SYMBOS

Installation and user manual for SymbOS 3.1

Z80 based multitasking operating system
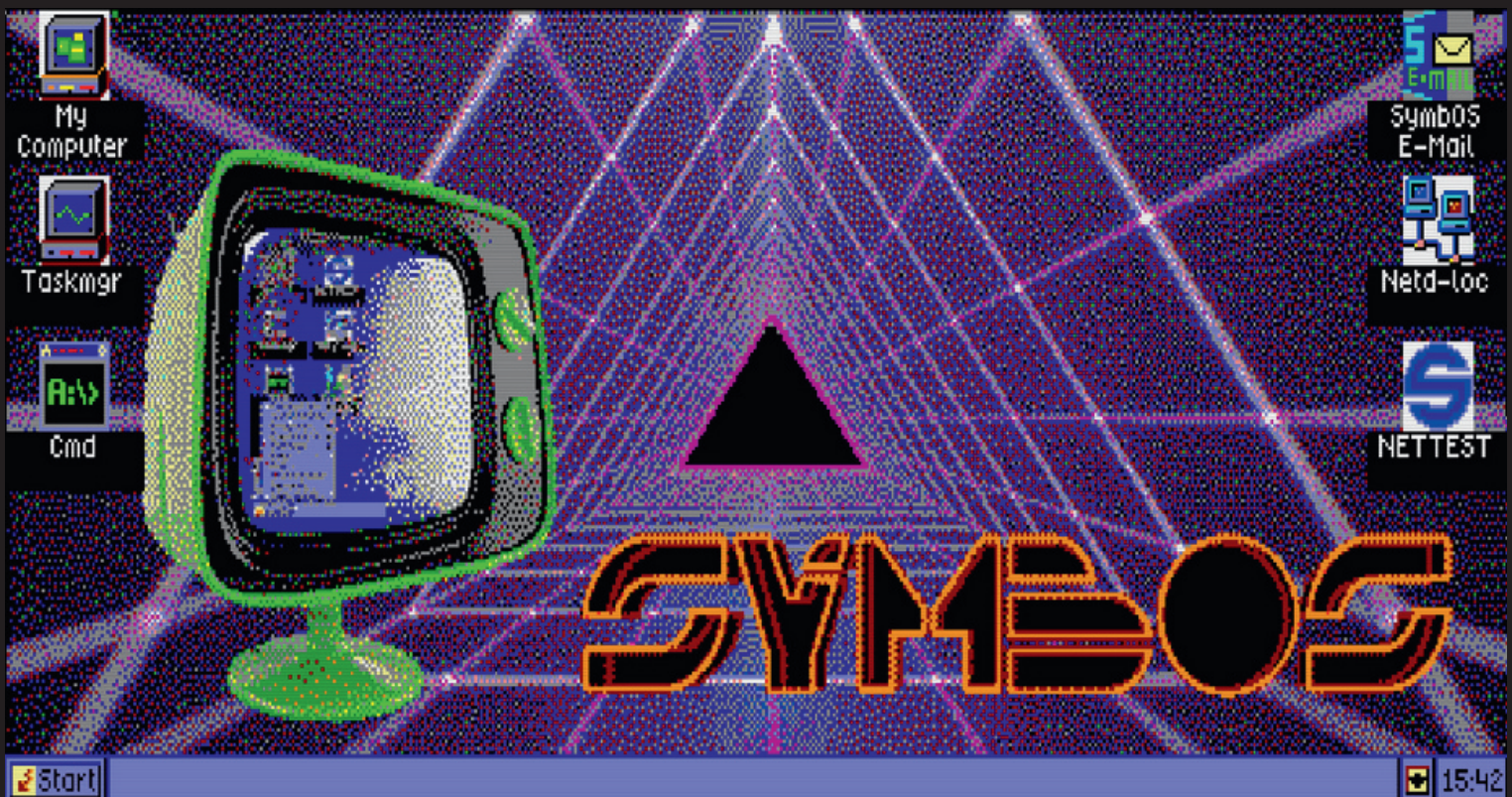
MSX **AMSTRAD** **ENTERPRISE** **SYMBOS**

SYMBOS

WWW.SYMBOS.ORG

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

"Connects Z80ties together forever"

SYMBOS

SYMBOS

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1.0 Introduction to SymbOS

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 micro kernel 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 storages of up to 2 Terabytes. Since version 3.0 SymbOS is fully network enabled.

1.1 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.

1.1.1   Supported Z80/R800 models:

MSX models	Amstrad CPC	Amstrad PCW	Enterprise
MSX 1 (v9990)			
MSX 2	CPC6128	PCW 8256	Enterprise 64
MSX 2+	CPC6128+	PCW 8512	Enterprise 128
TURBO-R	CPC 464	PCW 9256	
OCM	CPC 664	PCW 9512	
	CPC TREX	PCW 10	
128 Kb minimal	128 Kb minimal	256 Kb minimal	128 Kb minimal
1024 Kb maximal	1024 Kb maximal	1024 Kb maximal	1024 Kb maximal

* 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 Storage devices:

MSX	Amstrad CPC	Amstrad PCW	Enterprise
- Sunrise IDE - Sunrise CF/IDE - MegaFlashRom SCC+SD - GR8NET SD* - OCM SD	- CPC-IDE - SYMBiFACE II - X-MASS - M4 SD card - HxC direct SD access - SYMBiFACE 3	- HxC direct SD card access - uIDE	- SD EP Premium - SYMBiFACE 3
- Microsol FDC - National (MB8877A) FDC - Toshiba (Panasonic) FDC - Philips (WD2793) FDC - SVI (WD1793) FDC	- NEC FDC 765 - HxC FDC	- FDC 765	- WD1770 FDC

$*$ By default the GR8NET does not boot Nextor. If you want to use GR8NET as your primairy 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 primairy slot)

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 isssues downloading from the internet it could be usefull to minimize the network buffer by using the command CALL NETVARRWTH (,1024) Please see the GR8NET manual for all update instructions regarding the GR8NET.

Introduction to SymbOS

1.1.3 Supported SymbOS screenmodes:

MSX models	Amstrad CPC	Amstrad PCW	Enterprise
- Screen 4,5,6,7 - Screen 8,9,10,11	- Screen 1,2,4 - Screen 8,9,10,11	Screen 0	- Screen 1,2,4 - Screen 8,9,10,11

1.1.4 SymbOS screenmodes:

Screen		Resolution	Color support
0		768 x 255	2
1		320 x 200	4
2		640 x 200	2
3			
4	(G9k)	256 x 212 (Pattern mode)	64 (16 colors per layer)
5		256 x 212	16
6		512 x 212	4
7	(G9k)	512 x 212	16
8	(G9k)	384 x 240	16
9	(G9k)	512 x 212	16
10	(G9k)	768 x 240	16
11		1024 x 212	16

1.1.5 Supported sound devices in SymAMP:

MSX models	Amstrad CPC	Amstrad PCW	Enterprise
AY-3-8910 (PSG) Sunrice MP3 SE-ONE (FM+MP3) DAB+ Darky dual PSG	AY-3-8910 (PSG) Play city (6 AY) SE-ONE (FM+MP3) DAB+ Sunrise MP3	Dk'tronics AY-3-8910 (PSG)	DAVE sound chip SE-ONE (FM+MP3) DAB+ Sunrise MP3

1.1.6 Supported input devices:

MSX models	Amstrad CPC	Amstrad PCW	Enterprise
Msx standard mouse PS/2 mouse adapter by Nyyrikki Joystick Rooky USB mouse TMT-Logic USB mouse	"joystick compatible" (AMX Mouse, Reisware Mouse) Albireo USB mouse SYMBiFACE II compatible PS/2 adapter MultiPlay(Amiga) SYMBiFACE III USB	Kempston Mouse Interface AMX Mouse Interface	Boxsoft Mouse Interface Joystick Entermice SYMBiFACE III USB mouse

1.1.7   Supported network interfaces

MSX models	Amstrad CPC	Amstrad PCW	Enterprise
-Sunrise Denyonet (W5100) -GR8NET (W5100)	-M4Wifi Card(ESP82666) - SYMBiFACE III Wifi		- SYMBiFACE III Wifi

With Network support you can connect SymbOS worldwide!

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 partion table is correctly setup arccording Microsoft FAT standards!!!

1.1.8   Supported additional grapics cards

MSX models	Amstrad CPC	Amstrad PCW	Enterprise
	- Sunrise GFX9000 - Techobytes V9990 - TMTLogic GFX-Nine	-	- Sunrise GFX9000 - Techobytes V9990 - TMTLogic GFX-Nine

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

Supported bitmap screens are 8,9,10, and 11
Supported patten screen mode is screen 4 (multilayer pattern mode)

1.2   SymbOS Features

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.

Micro kernel	Power		System manager	Power
Maximum amount of supported RAM Maximum number of processes Number of different process priorities Maximum number of timers Maximum number of open messages	1024 KB 32 9 32 64		Maximum number of applications Maximum application core size	24 63k
Desktop manager	Power		File manager	Power
Maximum number of active windows Maximum number controls in window Maximum possible screen resolution (32.000x 32.000 pixels)	32 1000		Maximum hard disc size Maximum file size Maximum number of devices Maximum number of open files	2 TB 2 GB 8 7
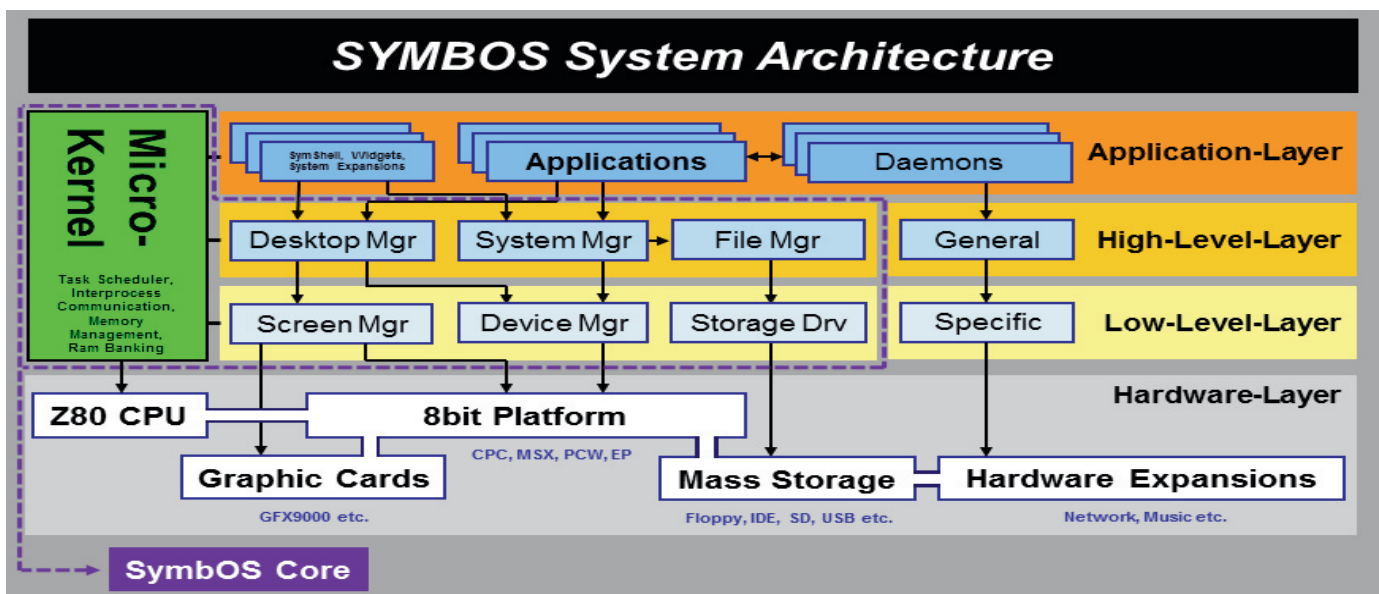
SymbOS supports preemptive multitasking. Preemptive multitasking allows the computer system to more reliably guarantee each process a regular "slice" of operating time. It also allows the system to rapidly deal with important external events like incoming data, which might require the immediate attention 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 exits.

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 **[1]** if you want to install or upgrade SymbOS

```
SYMBOS MSX      - SETUP
(c)2014 Prodatron/SymbiosiS
==================================

Welcome to SymbOS     setup!


Please choose...

[1] new SymbOS installation

[2] re-configure the device and
    driver setting of an existing
    SymbOS installation



==================================
Press [1], [2] or [C]ancel ...
```

How can i install SymbOS ?

