How to create a boot (start up) menu under Windows 9x/ME

jesolo
Online

Posts: 1706
Joined: 2014-6-24 @ 19:04
Location: South Africa

How to create a boot (start up) menu under Windows 9x/ME · quote

by **jesolo** » 2016-4-27 @ 13:36

During my time on Vogons, I've come across a couple of posts where users enquired about boot up settings and/or boot menus under Windows 9x. Windows ME will not allow you to boot to MS-DOS without applying some patches first (these are available online), but I haven't yet tried this configuration under a Windows ME environment with the relevant patches applied.

Some users like to have multiple operating systems on one system (which is sometimes necessary, depending on the type of software you like to run), but I've noticed that some users have both MS-DOS 6.22 & Windows 9x (the most popular one being Windows 98SE) on the same system.

Since Windows 9x also has MS-DOS "built in", you can just set up a boot (start up) menu that will allow you to boot to either Windows or to MS-DOS (with multiple configurations) on the same partition.

I came across a tutorial a couple of years ago that I saved for myself (unfortunately, the website doesn't seem to exist anymore).
Although this tutorial still refers to Windows 95, it applies to all versions of the Windows 9x family (please note that I'm not the author of this document and take no credit for it).

Real Mode MS-DOS emulation under Windows 9x.doc
Real Mode MS-DOS Emulation under Windows9x
(40.5 KiB) Downloaded 178 times

I've also attached a link to what the various options (parameters) are that one can specify under the MSDOS.SYS file: **https://support.microsoft.com/en-us/kb/118579**
In order to boot straight to MS-DOS, the first step would be to edit the MSDOS.SYS file.

I've also attached (simplified) versions of my own Autoexec.bat & Config.sys files, but these are not definitive. Users can choose whatever commands/parameters they wish to insert in their startup files.
Most of these command/settings I obtained by reading the MS-DOS 6.22 Help menu (I originally had a multiple boot menu configuration under MS-DOS 6.22) and online tutorials.
In this setup, Windows 98SE is the operating system and the sound card is an AWE64.

I'm sure the more experienced users here on Vogons will have other suggestions and/or tweaks (and are welcome to provide input), so this "guide" is more for the beginners or users that never have tried this before, but would like to have such a setup. Hope some users find this useful.

Where applicable, I've inserted some comments (in brackets) at the end of a command. You obviously need to remove these comments, otherwise DOS might complain about not being able to execute the command properly.

Contents of Config.sys file:

CODE: SELECT ALL

```
[ menu ] (this is what will be displayed on the boot screen, similar to what you see on the Windows 98 start up disk)
menuitem=windows, Microsoft Windows 98 Second Edition
menuitem=DOS1, MS-DOS 7.10 - Boot with Expanded Memory
menuitem=DOS2, MS-DOS 7.10 - Boot without Expanded Memory
menudefault=windows, 5

[common] (this section will load all commands, regardless what menu option is chosen)
DEVICE=C:\WINDOWS\HIMEM.SYS /TESTMEM:OFF
FILES=45
BUFFERS=30,0
DOS=UMB,HIGH (note that I didn't also specify UMB here, since some of my boot menu options below doesn't load EMM386.EXE.  I therefore load it with each menu option, where applicable)
LASTDRIVE=Z (this can be higher depending on the highest drive letter you want to use, but the higher the letter, the more memory is being used).
```

Contents of the Autoexec.bat file

CODE: SELECT ALL

```
@ECHO OFF
SET SOUND=C:\SB16
SET BLASTER=A220 I5 D1 H5 P330 E620 T6
SET MIDI=SYNTH:1 MAP:E MODE:1
PROMPT $g$g
PATH C:\;C:\WINDOWS;C:\WINDOWS\COMMAND;C:\CTCM (this is quite useful is you want to run a file/command, while in a specific folder, but don't want to specify where the actual file/command is located)

goto %config%

:windows
C:\WINDOWS\WIN.COM
goto end
```

Contents of the Dosstart.bat file (this file is only read when you select the "Restart in MS-DOS Mode" option when shutting down Windows and effectively acts in the same manner as Autoexec.bat):

CODE: SELECT ALL

```
C:\WINDOWS\CTCM
LH C:\MOUSE\MOUSE.COM
LH C:\WINDOWS\COMMAND\MSCDEX.EXE /D:MSCD001
```

Last edited by **jesolo** on 2019-2-05 @ 19:46, edited 5 times in total.

