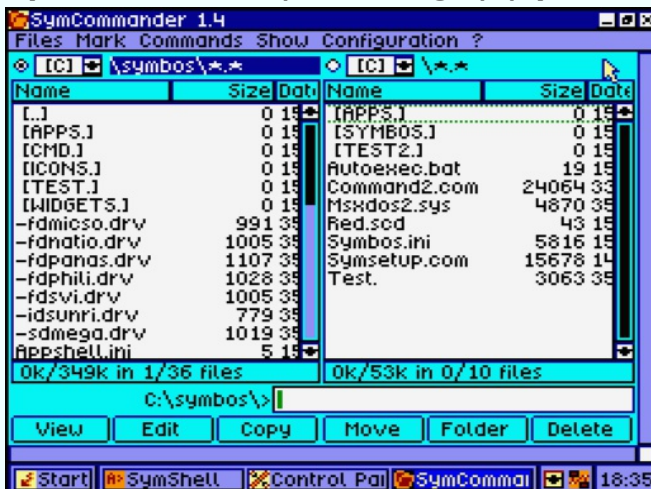
To produce your own SymPlay videos, please download SymStudio, which is the Windows XP tool for creating applications and videos for SymbOS.

SymSee (Picture viewer) (By Prodatron)



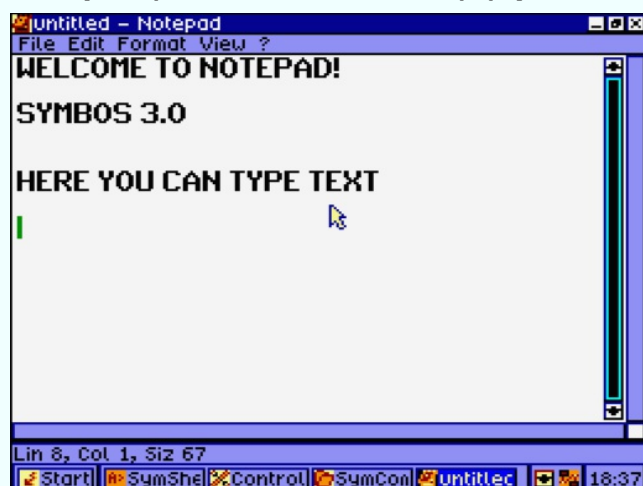
SymSee is a picture viewer for SymbOS, which allows you to watch your complete image library in a very comfortable way. You can step through your gallery with one mouse or keyboard click for each picture. Pictures can be viewed in window or (more or less) fullscreen mode. Raw 16K CPC files, OCP Art Studio (compressed or uncompressed) screens and SymbOS SGX files of any resolutions in 4 or 16 colours are supported. SymSee supports a slide show feature, where the pictures will change automatically after a special time. Even a random order is possible. 320x200 (CPC) and 512x212 (MSX) standard SymbOS SGX files can be used as desktop pictures directly from SymSee.

SymCommander (File Manager) (By Prodatron)



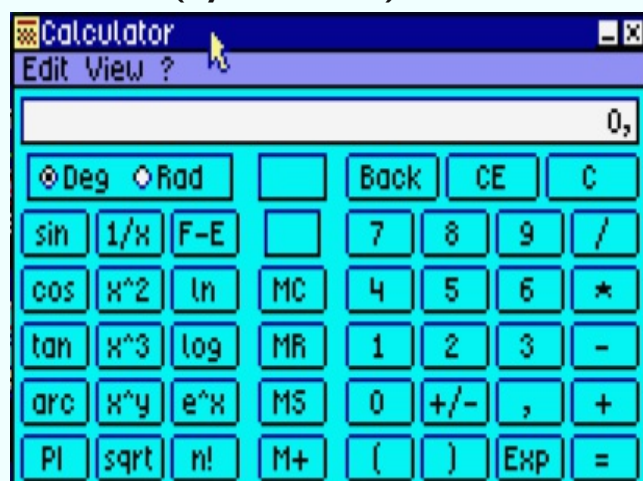
SymCommander is designed like the windows clone of the good old Norton Commander. Because of its huge keyboard support it's a very comfortable and fast to use tool for managing your files on floppy and hard disc. With the function keys or a mouse click on the buttons or menu entries you can reach all important file management features.

Notepad (Multiline text editor) (By Prodatron)



Notepad is a multiline textinput control. It is the most complex control of the desktop manager has the functionality of a small text editor and is an exact copy of modern textedit-boxes. It supports features like auto-word-wrapping, support of any proportional fonts and colours, unlimited line length, text marking, copy & paste etc.

Calculator (By Prodatron)



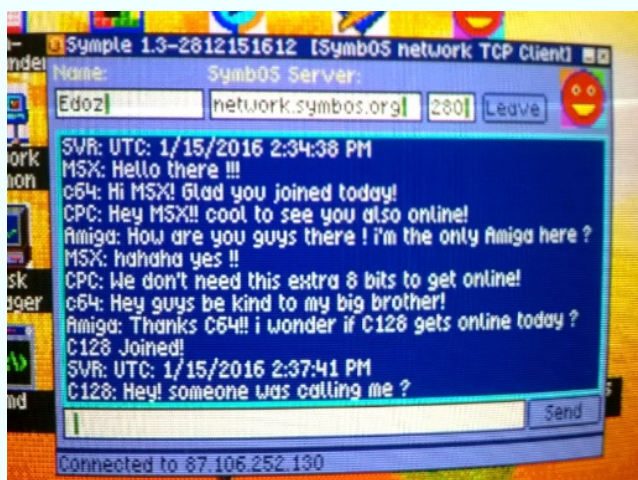
The pocket calculator was the first application available for SymbOS and has been rewritten after two years.