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


```
SYMBOS MSX      - SETUP
(c)2014 Prodatron/SymbiosiS
===================================
New SymbOS installation


Please enter the drive where SymbOS
should be installed to (example: A )

Drive: b█




===================================
[1/6] Destination path
```

STEP 4: Setup is copying files to the destination


```
SYMBOS MSX      - SETUP
(c)2014 Prodatron/SymbiosiS
===================================
New SymbOS installation


Setup is copying files...
                31%

▭▭▭▭▭/////////////////////
        SYMG9K.BIN    █



===================================
[2/6] Copying files
```

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STEP 5: Detection of storage devices


```
SYMBOS MSX      - SETUP
(c)2014 Prodatron/SymbiosiS
==================================
■1■ Sunrise IDE/CF card interface
                      [at Slot 1  ]
■2■ Philips/Sony floppy disc(WD2793)
                      [at Slot 3-1]



This is a list of all available
devices. The marked ones will be
used for SymbOS (up to 2). Press...
[1]-[4] alter the selection or add
        a driver manually for an
        undetected device.
[S]     save the settings ■

==================================
[3/6] Device drivers
```

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)

STEP 6: Set your boot drive

```
201 8+                              MSX

SYMBOS MSX      - SETUP
(c)2014 Prodatron/SymbiosiS
=================================
Determining the boot drive location

SymbOS has been installed here:
A:\SYMBOS
which is DRIVE A in MSX-DOS.

Please specify the device,
where DRIVE A is located:

[1] Sunrise IDE/CF card interface
[2] Philips/Sony floppy disc(WD2793)
■




=================================
[4/6] Boot drive location

          PHILIPS
```

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

```
201 8+                              MSX

SYMBOS MSX      - SETUP
(c)2014 Prodatron/SymbiosiS
=================================
Determining the boot drive location

SymbOS has been installed here:
A:\SYMBOS
which is DRIVE A in MSX-DOS.

Please specify the IDE channel,
where DRIVE A is located:

[M] master
[S] slave
■




=================================
[4/6] Boot drive location

          PHILIPS
```

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

```
201B

                                              MSX

SYMBOS MSX     - SETUP
(c)2014 Prodatron/SymbiosiS
==================================
Determining the boot drive location

SymbOS has been installed here:
A:\SYMBOS
which is DRIVE A in MSX-DOS.

Please specify the partition,
where DRIVE A is located:

[1] primary partition 1 (Nextor:A)
[2] primary partition 2
[3] primary partition 3
[4] primary partition 4 (Sunrise:A)
[0] unpartitioned medium
■
(extnd.partitions not yet supported)

==================================
[4/6] Boot drive location
```

If the destination path is on a large storage device please select the (primary partition or unparitioned 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 compaired to the Microsoft FAT standard. You could also use MSXDOS A: drive as C: in SymbOS which is more standard.

```
201B

                                              MSX

SYMBOS MSX      - SETUP
(c)2014 Prodatron/SymbiosiS
==================================
Determining the boot drive location

Thank you for determining the boot
drive location, which is summarised
here:

DRIVE A is located at...

Device:       Sunrise IDE
IDE channel:  MASTER
Partition:    PRIMARY 4

Is this correct?
[Y]es
[N]o
■

==================================
[4/6] Boot drive location
```

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

```
SYMBOS MSX        - SETUP
(c)2014 Prodatron/SymbiosiS
==================================
Setup nearly completed

For finishing the installation
SymbOS setup will now store all
configuration data.

Please press any key... ▮




==================================
[5/6] Saving configuration
```

SymbOS wil 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▮
```

15
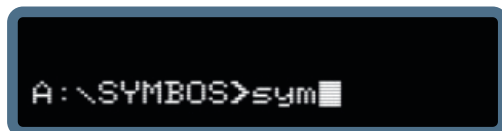
2.2   Installation on MSX based machines (Change Settings)

```
A:¥SYMBOS>sym

SYMBOS MSX     [www.symbos.de]
(c)2000-2014 by J.Mika (Prodatron)

Loading driver configuration...

** BOOTING ABORTED **
No device found at slot 31. You have
probably changed your driver
configuration or use a wrong
SYMBOS.CFG file. Please start
SYMSETUP for re-configuration.

A:¥SYMBOS>█
```

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:

```
SYMBOS MSX     - SETUP
(c)2014 Prodatron/SymbiosiS
======================================

Welcome to SymbOS     setup!


Please choose...


[2] re-configure the device and
    driver setting of an existing
    SymbOS installation



======================================
Press        [2] or [C]ancel ... █
```

16

```
SYMBOS MSX      - DEVICE DRIVER SETUP
(c)2014 Prodatron/SymbiosiS
====================================
Available Mass Storage Devices
------------------------------------
  #  SLOT  DRIVES  DEVICE
  1   1      1     Sunrise IDE
  2   32     2     Panasonic FDC
  3   --     -     -
  4   --     -     -

S E L E C T E D   D E V I C E S
------------------------------------
DRIVER # SLOT TYPE DEVICE
  [1]   -   --  ---- -
  [2]   -   --  ---- -

B O O T   L O C A T I O N
------------------------------------
Driver:[-] (-               ), Letter:-
====================================
Press [D]evices, [B]oot location,
[S]ave&exit, [C]ancel, [H]elp ... ■
```

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 manualy the devices you want to use it for SymbOS.

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

```
SYMBOS MSX      - DEVICE DRIVER SETUP
(c)2014 Prodatron/SymbiosiS
====================================
Available Mass Storage Devices
------------------------------------
  #  SLOT  DRIVES  DEVICE
  1   1      1     Sunrise IDE
  2   32     2     Panasonic FDC
  3   --     -     -
  4   --     -     -

S E L E C T E D   D E V I C E S
------------------------------------
DRIVER # SLOT TYPE DEVICE
  [1]   -   --  ---- -
  [2]   -   --  ---- -

Please select...
Driver place (1/2)..:[1]
Device (1-4, 0=none):1 -> SLOT 1
Driver filename
(use arrow keys)....:-IDSUNRI■
```

-      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)

```
SYMBOS MSX      - DEVICE DRIVER SETUP
(c)2014 Prodatron/SymbiosiS
====================================
S E L E C T E D   D E V I C E S
------------------------------------
DRIVER # SLOT TYPE DEVICE
 [1]   1   1   IDE  Sunrise IDE
 [2]   2   32  FDC  FDC TC8566AF

B O O T   L O C A T I O N
------------------------------------
For the SymbOS boot drive location,
which contains the SYMBOS.INI file,
please select...:
Driver (1/2)...:[1] (Sunrise IDE  )
Drv.letter (A-Z):A
(M)aster/(S)lave:MASTER (=Channel 0)
Partition
  (1-4=primary,
   0=not
   partitioned)..:4
Removeable (Y/N):█
```

-     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 partion 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.


```
SYMBOS MSX      - DEVICE DRIVER SETUP
(c)2014 Prodatron/SymbiosiS
====================================
Available Mass Storage Devices
------------------------------------
 #  SLOT  DRIVES  DEVICE
 1   1      1     Sunrise IDE
 2   32     2     Panasonic FDC
 3   --     -     -
 4   --     -     -

S E L E C T E D   D E V I C E S
------------------------------------
DRIVER # SLOT TYPE DEVICE
 [1]   1   1   IDE  Sunrise IDE
 [2]   2   32  FDC  FDC TC8566AF