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collector
1336

Posts: 4300
Joined: 2002-1-15 @ 10:39

Re: How to set up a start up (boot) menu under Windows 9x/ME · quote

by **collector** » 2016-4-27 @ 18:31

This should be in Marvin. This subforum is for help with DOS games.

The Sierra Help Pages -- **New Sierra Game Installers** -- **Sierra Game Patches** -- **New Non-Sierra Game Installers**

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jesolo
Online

Posts: 1706
Joined: 2014-6-24 @ 19:04
Location: South Africa

Re: How to set up a start up (boot) menu under Windows 9x/ME · quote

by **jesolo** » 2016-4-27 @ 17:33

> **collector wrote:**
> This should be in Marvin. This subforum is for help with DOS games.

The purpose of this topic is to help people to be able to run their DOS games in a real mode DOS environment under Windows
However, if the general consensus is that this is a more hardware related topic, then I apologise for posting under the wrong thread.
Come to think of it, it could even belong under Millways.
I'm confused.

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dr_st
1320

Posts: 2038
Joined: 2015-4-09 @ 07:18

Re: How to set up a start up (boot) menu under Windows 9x/ME · quote

by **dr_st** » 2016-4-27 @ 17:34

In a nutshell:

Under Win95/98 - the process to set up the startup menu is exactly the same as for DOS 6.x, provided that you first added **BootGUI=0** in *Msdos.sys* (otherwise Windows will auto-load at the end of Autoexec.bat), and, optionally, **Logo=0** (if you want to avoid the splash screen so it feels like pure DOS and you see the boot process). As far as I could see, this is the only key point that is missing from your guide (although it is present in the links).

Under WinME - you need to apply the patches you mentioned. And then it's probably the same thing.

Stiletto
1336

Posts: 4370
Joined: 2002-7-01 @ 21:57

Re: How to set up a start up (boot) menu under Windows 9x/ME · quote

by **Stiletto** » 2016-4-27 @ 19:48

> **jesolo wrote:**
> > **collector wrote:**
> > This should be in Marvin. This subforum is for help with DOS games.
>
> The purpose of this topic is to help people to be able to run their DOS games in a real mode DOS environment under Windows

The purpose of the DOS subforum is to help people to be able to run their DOS games in newer operating systems, which at the time of VOGONS' creation was Windows XP. We were not considering "Windows 9x" as newer than DOS. So, getting DOS games going in everything from the Windows 2000 / Windows XP VDM (NTVDM) and any other hack you can think of, on upwards to Windows 10 and beyond. Mostly help with specific games and how-to's. DOSBox-only threads are preferred in the DOSBox section, Non-DOSBox emulator-specific questions in the PC Emulation section.

VOGONS - Very Old Games On New Systems.

... Moved to Marvin.

"I see a little silhouette-o of a man, Scaramouche, Scaramouche, will you
do the Fandango!" - Queen

Stiletto

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chinny22
1320

Posts: 2523
Joined: 2011-8-26 @ 12:02
Location: Australian but living in the UK for now

Re: How to set up a start up (boot) menu under Windows 9x/ME · quote

by **chinny22** » 2016-4-28 @ 13:25

Another method I used ever since I upgraded to Windows 95 was to create a shotcut to command.com on the desktop and modify the autoexe/config.sys in there and force to restart in MS-DOS mode
Yes it does mean you have to open windows simply to double click the shortcut and PC will boot again into do, but it will continue to do this till you type exit, even if the PC is turned off.

Not sure if this works in WinME though

HighTreason
Online

Posts: 1186
Joined: 2014-7-08 @ 14:50
Location: Hull, UK

Re: How to set up a start up (boot) menu under Windows 9x/ME · quote

by **HighTreason** » 2016-4-28 @ 14:03

You can actually point one menu to another and even step back to the previous menu. I used this on systems with multiple elaborate setups.