SymZilla (Web/DOX browser) (By Prodatron)



SymZilla is a simple web- browser that supports DOX files. DOX files are compiled documents that can contain text and images. SymZilla is still in beta and networks support / pure HTML are not supported at this time.

Symple (Network Chat Client) (By EdoZ)



Symple web chat client for SymbOS. Symple needs a network connection and the network daemon to run.

SymbOS chat server is hosted on: network.symbos.org on port 280

There is also a Windows, SymbOS chat client for modern computers.

Battleship (SymbOS first NETWORK game) (By EdoZ)



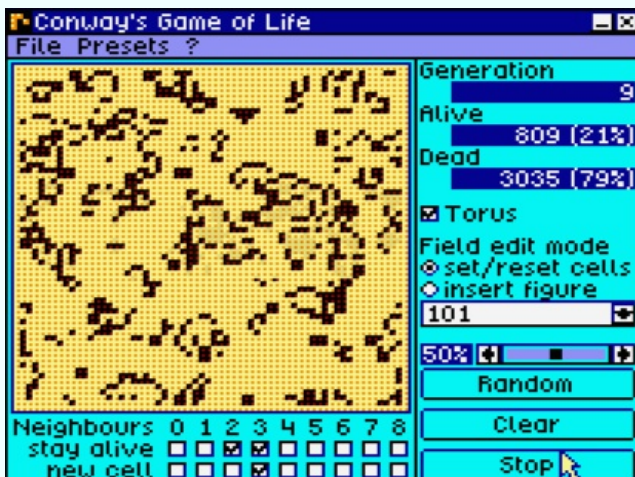
The BattleShip game, which is the first network game for SymbOS, and probably the first ethernet-based network game for the MSX/CPC/Enterprise as well. It contains network-realtime-elements and an in-game chat! You need the network daemon as well.

MineSweeper (By Prodatron)



This MineSweeper clone is nearly 100% identical to its windows pendant. The size of the mine field is freely adjustable. Two field sizes are predefined, the "beginner" and the "advanced" game mode.

Conway's Game of Life (By Prodatron)



This application was mainly developed to demonstrate the multi threading ability in the multitasking environment of SymbOS. It also contains a library with hundrets of objects and supports all combinations of alternative cell rules.

The cool part is that this "game" runs on a lower priority thread. That means it takes 100% of the CPU without slowing down other applications with a higher or normal priority. This was a huge step in the SymbOS multitasking enviornment.

Pacman (By Prodatron)



Pac-Man for SymbOS is a complete clone of the original from 1980. It uses 16 colour sprites, which will be downrendered automatically on the CPC. The game supports keyboard and joystick control, multilevel and different speeds.

Tetris By (Edoz and Trebmint)



Simple version of Tetris. This game was developed with Unify.

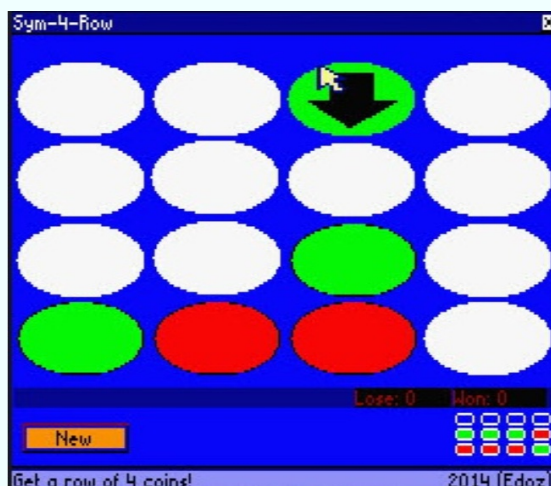
Tetris is the first game that have a scalable mode. This means it will choose the best 1:1 size in different resolutions, in a window or in fullscreen.

Sega Columns remake by (Edoz and Trebmint)



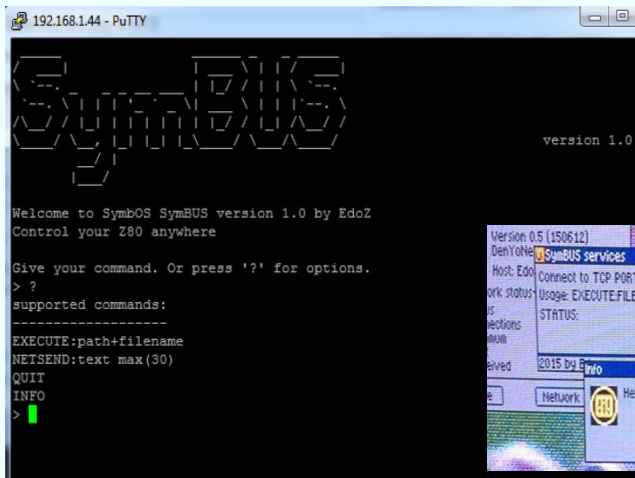
Simple version of Columns. This game was developed with Unify. The original was created by SEGA. This clone is not perfect but it shows what can be done with Unify.