B O O T   L O C A T I O N
------------------------------------
Driver:[1] (Sunrise IDE  ), Letter:A
Channel:00,Partition:04,Removeable:N
====================================
Press [D]evices, [B]oot location,
[S]ave&exit, [C]ancel, [H]elp ... █
```

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

2.3   Installation on CPC based machines

INSTALLING AND BOOTING CPC

SymbOS can be booted from disc or from ROM. There are some small differences between the disc and the ROM version:

- you can insert the application disc directly before the booting process
- with an IDE device, the ROM version is able to boot completely disc-less, as it searches on the

harddisc/CF card for the configuration file at first. All files, which are needed during the booting process (background picture, screensaver etc.) can be loaded directly from IDE.

- booting SymbOS from ROM of course is much faster (about 3 seconds)

If you own a ROM box or use an emulator, this way of starting SymbOS is recommended.
If you want to boot SymbOS from disc, you can choose between the fast boot loader version and the slow raw Amsdos loader version. The first one boots SymbOS in only 11 seconds, while the second one uses for compatibility reasons Amsdos or another installed OS to load the SymbOS binaries.
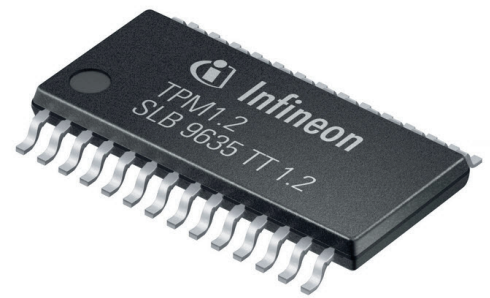
Using the ROM version on the CPC

The ROM version consists of the files SYM-ROMA.ROM, SYM-ROMB.ROM, SYM-ROMC.ROM and SYM-ROMD.ROM, so you need 64K ROM memory. The first ROM (SYM-ROMA.ROM) needs to be placed at any slot between 1 and 15.

All other ROMs can be placed everywhere between 1 and 63 in no special order. After installing the ROMs you should get a message when switching on your CPC.

Type in **|SYM [+return]** to boot SymbOS.

With the ROM version a disc is not needed to start SymbOS, but if you don't have a harddisc, too, only the default configuration will be present after the booting process. So you should connect a harddisc or insert a disc which contains at least your configuration (**SYMBOS.INI**) and (if installed) the desktop background graphic and the screen saver. It is recommended, that you copy these files on your application disc and insert this one, before you boot SymbOS from ROM. In this case the correct configuration will be loaded, and you can start working with SymbOS at once.

Using the disc version on the CPC

There are two different disc versions.

You always have to type **RUN"SYM** [+return] to boot SymbOS.

The fast boot loader version (SymbOS-CPC-BootFast.DSK) can be used to boot SymbOS within 11 seconds from a standard floppy disc.

The raw Amsdos loader (SymbOS-CPC-BootRaw.DSK) is compatible with all AMSDOS extensions and can be used when booting SymbOS from a mass storage device like the M4Board or the SYMBiFACE 3.

SymbOS starts, reads the configuration file (SYMBOS.INI) and loads (if installed) the desktop background graphic and the screen saver. They need to be present on the boot disc or on another present device.

After booting SymbOS from disc you have to insert the SymbOS-CPC-AppsStandard.DSK disc to configure your system with the Control Panel. See 3.0. When saving the current config settings you always have to insert the boot disc again.

The additional SymbOS-CPC-G9K.ZIP archive contains the Graphics9000 version of SymbOS CPC. You can copy these files into a subdirectory of an existing SymbOS installation.

The settings of the G9K version are seperated from these of SymbOS running with standard video hardware.

The last archive SymbOS-CPC-MassStorage. ZIP contains a complete dump, which can be copied to your USB stick or SD card when running SymbOS with the SYMBiFACE 3 or the M4Board.

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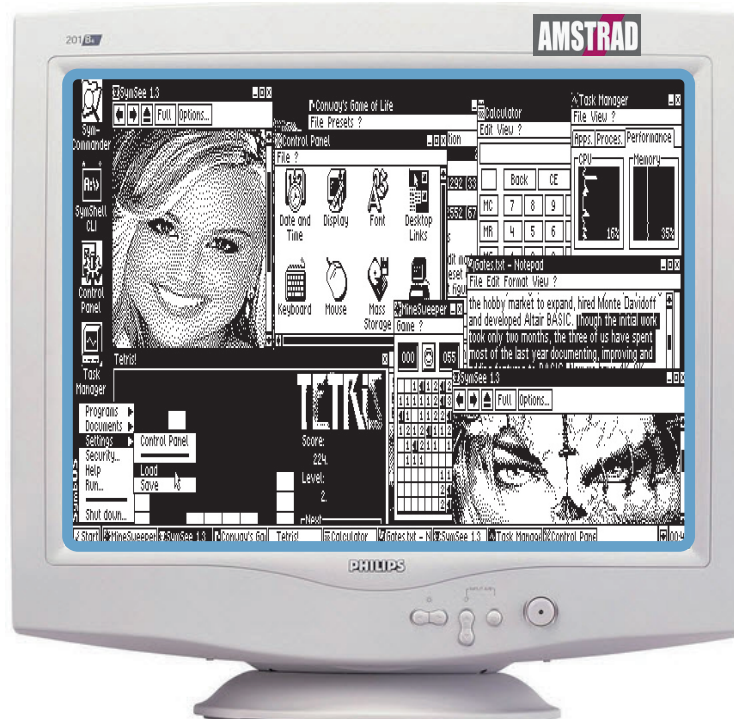
After loading SymbOS you can insert Side B and configure the system. Insert Side A again when you made changes in the Control Panel and want to save the settings again. See 3.0

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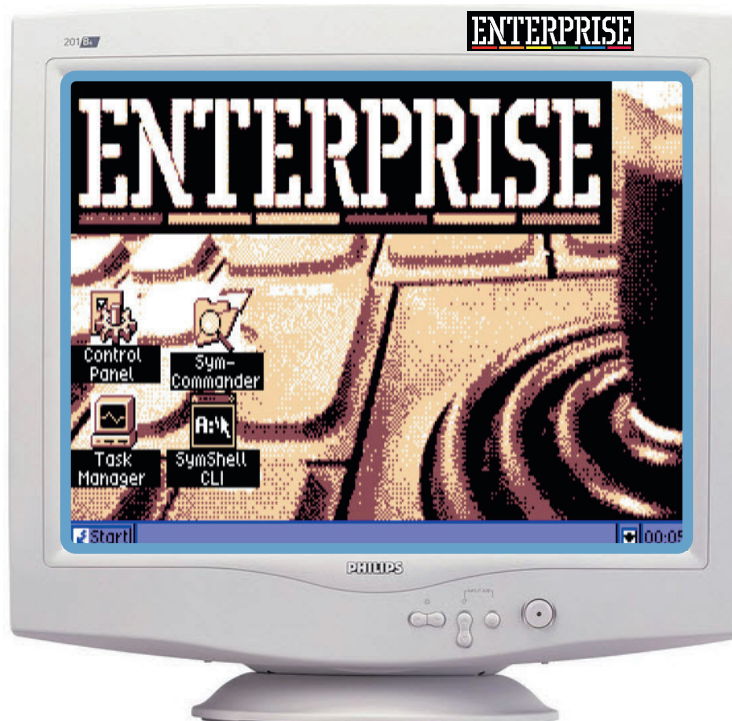
After loading SymbOS you can configure the
system path and other system settings. See 3.0

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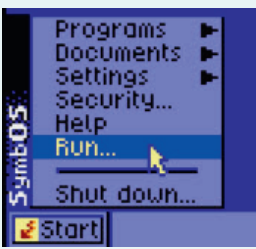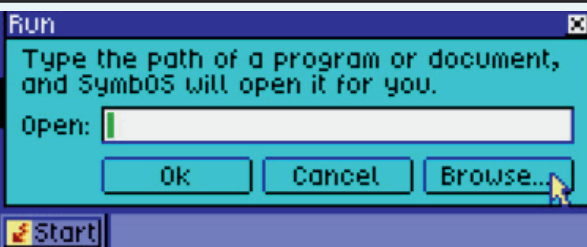
3.1   Symbos SYSTEM PATH not correct
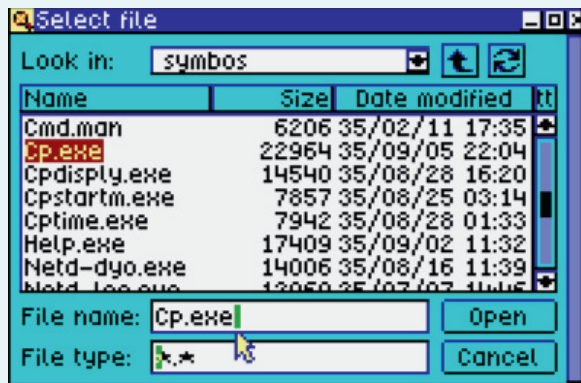
After successfully installing SymbOS on your system it could happen that you running in some troubles when opening system applications. This could happen when you did not set the SYSTEM PATH correctly during the installation. To check the system path do the following steps:

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.

3

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]

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 CP.EXE (SymbOS Control Panel) and open it.