Would you like me to post the CONFIG and AUTOEXEC from my retired K7 so you can see how I had that one set up?

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jesolo
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Posts: 1706
Joined: 2014-6-24 @ 19:04
Location: South Africa

Re: How to set up a start up (boot) menu under Windows 9x/ME · quote

by **jesolo** » 2016-4-28 @ 17:55

> **HighTreason wrote:**
> You can actually point one menu to another and even step back to the previous menu. I used this on systems with multiple elaborate setups.
>
> Would you like me to post the CONFIG and AUTOEXEC from my retired K7 so you can see how I had that one set up?

Yes, I would like to see what it looks like.

HighTreason
Online

Posts: 1186
Joined: 2014-7-08 @ 14:50
Location: Hull, UK

Re: How to set up a start up (boot) menu under Windows 9x/ME · quote

by **HighTreason** » 2016-4-28 @ 19:27

OK, obviously you can't just drop these in and use them on your own machine as they rely on certain files and probably certain hardware.

[B]MSDOS.SYS[/B]

CODE: SELECT ALL

```
[Options]
BootGUI=0
BootMulti=1
DoubleBuffer=1
AutoExec=1
WinVer=4.10.2222
Logo=1
;
;The following lines are required for compatibility with other programs.
;Do not remove them (MSDOS.SYS needs to be <1024 bytes).
;xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx0
;xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx0
;xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx0
```

CONFIG.SYS

CODE: SELECT ALL

```
[ menu ]
MENUCOLOR=6,0
SUBMENU=DOS, Start DOS.
SUBMENU=WIN, Start Windows.
MENUDEFAULT=WIN,3

[DOS]
MENUITEM=DOS,DOS Only.
MENUITEM=DI,DOS and HIMEM.
MENUITEM=DZ,DOS, HIMEM and EMM386
MENUITEM=D3,DOS, HIMEM, EMM386 and MOUSE.
SUBMENU=WIN,Load Windows instead.
MENUCOLOR=10,0
```

AUTOEXEC.BAT

CODE: SELECT ALL

```
Recho off

Recho off
SET SYSNAME=Riccardo

MODE CON COLS=80 LINES=50
REM LH UNZVBE
cpustat
emsstat

PROMPT $e[37;40;1m$p$g
ECHO The current configuration is %CONFIGN.
```

Things of note:
> The IF statements in AUTOEXEC. They can be done more efficiently, this one was butchered from some old template. My K5 used a few IF NOT statements.
> As noted, these used a template I don't have any more.
> There may be modifications to WIN.INI and SYSTEM.INI but I don't remember. They do nothing significant if they exist, probably only came into my mind because the machine requires the MAXPHYSPAGE value to be set.
> You can actually use INCLUDE in CONFIG.SYS to load an existing block into another without typing it again. For example I could use;

CODE: SELECT ALL

```
...
[D2]
DEVICE=C:\WINDOWS\HIMEMX.EXE
DEVICE=C:\WINDOWS\COMMAND\EMM386.EXE ALTBOOT NOEMS

[D3]
INCLUDE=D2
DEVICEHIGH=C:\WINDOWS\COMMAND\OAKCDROM.SYS /D:CDROM
...
```

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Re: How to set up a start up (boot) menu under Windows 9x/ME · quote

by **jesolo** » 2016-4-28 @ 21:20

Quite an impressive configuration you had set up for yourself.
I like the idea of the colours.
The sub menu system is also quite useful if you do not wish to clog your main start up menu with too many options.

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Re: How to set up a start up (boot) menu under Windows 9x/ME · quote

by **jesolo** » 2016-4-28 @ 21:28

> **chinny22 wrote:**
> Another method I used ever since I upgraded to Windows 95 was to create a shotcut to command.com on the desktop and modify the autoexe/config.sys in there and force to restart in MS-DOS mode
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>
> Not sure if this works in WinME though

This is also a nice option, especially if you're already in Windows.
However, as you said, this method does require you to first boot up into Windows after which you must shut down again to enter DOS.

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