4 on a row (By Edoz)

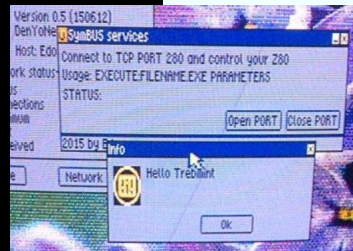


The first official released SymStudio/Unify application that has been developed. It is the well known game "4-in-a-row". It is a very simple version as this was the first game test game application written in SymStudio. You can use the right mouse button to drop the coins.

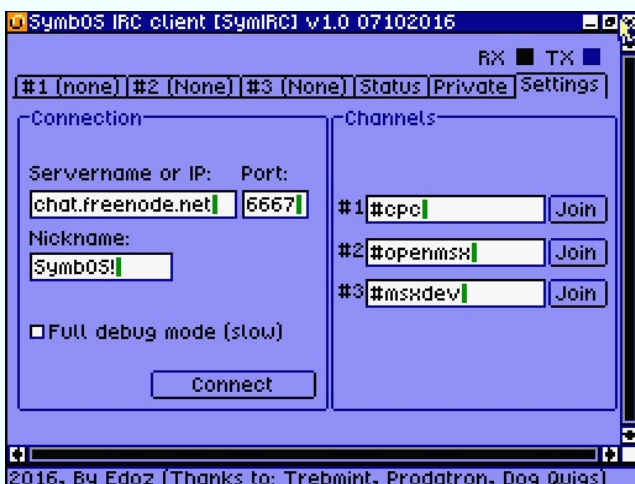
SymBUS (By Edoz)



SymBUS can be used to remote control your z80 system. You have to start it on your SymbOS workstation and enable the remote port. After that you can use putty or telnet to connect to the port and do some remote tasks.

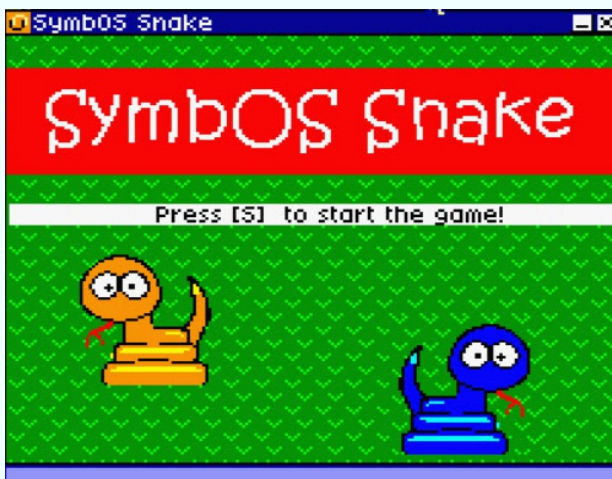


SymIRC (By Edoz)



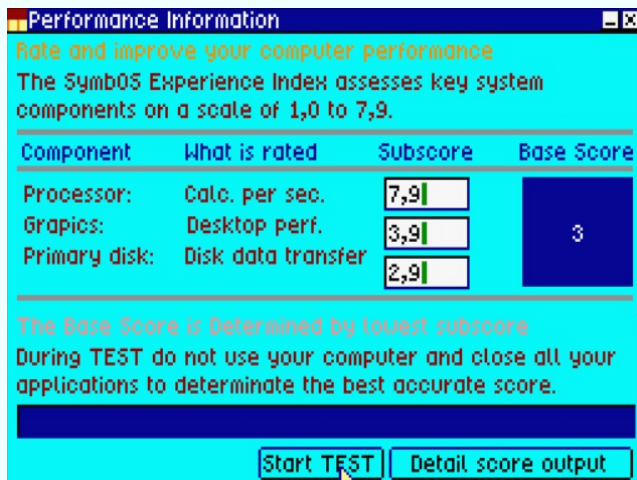
SymIRC is a IRC client which can be used against a IRC server. The login of the server could take some time. This because the server is sending sometimes a lot of information which had to be processed by the client.

Snake Multiplayer (By Edoz)



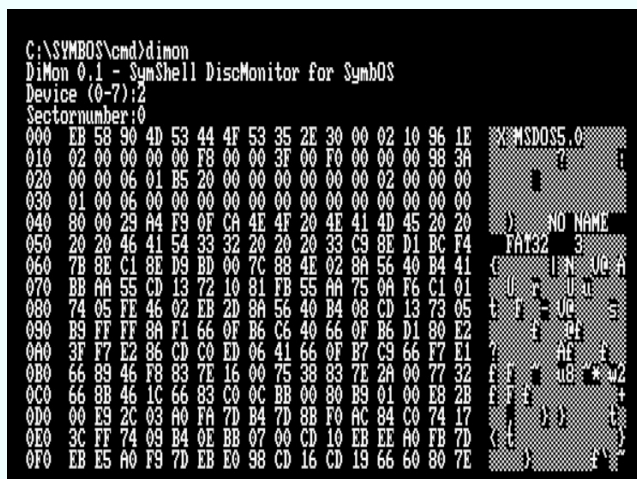
Snake is a multiplayer network game but can be played in single player mode as well. This network is a realtime network game and could be a bit slow on slow systems. If you have a faster z80 it is recommended

Perfmon (by Edoz)



Perfmon can be used to compare your performance against other z80 machines.