2

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

24

Troubelshooting after booting

4

Run

Type the path of a program or document, and SymbOS will open it for you.

Open: c:\symbos\Cp.exe

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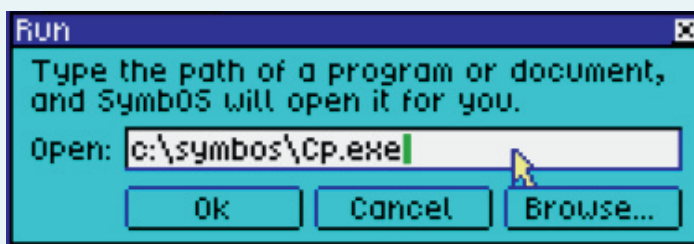
Browse to 'OK' using the mouse or the arrow keys [UP/DOWN] and press [SPACE] or [ENTER]
This will execute the Control Panel

5

Control Panel
File ?

Date and Time   Display   Font   Desktop Links

Keyboard   Mouse   Mass Storage   System

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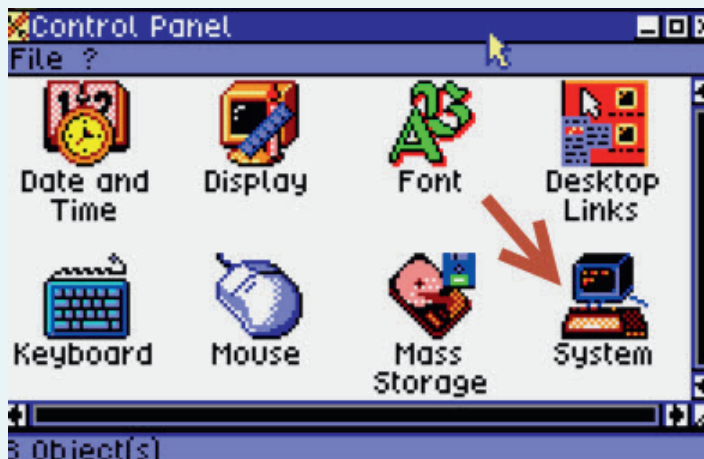
Browse to 'SYSTEM' program using the mouse or the arrow keys [UP/DOWN] and press [SPACE] or [ENTER]

This wil open the System configuration

6

System
General | File types

System info
Type   MSX2
Memory   1024 KB Ram
System   SymbOS MSX
Version   MSX 3.0-141109

Miscellaneous
Boot drive A
System path a:\symbos\
Autoexec □
□Load SymbOS extensions (requires a reboot)

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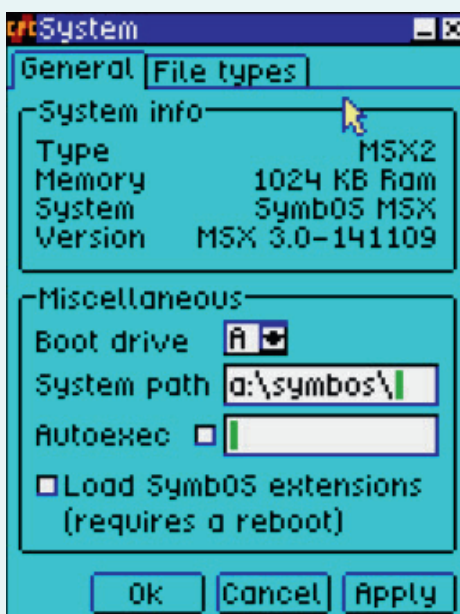
Change the SYSTEM PATH to the correct one. Check your Mass Storage drive mapping for the correct drive and path.

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

Press [OK]

7
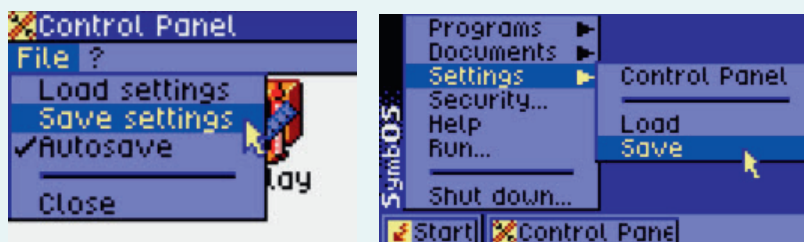
Control Panel
File ?
Load settings
Save settings
✓Autosave
Close

Programs ►
Documents ►
Settings ►   Control Panel
Security...   Load
Help   Save
Run...
Shut down...
Start   Control Pane

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"
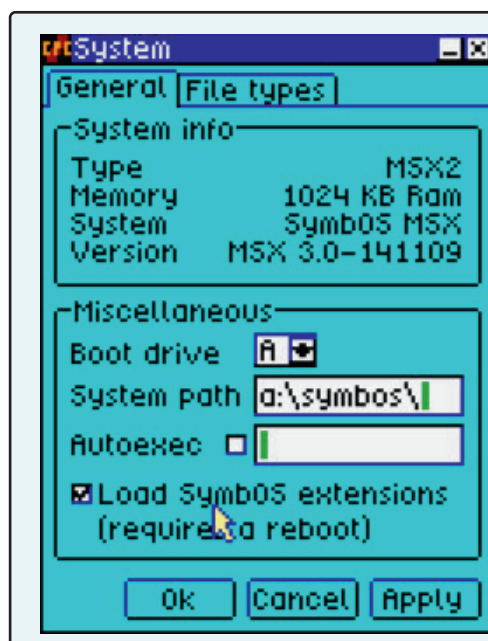
Open the Control panel:

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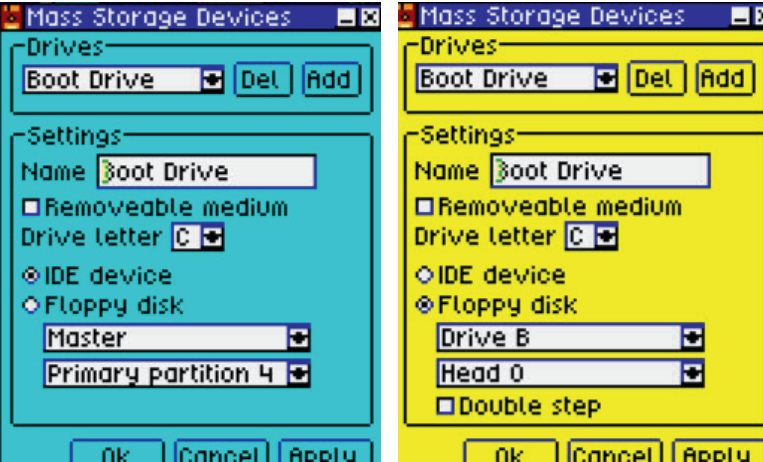
This screen look different depending of your configuration (loaded storage drivers):

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.

4.1   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 cursos 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	(Swith Task forwards)*
ALT+TAB+SHIFT	(Swith Task backwards)*
TAB	(Switch to next Control)
SPACE	(Select Control)

Special MSX keys:
GRAPH+SELECT (Rescan joystick ports)

A mouse is the perverted 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		**ENTER KEY**	
CPC	**= Copy**	**CPC**	**= Enter**
MSX	**= Graph**	**MSX**	**= Code**
PCW	**= Alt**	**PCW**	**= Enter**
EP	**= Alt**	**EP**	**= INS**

Left Click
ALT+SPACE

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)
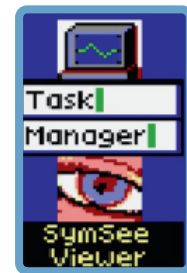
You'll point and click with your left mouse button to select buttons, menus, commands, and other items. To make a selection with your left mouse button, just point at the item, hold you mouse still, and click once. For example, try clicking on one of the icons to select it. After you select something, 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 perfom 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.
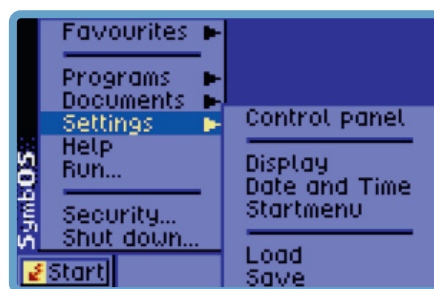
Help:

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.
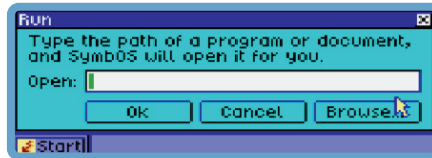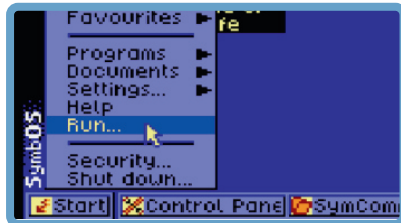
Shut Down:

Choose this option to begin shutting down SymbOS
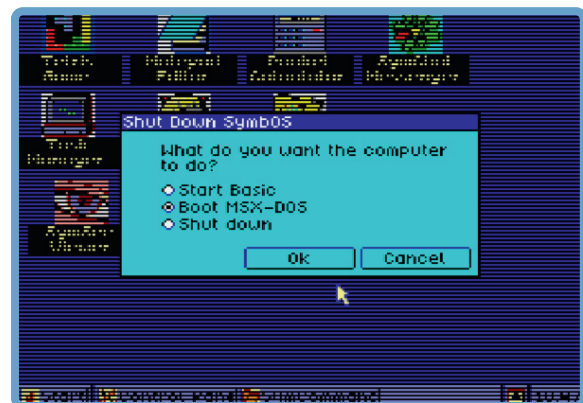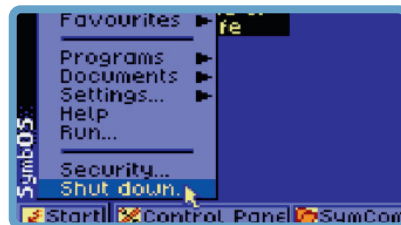
Notice that some of the options in the Start menu, such as Programs, have arrows next to them.

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.

How to use SymbOS

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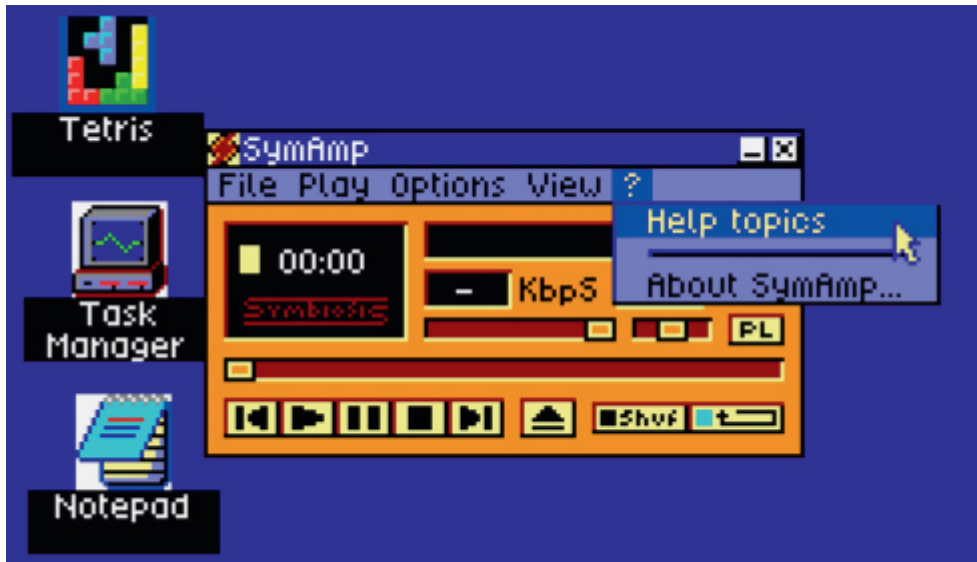
Go to the Help function in the application to get more info about the application.
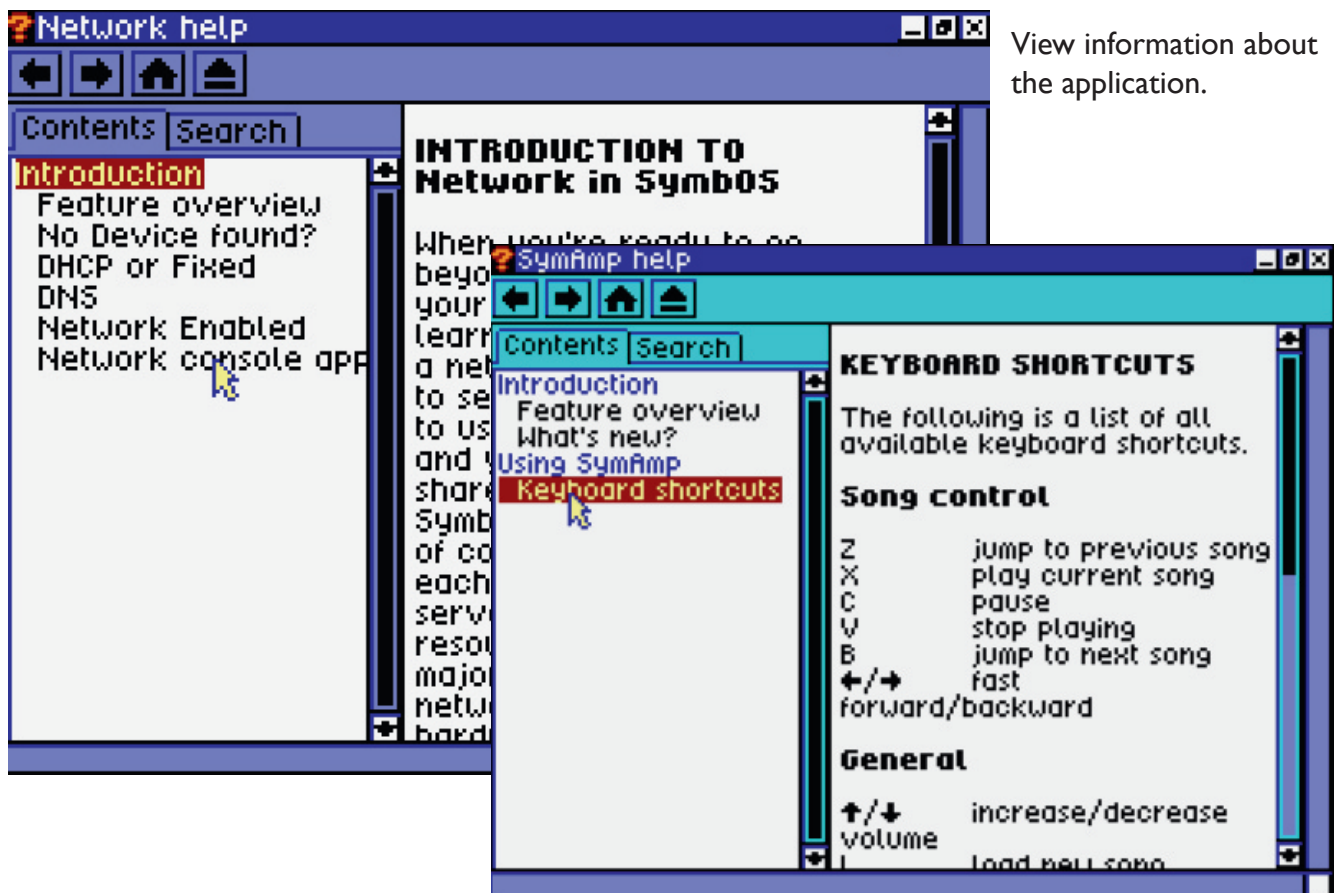
View information about the application.

4.5   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 deskt. tab and click browse. Use the file dialog to select a background (SGX file). If you want to know how to use the filedialog please see (3.1)
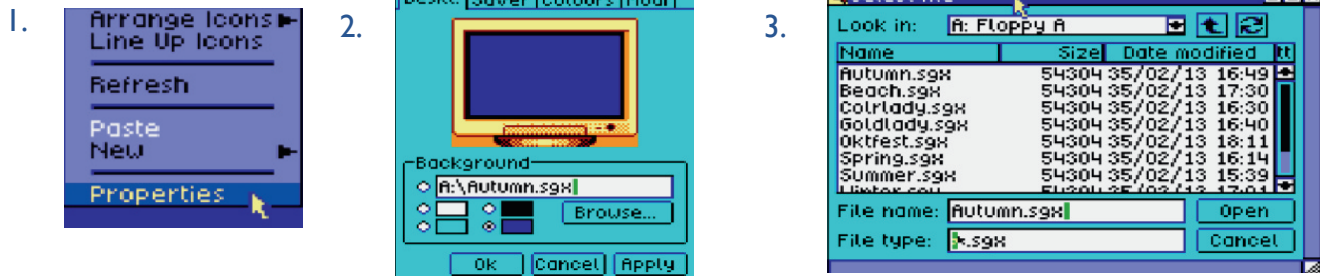
5.3   Examples of desktop backgrounds

How to use SymbOS

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.)

4.6   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)
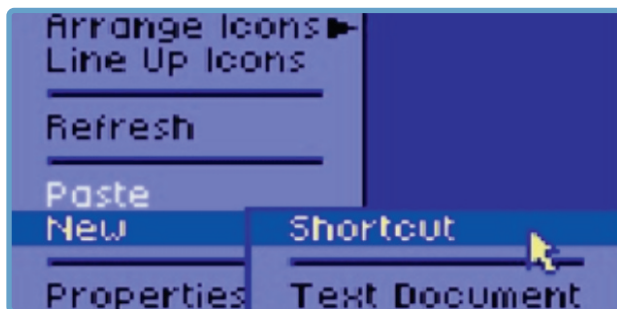
Click with the mouse right on a empty place on the desktop. Choose New -> Shortcut
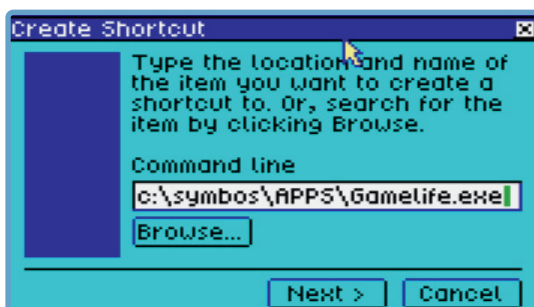
Insert the path to the location of the file or use the browse button to browse to the system path.

Click 'Next' to continue
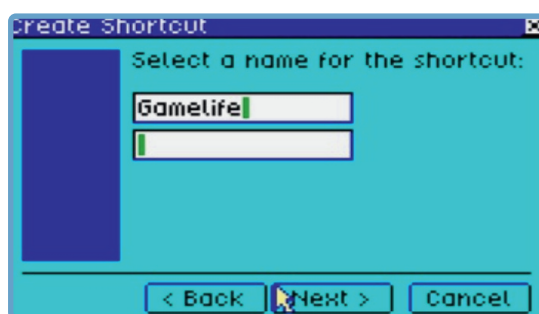
Insert the name of the shortcut. You can define your own name and you can use two text lines of it.

Click 'Next' to continue
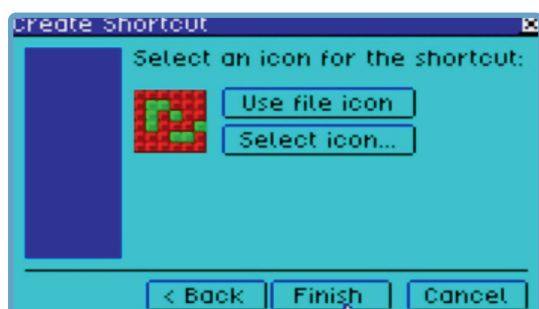
Select a new icon using the 'Select Icon Button' or keep the default file icon.

Click 'Finish' to create your shortcut.