Dimon (by Prodatron)



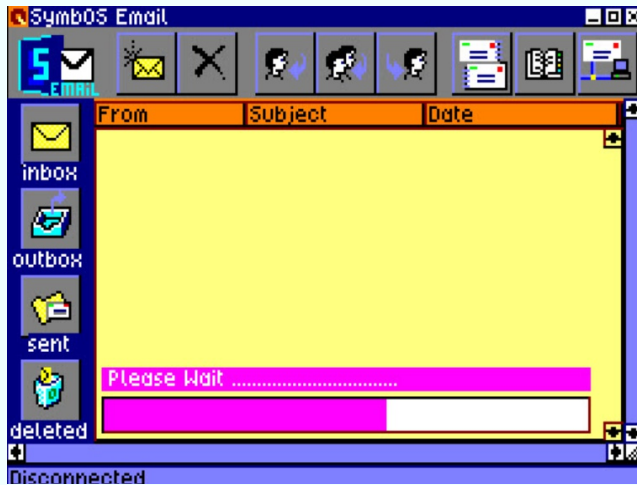
Commandline disc monitor to view the disks in Hexidecimal output.

WGET.COM (By Prodatron)



Commandline wget.com application to download files over HTTP protocol, using network daemon.

SymbOS Email (By Edoz)



This full functionally EMail client for SymbOS makes it possible to send and receive emails around the whole world, including attachments. Features like address book and more are available.

DAB+ Radio (By Edoz)



Listen to DAB+ Radio in SymbOS
For more information about hardware see:

<http://www.tmtlogic.com>

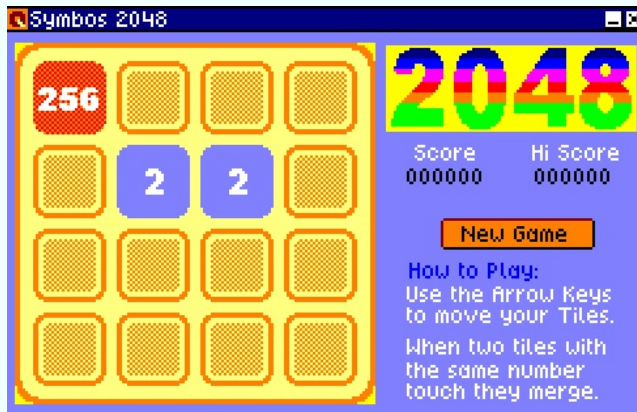
FM Radio (By Edoz)



Listen to FM Radio in SymbOS
For more information about hardware see:

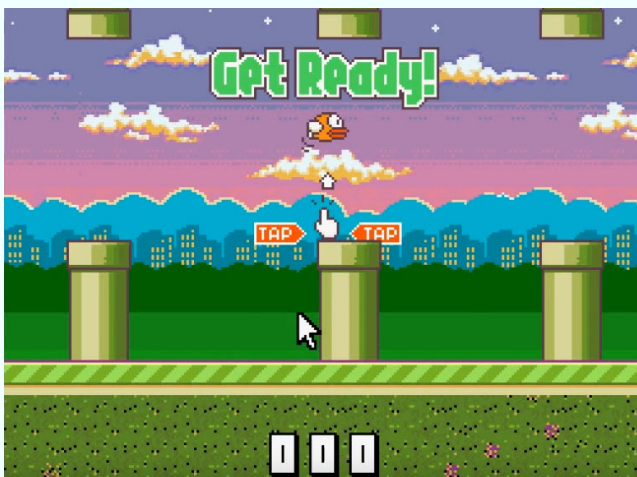
<http://www.tmtlogic.com>

SymbOS 2048 (By Trebmint)



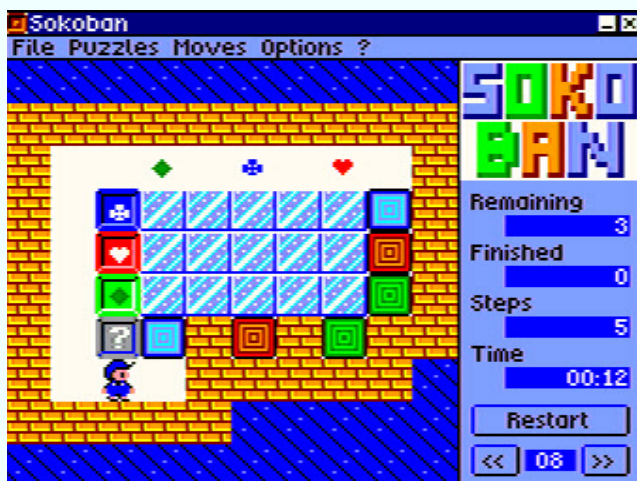
2048 is a sliding tile puzzle game. It is played on a plain 4x4 grid, with numbered tiles that slide when a player moves them using the four arrow keys. Every turn, a new tile randomly appears in an empty spot on the board with a value of either 2 or 4. Tiles slide as far as possible in the chosen direction until they are stopped by either another tile or the edge of the grid. If two tiles of the same number collide while moving, they will merge into a tile with the total value of the two tiles that collided. The goal is to add as much tiles as possible and reach a very high number

Flappy Bird (By Trebmint and Edoz)



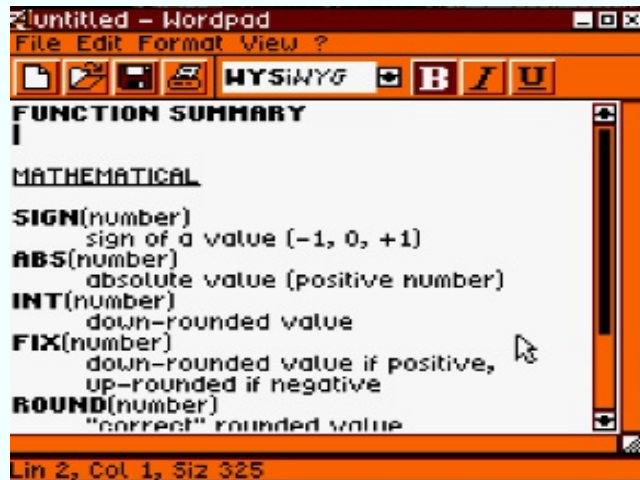
First fullscreen pattern (example) mode game for SymbOS Flappy Bird is a side-scroller where the player controls a bird, attempting to fly between columns of green pipes without hitting them.

Sokoban (By Prodatron)



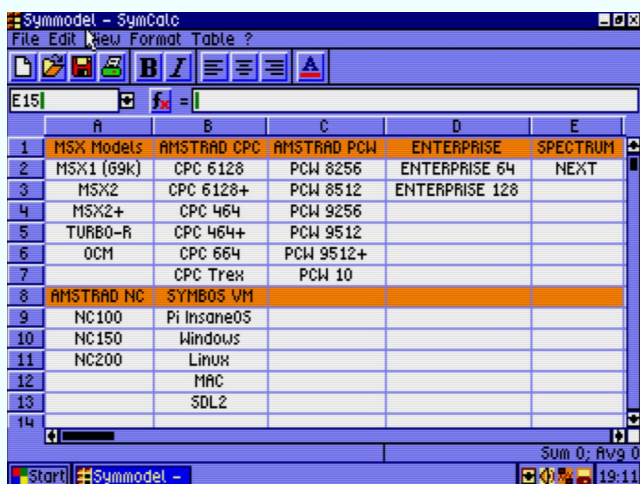
Sokoban for SymbOS is a quite advanced implementation of the classic Sokoban game. This version extends the original game principle with a lot of additional puzzle objects such as coloured boxes, ice floors, holes, portals, rails and magnets.

WordPad (By Prodatron)



Wordpad is an advanced version of Notepad and is able to handle WYSIWYG text with different font styles like bold and italic. It is able to print texts as well using the Printer Daemon.

SYMCaI (by Prodatron)



Symcall is the first real office beast application for SymbOS that is able to do all your spreadsheets!

Print Daemon (By Edoz)



SymbOS Printer Daemon provides a platform-independent printing service for applications. Applications can use it to print text documents with font formatting without having to know anything about the printer used.

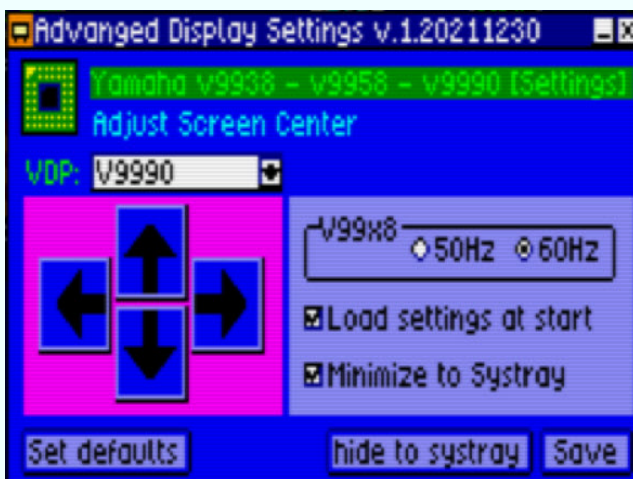
In addition, the Printer Daemon can act as a server-client system, where a print server can process print requests from any number of client systems using the network TCP port 9100

Z80 DOOM adapted (by NNYRIKKI and Prodatron)