4.7   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 shorcut simply click slow on the text or choose rename in the properties windows.
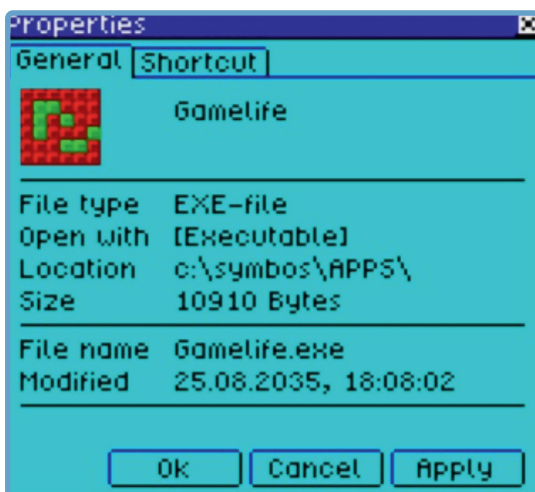
In the general tab you can see the properties of the icon.

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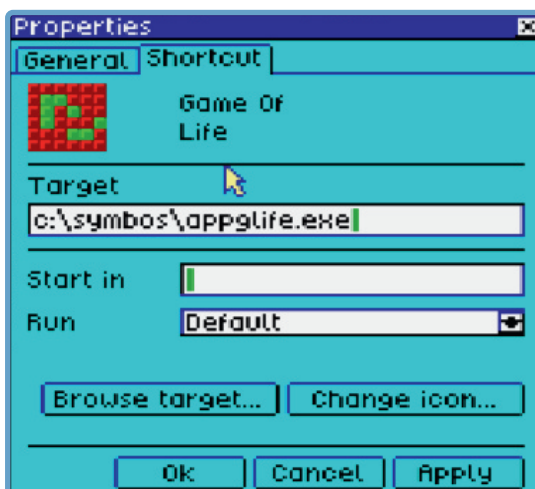
In the shortcut tab you can define the path of the target and the icon. Change your data and press OK to save it.

Click 'OK'

4.8   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:
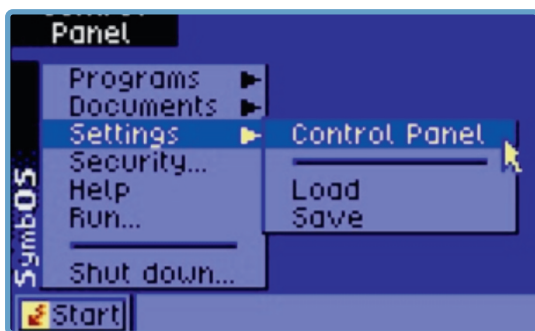
Use START and then Control Panel

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 depening 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.

4.9   Change a Shortcut on the Desktop (Using the Advanged 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 extentions 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"
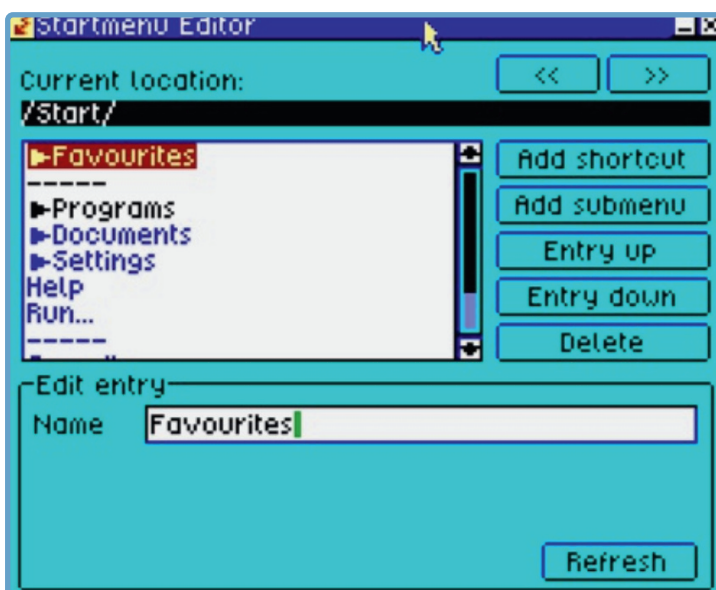
SymbOS will display the "Advanced" Start Menu editor. You can define shortcuts and submenus by using the ADD shortcut/submenu buttons. Use the << and >> buttons to browse to the Start Menu structure. Blue Items are "Read only" and cannot be changed. Shortcuts placed in the "Autostart" folder are programs that will be started automatically when SymbOS boots. For example you can use the Network Daemon to start automatically.
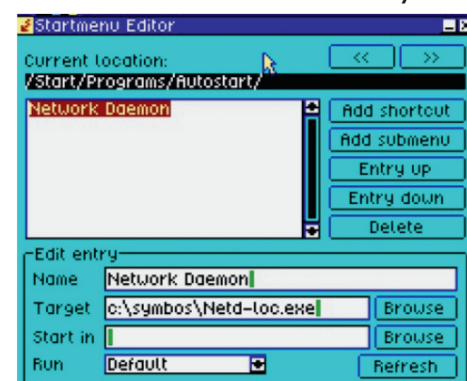
4.10   Using widgets in SymbOS 3.0

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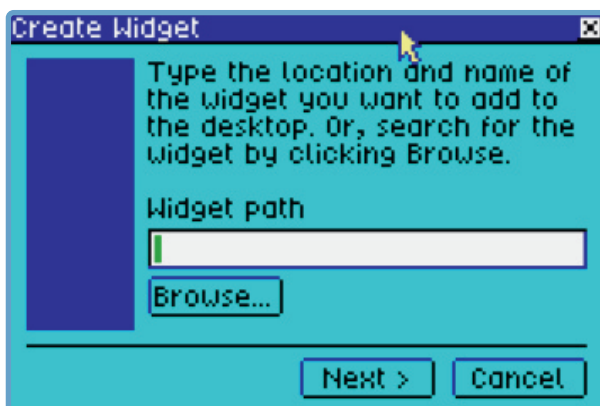
The create new Widget wizzard will start. Use the browse button to browse to the widget application that you want to start/load.

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.
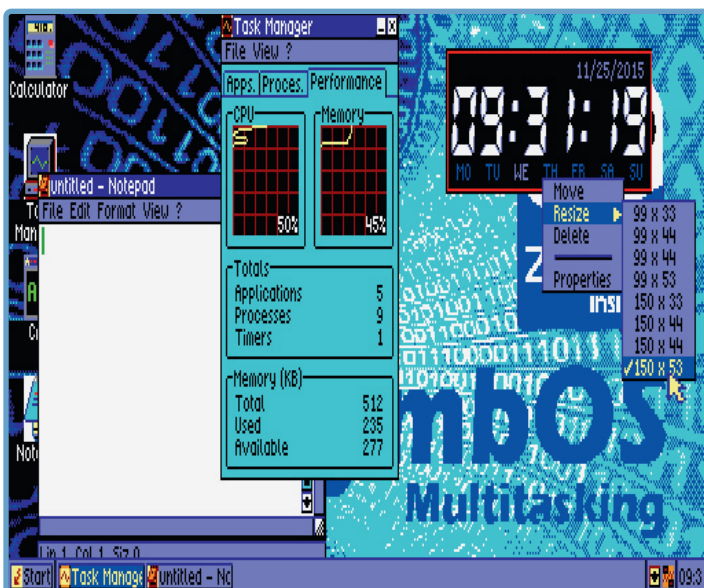
Depending on which widget you load it can have different sizes and display options. You can move your widget where you want by using the mouse. Don't forget to save the settings using the start-menu.
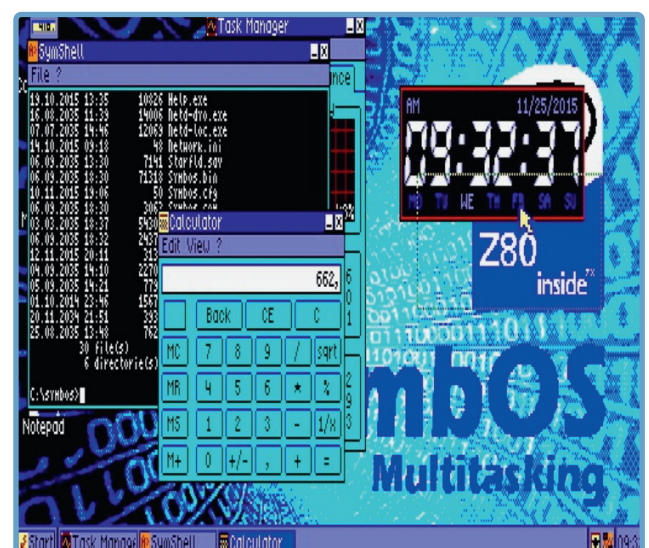
Task Manager [TASKMGR.EXE]
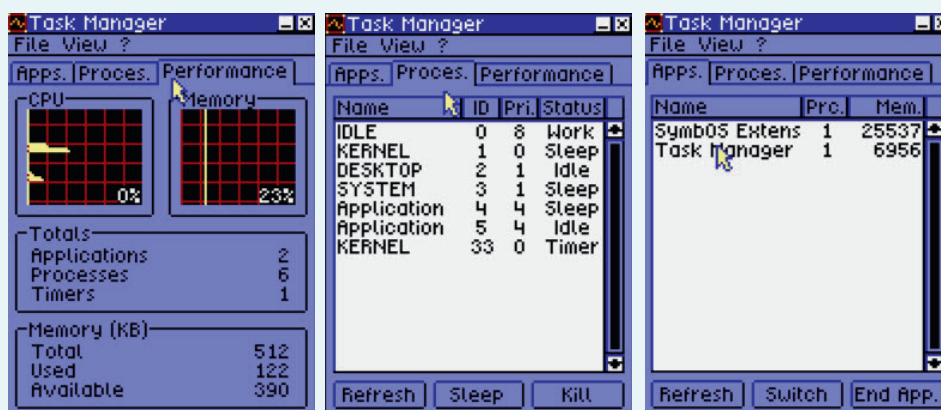
With the task manager you can have a view about the utilization of the system, memory uses and process and applications. There is also the possibility to start are stop applications or processes.

Control Panel (Date and Time) [CPTIME.EXE}
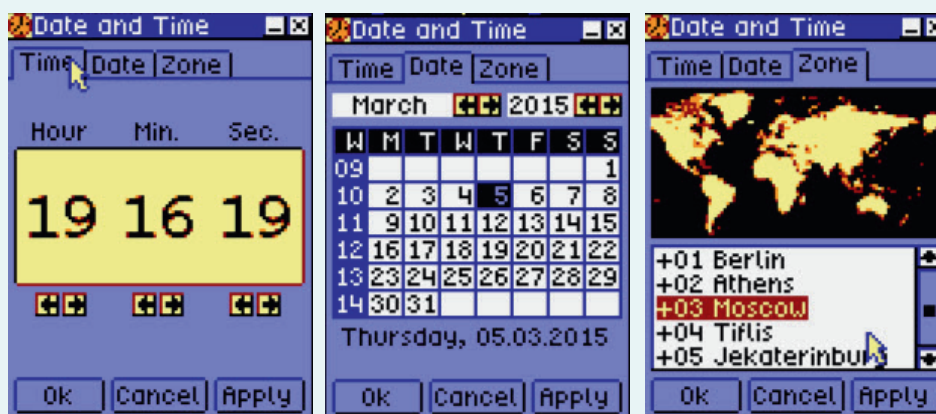
You can setup the date and time in the control panel or by clicking on the time bottom right in the taskbar.

Control Panel (Mouse settings) [CP.EXE}
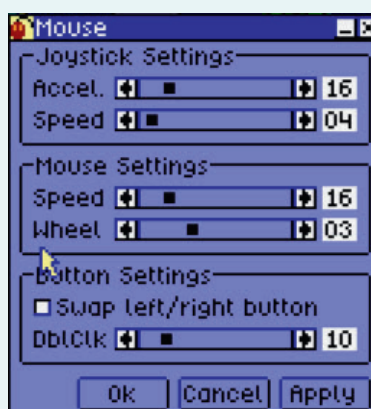
In the control panel you can change the mouse and joystick speed settings. Press OK and then [SAVE] SymbOS settings in the control panel or start menu.

System applications for SymbOS

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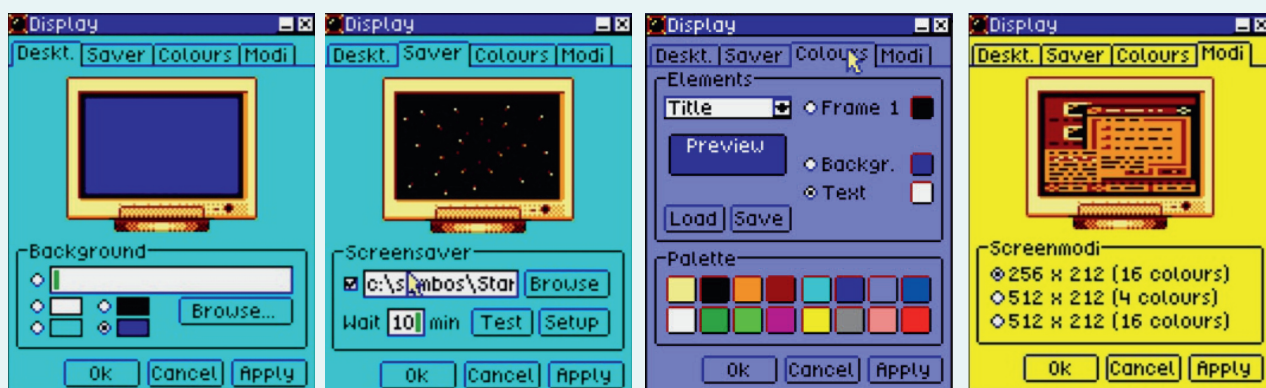
In the display section you can change the background, screensave, content colors and resolution. Depending on your hardware different colors and resolutions are possible. See supported SymbOS resolutions. Press OK and then [SAVE] SymbOS settings in the control panel or start menu.

Control Panel (Keyboard settings) [CP.EXE}

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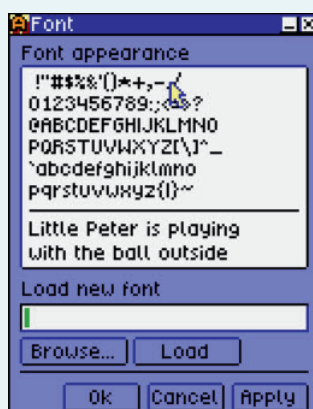
In the control panel you can change the font. There are several font available for SymbOS. Load you font by browsing to the font file and click [LOAD] Press OK and then [SAVE] SymbOS settings in the control panel or Start Menu.

6.0 SymbOS Shell

SymbOS SHELL [CMD.EXE]

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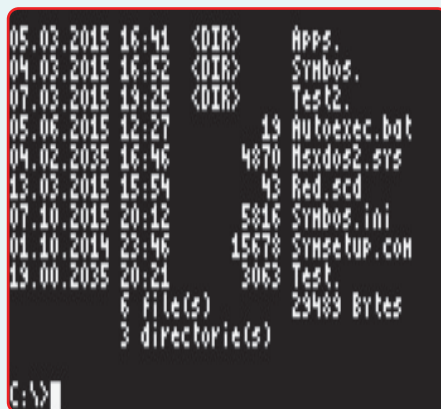
[DIR]	display files
[DIR %h]	display hidden files
[DIR %s]	display system files
[DIR %f]	calculate free disk space
[DIR %p]	pauze
[DIR *.exe]	wildcards filters
[DIR fi*.ex*]	wildcards filters
[CD]	display directory
[CD \]	browse to root directory
[CD ..]	go one directory back
[CD folder]	browse to folder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

SymbOS SHELL [CMD.EXE] (deleting files and directorys, 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

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

[DATE]   display or set date

[TIME]   display or set time
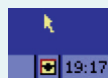
(Date and time can also be changed by double click on the time in the taskbar)

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

[REN filename newname]   Rename files or directorys
[REN *.TXT *.BAK]   rename files with wildcards

[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)

[COPY source destinstion]   copy files
[COPY source.* destination.*]   copy files using
                                wildcards
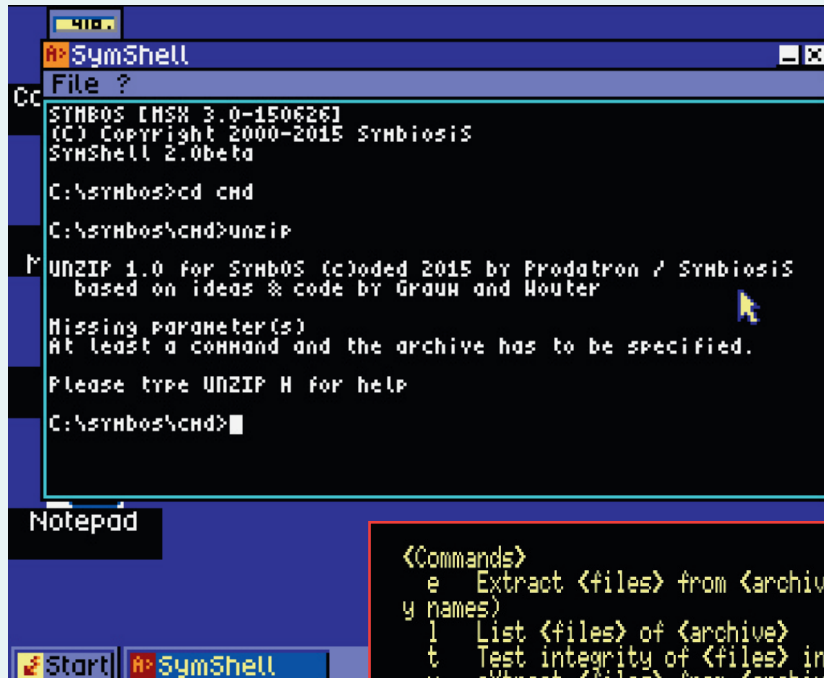
[MOVE source destinstion]   move files
[MOVE source.* destination.*]   move files using
                                wildcards

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