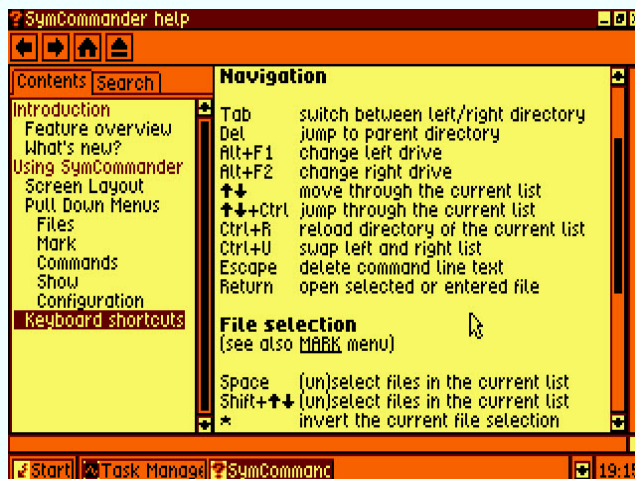
ZDOOM for SymbOS is a Doom-like 3D First-person shooter, one of the few or only implementations for the supported SymbOS platforms. It is running in a window within the GUI, so you can even start and play Doom multiple times, which wasn't even possible back in the early 90ies on a 32bit system. Running on a 4MHz system it's not the fastest game, but some optimizations are hopefully possible for the future. Doom for SymbOS is a port of the original Doom83/zDoom, which was developed for the TI-83(+)/84+ calculators back in the 2000ies.!

MSX VDP tool (By Edoz)



Use for v9938, v9958 and v9990 Use this tool to adjust your screen position and the frequency of your screen. (Hz and set screen)

Helpbrowser (by Prodatron)



Help function used in most applications of SymbOS.

Sound Daemon (By Prodatron)



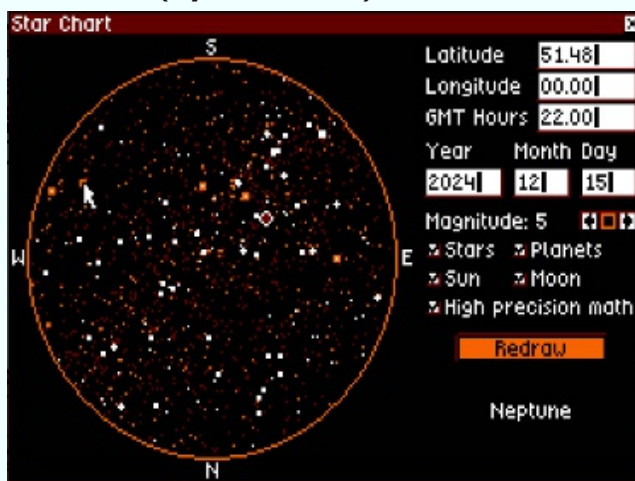
New in SymbOS 4.0! Adding system and game sounds to SymbOS and Apps! OPL4 Wave and PSG Supported!

Solitaire (By Prevtenet)



Klondike Solitaire, also known as Patience, Canfield or just Solitaire is a single-player card game which became very famous when it was delivered together with Windows 95. The object of the game is to move all 52 cards from the deck and the seven "tableau" piles in the lower half of the window to the four "foundation" piles in the upper right of the window.

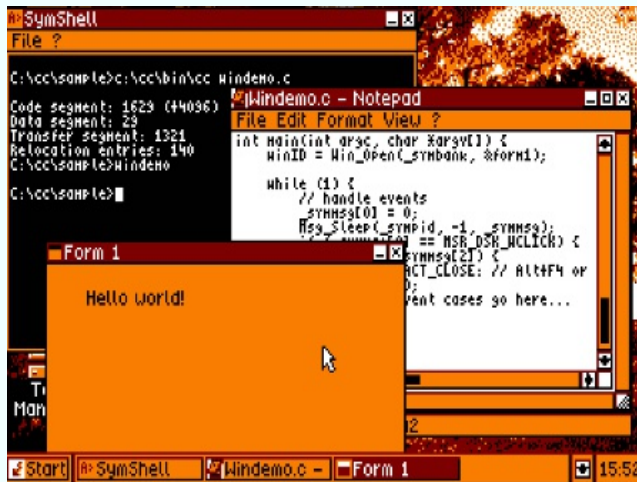
StarChart (By Prevtenet)



Star Chart for SymbOS calculates and displays a diagram of the night sky at the specified date, time, and latitude/longitude. Stars down to magnitude 5 are included, as well as the eight IAU-recognized planets of the solar system, the sun, the moon, and the current moon phase. (Sorry, Pluto - you can't be seen with the naked eye anyway.)

Because floating-point math is very slow on the Z80, Star Chart's calculations use a number of approximations and may vary by a degree or more from true celestial positions (especially when high-precision math is turned off, or when viewing dates outside the 21st century). Still, charts are accurate enough for casual stargazing..

SymbOS C- Compiler (By Prevtenet)



SCC is a C compiler for SymbOS, which runs on Windows and cross-compiles binaries for SymbOS, but can also cross-compile itself to run natively on SymbOS. It contains a full ANSI C compiler, a proper libc port for plug-and-play compilation of existing code, extensive wrappers and utility functions for SymbOS system calls, extensive documentation to help you get started with SymbOS programming, multithreading and a complete sample application (programmer's calculator) for reference.

Please visit the project main page on GitHub for all detailed information and resources:
<https://github.com/danielgaskell/scc>

ZYM Z-Machine (By Prevtenet)



Zym is an interpreter for playing interactive fiction games (text adventures) in Z-code format on SymbOS. It supports Z-machine versions 3, 4, 5, and 8, so it can run most of the games published by Infocom, as well as thousands of other Z-code games created by the interactive fiction community.

BrainFuck (By NYRIKKI)



Brainfuck is a SymShell-based interpreter for the famous esoteric programming language. Designed to be extremely minimalistic, the language consists of only eight simple commands, a data pointer, and an instruction pointer.

PDP Emulator (By Prevetenet)



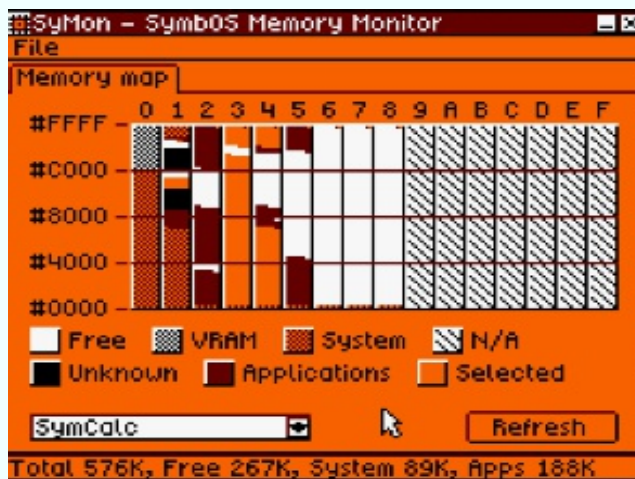
PDP-8 Emulator emulates a DEC PDP-8 minicomputer (1965-1975) on SymbOS. The emulation provides a working front panel, 8K words of core memory, a teletype, and a paper tape reader/punch. Technically functional and written in relatively efficient assembly, the PDP-8 Emulators' primary goal is to run simple paper-tape software from the early days of the PDP-8 line.

Font Editor (By Prevetenet)



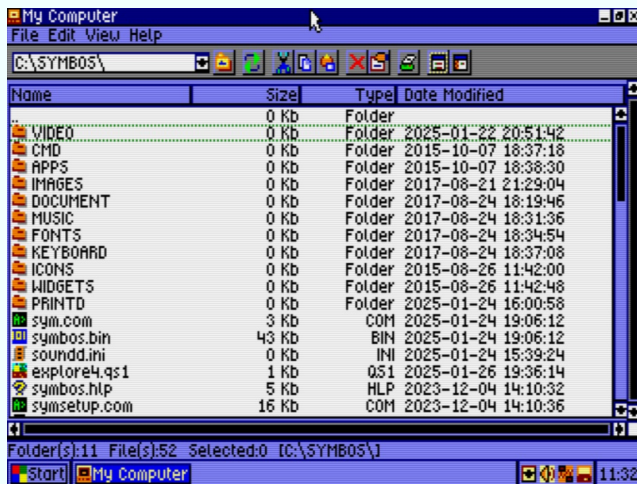
ZFont Editor is a tool for creating and editing fonts in SymbOS format (.FNT). A huge amount of all kind of fonts can be found in the Media section on symbos.org

SymMon (By Prodatron)



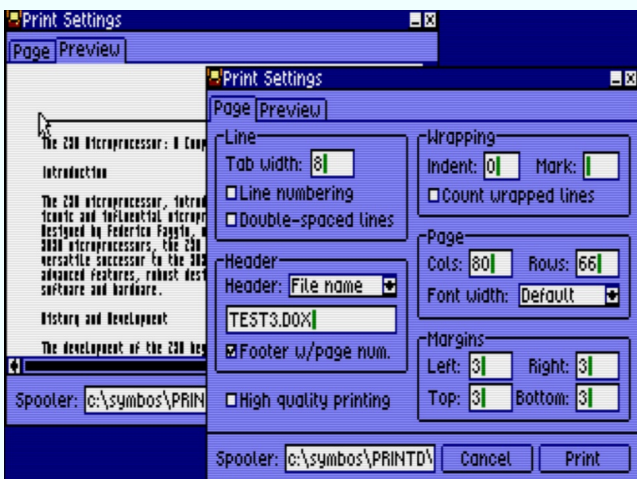
SymMon is a system tool for SymbOS to visualize memory usage. It shows a complete map of the available memory and how and by which programs the occupied parts are used.

My Computer "Explorer" (By Edoz)



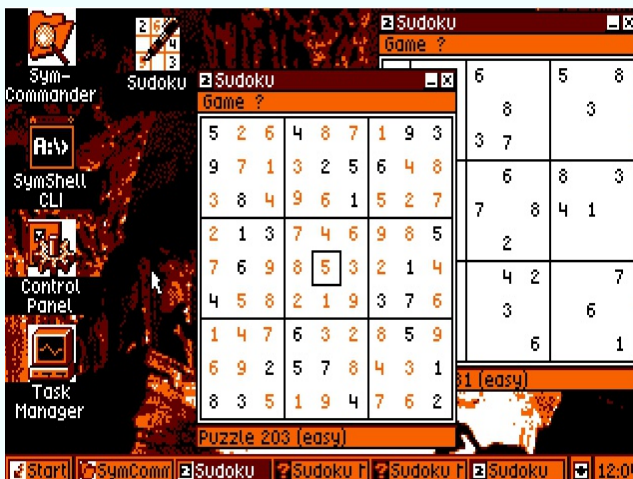
File explorer to copy delete move and execute your apps!