```
SymShell                                    _ □ ✕
 File  ?
SYMBOS [MSX 3.0-150626]
(C) Copyright 2000-2015 SymbiosiS
SymShell 2.0beta

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 Wouter

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>
   %c:<file>
       Concatenate output(s) to <file>
   %f  Fast mode (no CRC check)
   %o  Overwrite existing files
   %s  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 Wouter

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:
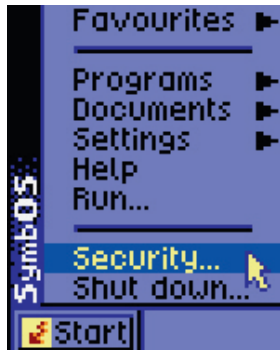
Open the start menu an choose "security". This feature can only be used if the extended desktop is loaded.
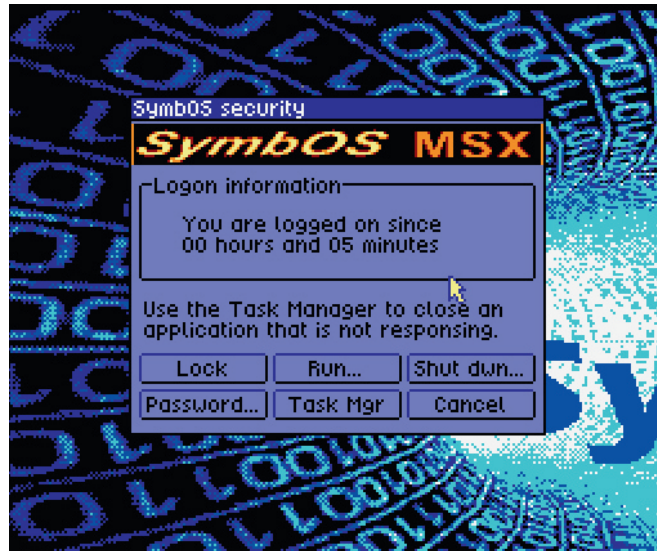
If this is the first time, or if you want to change your password, choose the password option in the lock screen.
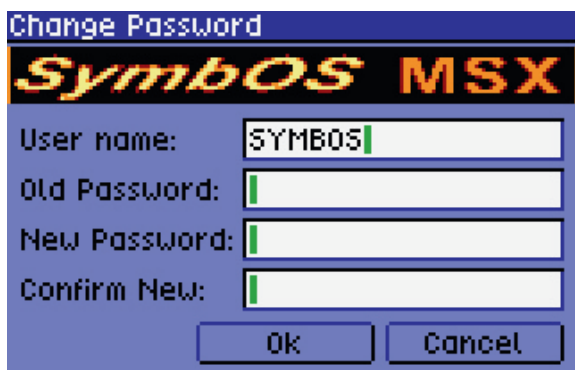
For the SYMBOS (administrator user) choose a new password. By default the password is blank.

To unlock your SymbOS workstation, enter your password. If you forgot you 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 resourcess.

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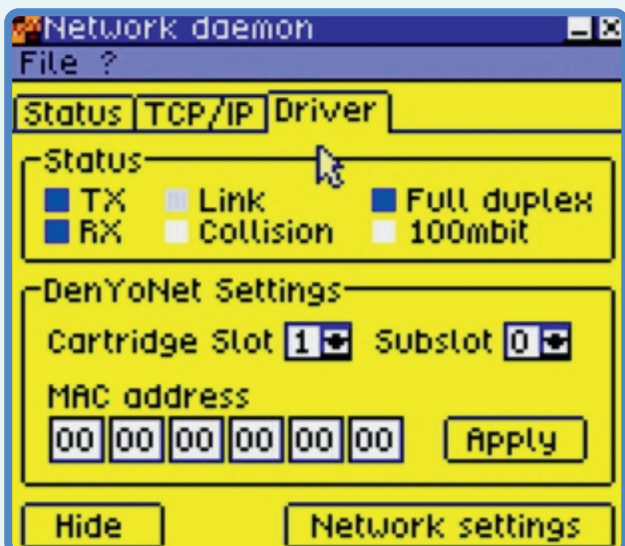
If the status is 'No Device' go to the driver tab and set the correct settings for your device. Depending on which hardware is installed choose the correct settings for your network hardware.

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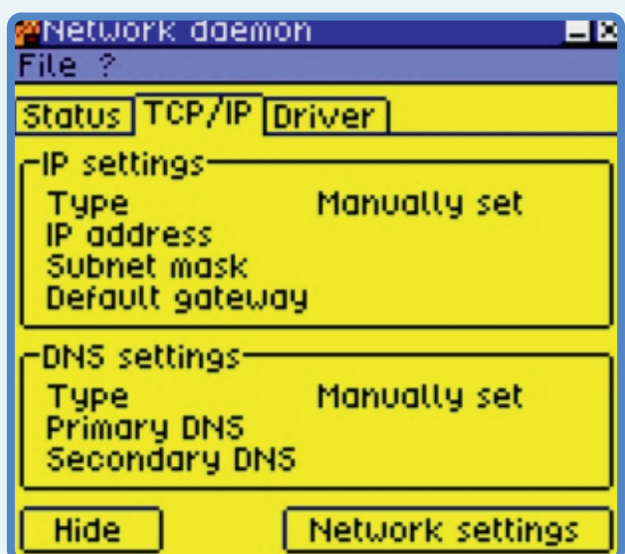
If the IP number is not correctly setup go to the TCP/IP tab and define a IP number using the Network settings button.

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

Enable Network support in SymbOS

TCP/IP properties — IP address / DNS settings

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network admin for the appropriate IP settings.

○ Obtain an IP address automatically
◉ Use the following IP address

IP address: 192.168.22.23
Subnet mask: 255.255.244.0
Default gateway: 192.168.200.1

Ok — Cancel

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)

TCP/IP properties — IP address / DNS settings

Hostname: MYMSX

○ Obtain DNS server addresses automatically
◉ Use the following DNS server addresses

Primary DNS: 192.168.1.1
Secondary DNS: 86.21.77.11

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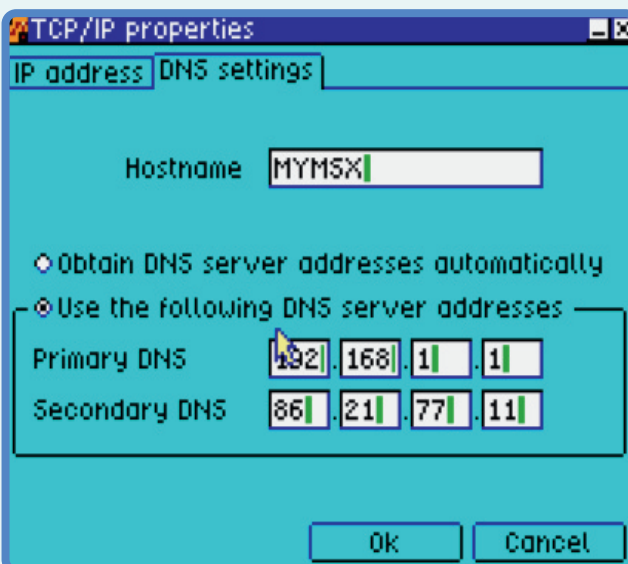
A DNS (Dynamic Name Server) is needed to translate hostnames to IP addresses. You can choose to obtain a DNS server addresses automatically or to use a static DNS server.
Most of the time the DNS server is the same IP as your gateway. You need to ask your network administrator for the appropriate IP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

Network daemon — Status / TCP/IP / Driver

IP settings
Type: Manually set
IP address: 192.168.22.23
Subnet mask: 255.255.244.0
Default gateway: 192.168.200.1

DNS & Hostname
Type: Manually set
Primary DNS: 192.168.1.1
Secondary DNS: 86.21.77.11

Hide — Network settings
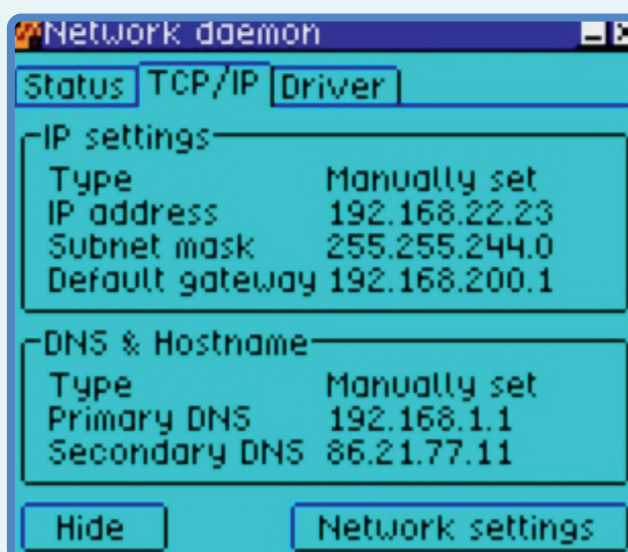
If the IP number is correcly it will be displayed in the TCP/IP tab. If everything is correct you are connected to your local network or to the internet. with your Z80 home computer! If you not have a network hardware device and you want to play arround with networking in SymbOS you could load a localhost 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.

Enable Network support in SymbOS

SYMBOS

Network daemon _ ⊠

File ?

| Status | TCP/IP | **Driver** |

─Status─────────────────
☐ TX   ■ Link   Signal ▂▃▄▅▆
☐ RX

─M4 Board Settings───────
SSID [SymbOS-Backbor] [Connect]
Key   [**********] ☐ Show
         M4 at ROM 117 (Firmware 1.9)

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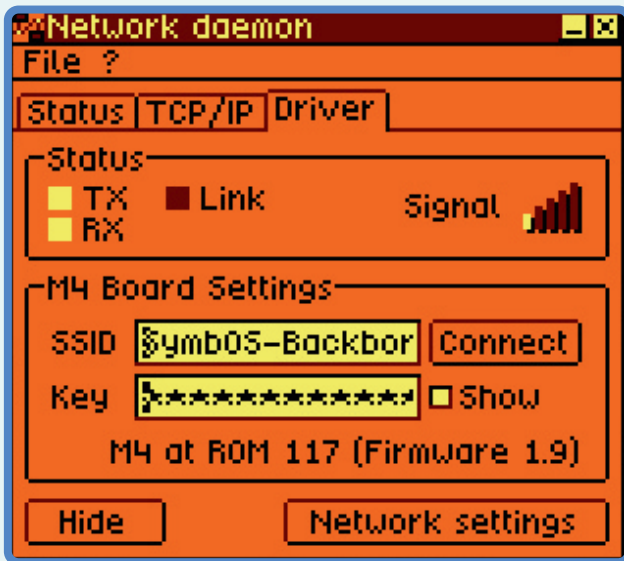
When using a Wifi adapter you have to provide the SSID of your network and the password of your security mode. SymbOS shows you the signal strenght of your connection. Be sure you are using the last Firmware provide for the M4

Network daemon _ ⊠

File ?

| **Status** | TCP/IP | Driver |

Adapter: M4 Board ESP8266
(driver version 0.1)
Host:

─Network status──────────
Status   ONLINE
Connections   0
Maximum   4
Sent   0 KB
Received   0 KB

[Hide]   [Network settings]
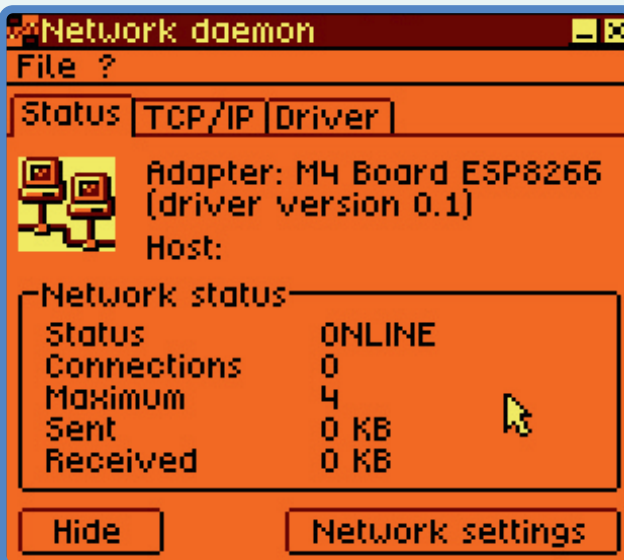
If your Wifi is connected you get an Online in the status.

WiFi

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.

Use Network applications in SymbOS

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

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.

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!