PrintIT (By Prevtenet)



Perfect tool to printout your text documents in a nice way. Your text document can be previewed before printing and you can set all your paper options you like! This will work in combination with the SymbOS printer Daemon!

Sudoku (By Prevtenet)



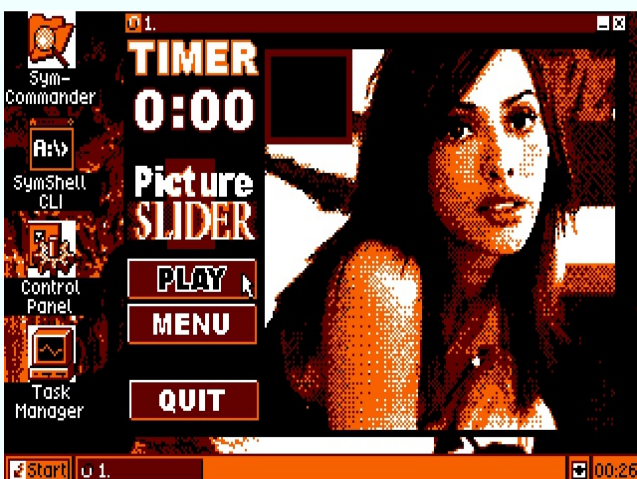
Sudoku is a number-placement logic puzzle game, popular in newspapers and puzzle books. The object of Sudoku is to fill a 9x9 grid with numbers. Each space can contain a single digit from 1 to 9, but you cannot repeat any numbers across an entire horizontal row, an entire vertical column, or within one of the marked 3x3 boxes. The puzzle is solved when the grid is completely filled with valid number.

SymChess (By Trebmint)



Play chess against your clever Z80 CPU. This chess implementation has a strong AI and a nice looking and easy to use interface!

Picture Slider (By Trebmint)



This is the first SymStudio/Unify/Quigs game ever made in history. It's the first demonstration how easy it is to develop applications and games in the Quigs IDE for SymbOS for all supported Z80 platforms.!

SymROM (By NYRIKKI)



This application starts ROM-files from SymbOS. Sizes 8KB-48KB are supported. Some programs may require disk drive to be disabled in order to work. You can do that by holding SHIFT-key down while computer reboots. If you are using Sunrise IDE or CF interface, you can disable it by holding "INS"-key down at boot. Novaxis SCSI can be disabled by holding "GRAPH"-key down at boot..

Thank You for your SymbOS 4.0 support!

We are thrilled to announce the release of SymbOS 4.0, and we couldn't have done it without the incredible support and dedication of the 8-bit community. This release is a testament to the passion and enthusiasm that continues to thrive among users and developers of classic computing platforms.

The 8-bit community is a unique and vibrant group of individuals who share a love for vintage computers and the nostalgia they bring. From the MSX to the Amstrad CPC, Amstrad PCW, Enterprise, and ZX Spectrum Next, each platform has its own dedicated following and a rich history of innovation and creativity.

MSX Community

The MSX community, centered around msx.org, has always been a hub of activity and collaboration. From hardware enthusiasts to software developers, the MSX community continues to push the boundaries of what these classic machines can do. The camaraderie and support within this community are truly inspiring, and we are grateful for their contributions to SymbOS.

Amstrad CPC Community

The Amstrad CPC community, with its home at cpcwiki.eu, is another shining example of dedication and passion. The CPC community has a long history of creating amazing software and hardware projects, and their enthusiasm for the platform is infectious. The stories of late-night coding sessions and the joy of seeing a project come to life are what make this community so special.

Amstrad PCW Community

The Amstrad PCW community may be smaller, but it is no less passionate. These enthusiasts have kept the spirit of the PCW alive through their tireless efforts to develop new software and hardware solutions. Their dedication to preserving and enhancing this platform is a testament to the enduring appeal of the PCW.

Enterprise Community

The Enterprise community, found at enterpriseforever.com, is a close-knit group of individuals who share a deep love for this unique platform. The Enterprise may not be as well-known as some other 8-bit machines, but its community is fiercely loyal and incredibly creative. The stories of collaboration and innovation within this group are truly heartwarming.

ZX Spectrum Next Community

The ZX Spectrum Next community is a shining example of how classic computing can be revitalized for a new generation. The Spectrum Next has brought together enthusiasts from around the world, and the community's dedication to pushing the limits of this platform is nothing short of remarkable. The Spectrum Next communities are filled with stories of innovation, creativity, and a shared love for this iconic machine.

A Heartfelt Thank You

To everyone in the 8-bit community, we extend our heartfelt thanks. Your passion, creativity, and dedication have made SymbOS 4.0 possible. Whether you're a developer, a hardware enthusiast, or simply a fan of these classic machines, your contributions are invaluable. Together, we continue to celebrate the legacy of 8-bit computing and ensure that these beloved platforms remain vibrant and relevant.

Thank you for being a part of this incredible journey. Here's to many more years of innovation and collaboration in the world of 8-bit computing!

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