9.0 SymbOS Applications

SymAmp (Music Player)
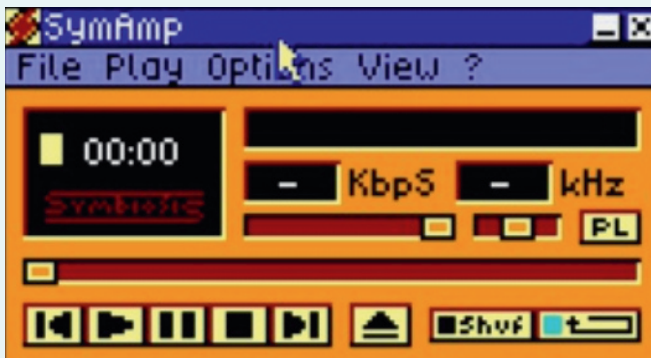
SymAmp is a music player for SymbOS, which currently supports compiled Starkos modules (SKM, this is the compiled version), Soundtrakker 128 modules (ST2, this also is the compiled version of *.128 files), PT3 modules (ZX Spectrum Protracker, Vortex Tracker) and MP3 files (MSX with MP3MSX decoder card required). 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 automatically.

SymPlay (Video Player)
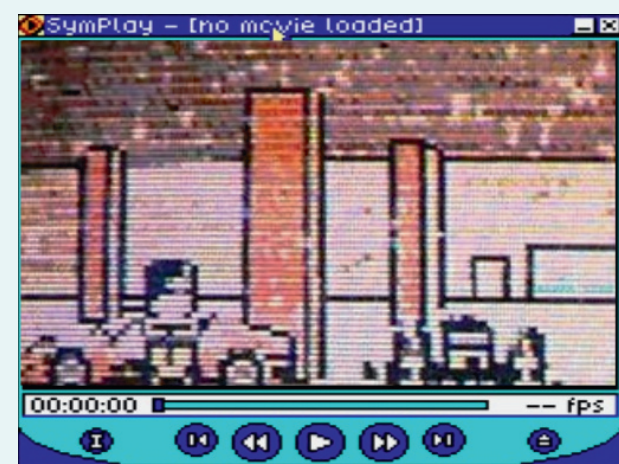
SymPlay is the first and only CPC application, which allows you to play videos from your hard disc or compact flash card. It supports any kind of resolution and data rate (frames per second). As it is completely independed from the hardware, it behaves on a 12MHz TREX like on an original 4MHz CPC - just 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)
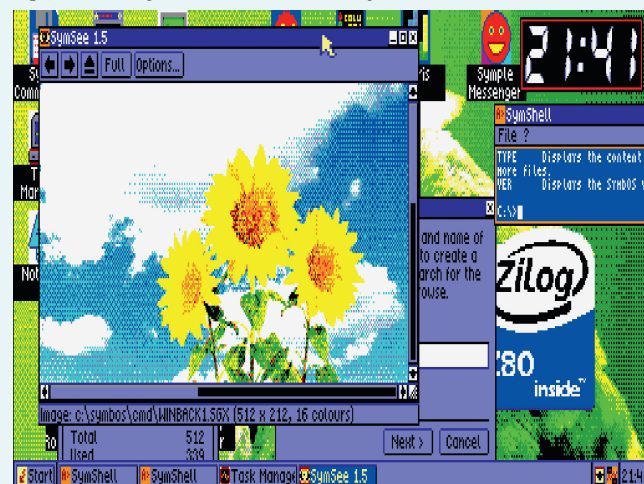
SymSee is a picture viewer for SymbOS, which allows you to watch your complete image library in a very comfortable way. You can step through your gallery with one mouse or keyboard click for each picture. Pictures can be viewed in window or (more or less) fullscreen mode. Raw 16K CPC files, OCP Art Studio (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.

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SymbOS Applications

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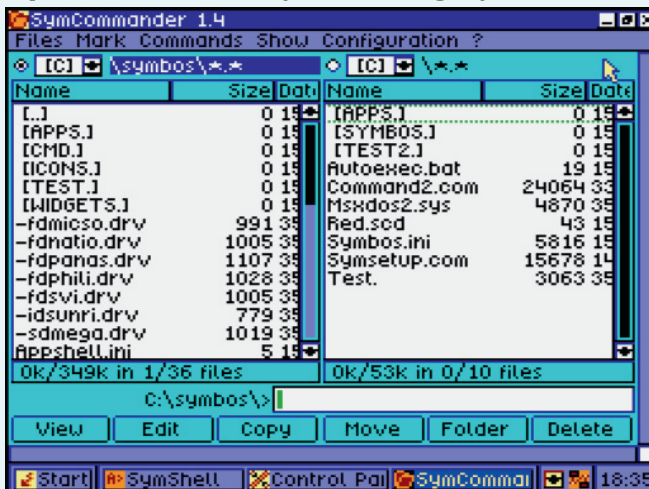
SymCommander is designed like the windows clone of the good old Norton Commander. Because of its huge keyboard support it's a very comfortable and fast to use tool for managing your files on floppy and hard disc. With the function keys or a mouse click on the buttons or menu entries you can reach all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

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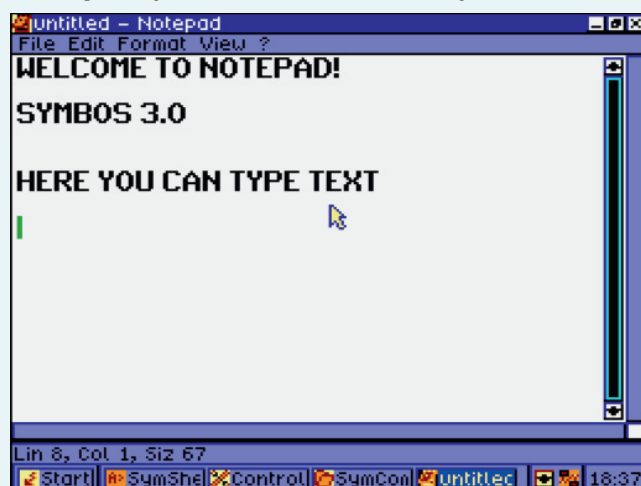
Notepad is a multiline textinput control. It is the most complex control of the desktop manager has the functionality of a small text editor and is an exact copy of modern textedit-boxes. It supports features like auto-word-wrapping, support of any proportional fonts and colours, unlimited line length,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

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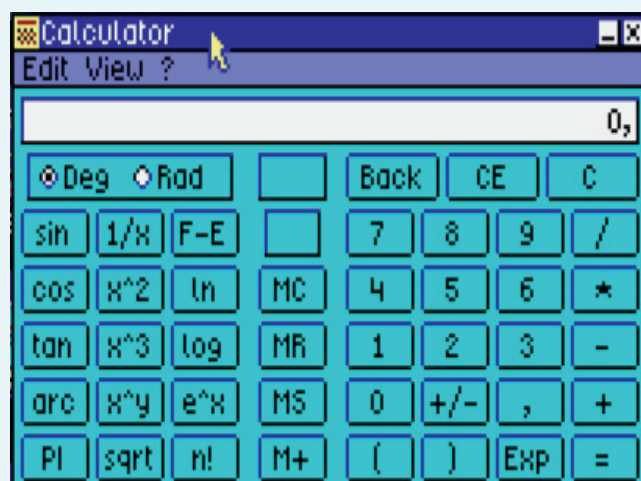
The pocket calculator was the first application available for SymbOS and has been rewritten after two years.

SymbOS Applications

SymZilla (Web/DOX browser)

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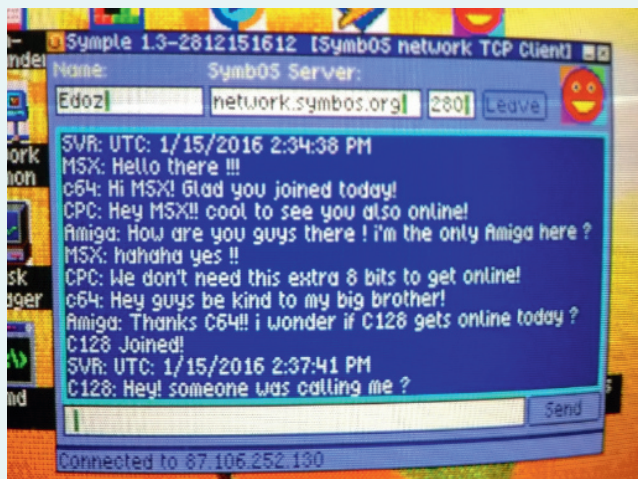
Symple web chat client for SymbOS. Symple needs a network connection and the network daemon to run.

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

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

Battleship (SymbOS first NETWORK game)

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.

SymbOS Applications

MineSweeper

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 "advaned" game mode.

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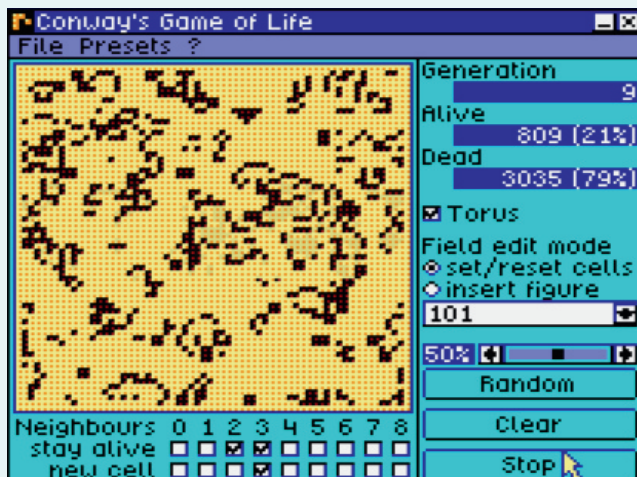
This application was mainly developed to demonstrate the multi threading ability in the multitasking environment of SymbOS. It also contains a library with hundrets of objects and supports all combinations of alternative cell rules.

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 enviorment.
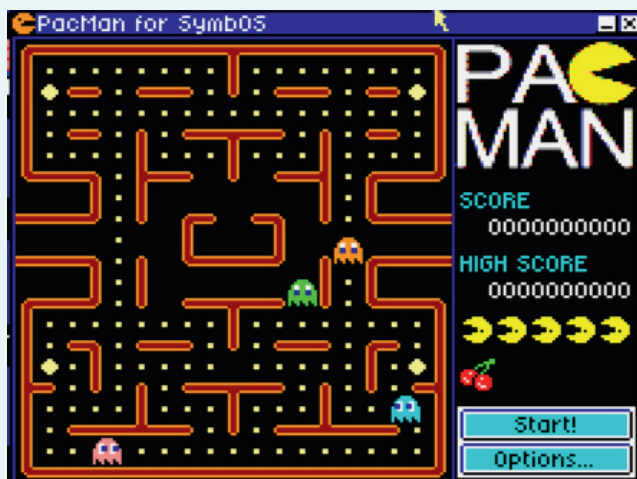
Pacman

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

60

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

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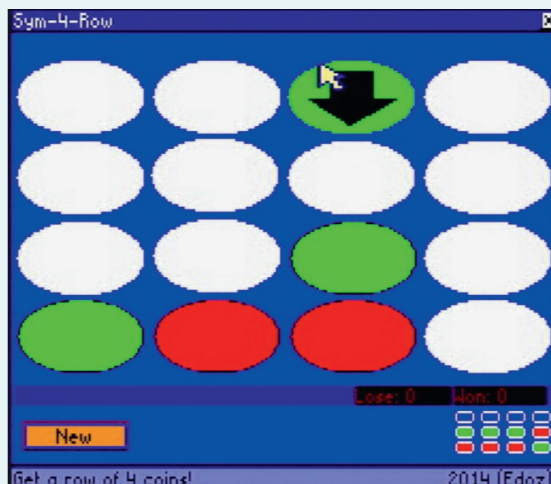
The first official released SymStudio/Unify application that has been developed. It is the well known game "4-in-a-row" It is a very simple version as this was the first game test game application written in SymStudio. You can use the right mouse button to drop the coins.

SymbOS Applications

SymBUS

61
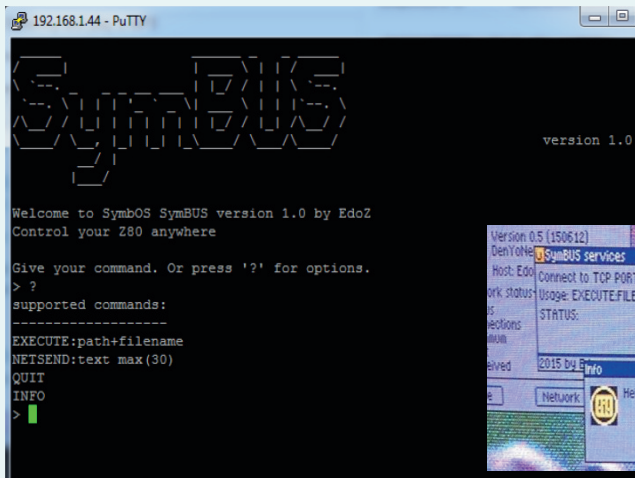
SymBUS can be used to remote control your z80 system. You have to start it on your SymbOS workstation and enable the remote port. After that you can use putty or telnet to connect to the port and do some remote tasks.
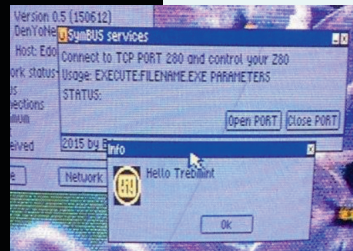
SymIRC
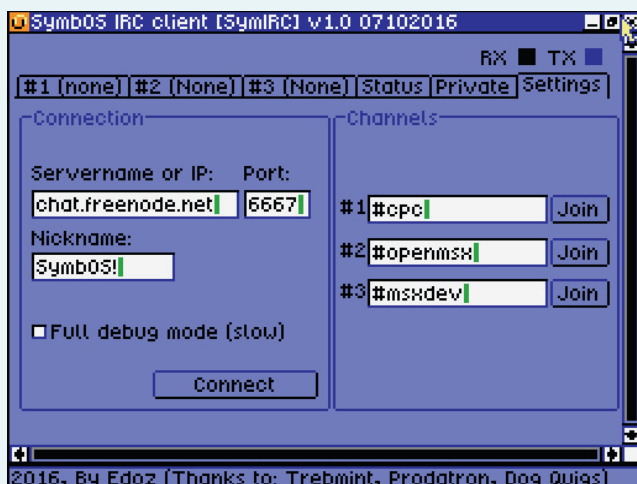
SymIRC is a IRC client which can be used against a IRC server. The login of the server could take some time. This because the server is sending sometimes a lot of information which had to be proccesed by the client.

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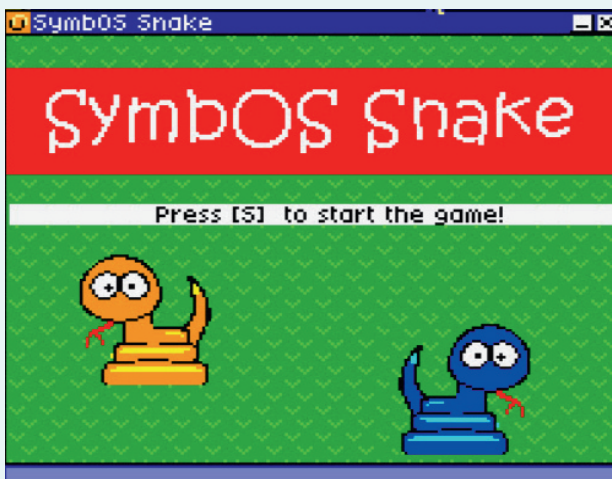
Snake is a multiplayer network game but can be played in single player mode as well. This network is a realtime network game and could be a bit slow on slow systems. If you have a faster z80 it is recommended

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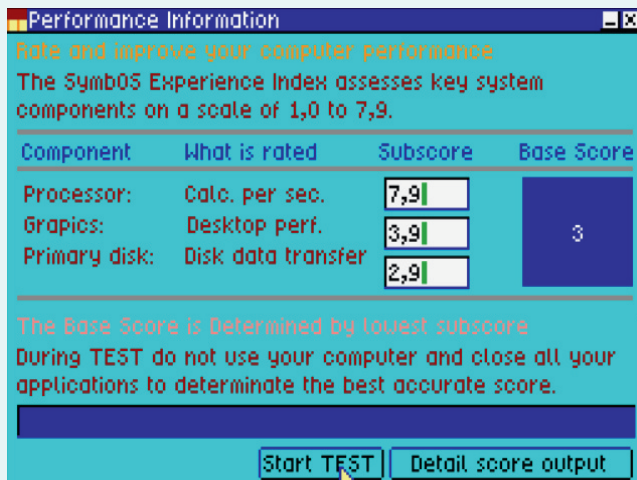
Perfmon can be used to compair your performance against other z80 machines.

Dimon
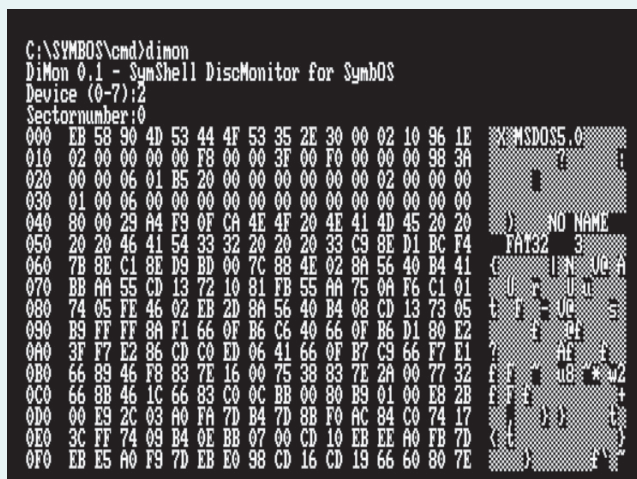
Commandline disc monitor to view the disks in Hexidecimal output.

WGET.COM

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

SymbOS Applications
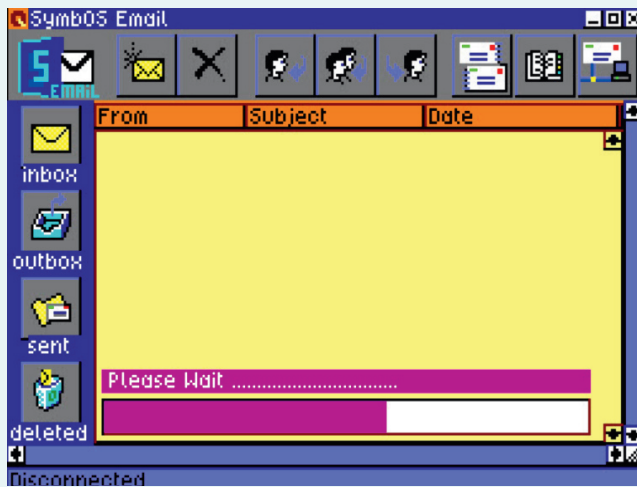
SymbOS Email

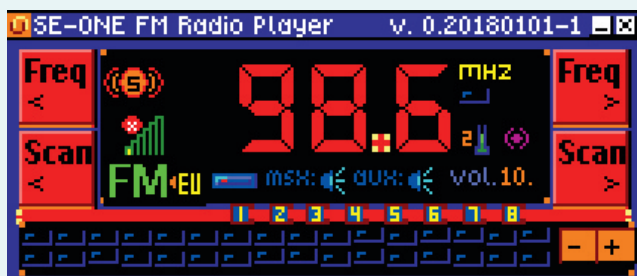SymbOS E-mail client for POP3 and SMTP. Only supported by SymbOS 3.1 and FAT16 or higer.

DAB+ Radio

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

http://www.tmtlogic.com

FM Radio

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

http://www.tmtlogic.com

SymbOS 2048

64

SymbOS 2048 puzzle game.

Flappy Bird
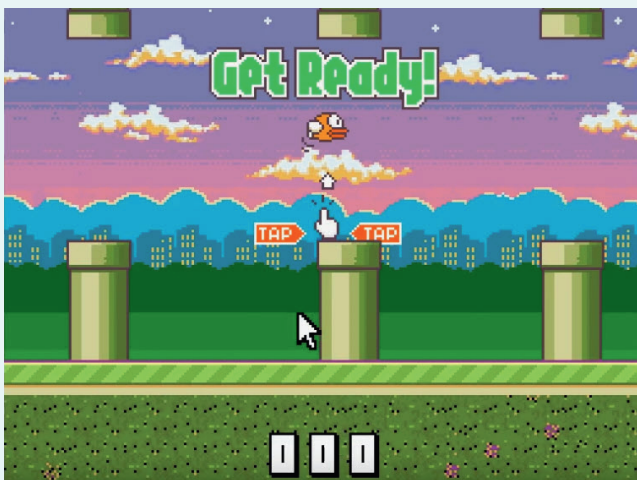
First fullscreen pattern (example) mode game for SymbOS
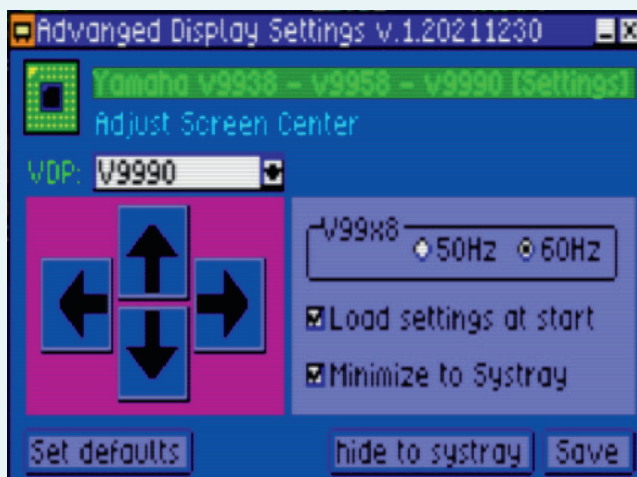
Sokoban
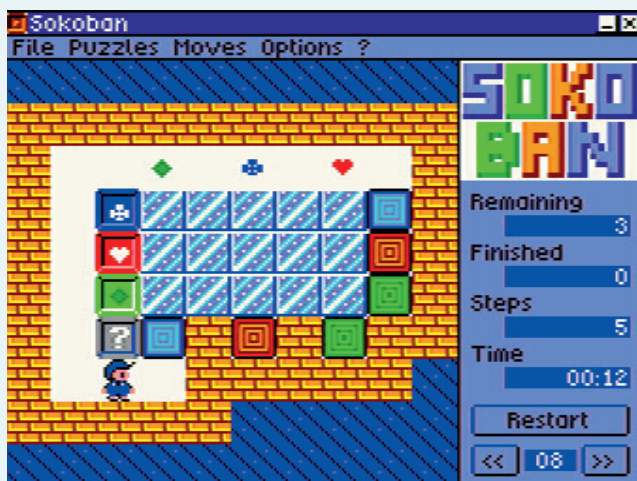
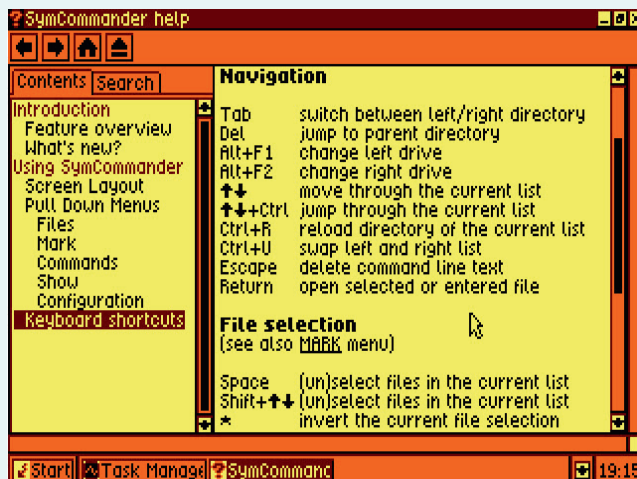Sokoban puzzle game for SymbOS.

DOOM

65

Z80 doom version for SymbOS. Playing doom in a window!

Advanged Display controller

Use for v9938, v9958 and v9990 (Hz and set screen)

Help browser

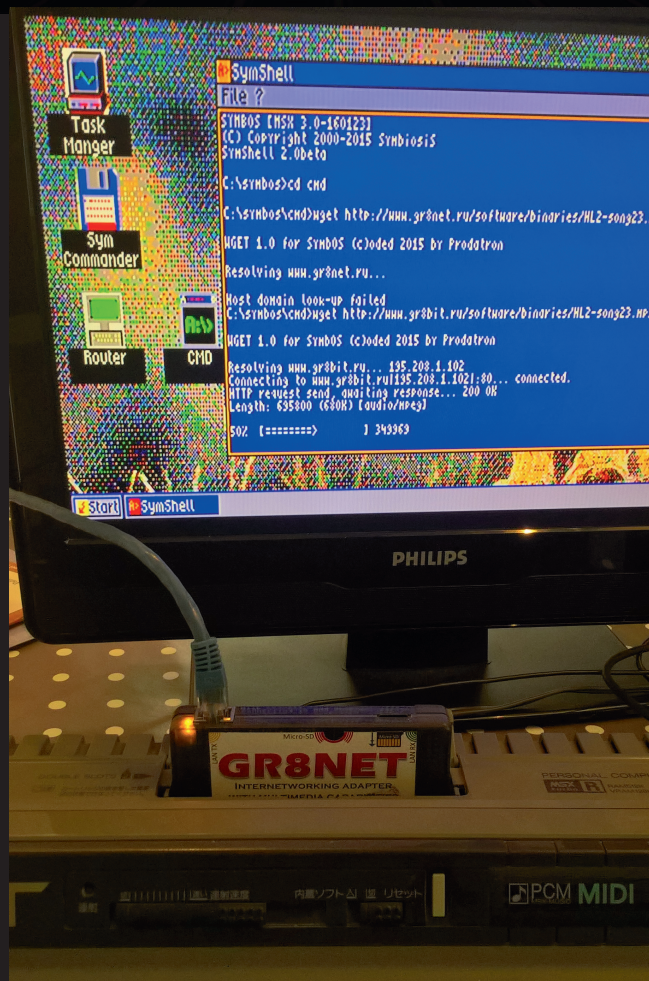Help function used in most applications of SymbOS.

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"Connects Z80ties together forever"