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| Bochs User Manual | | |
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8.18. Notes about VESA usage

Since Bochs 1.4 it is possible to use VESA graphics. There are some limitations in the current implementation, but in general it should work ok (we have run several test programs, the XFree86 VESA display driver, etc.)

In order to use VESA VBE, you need to enable it in your bochsrc by setting the [vga option](http://docs.google.com/bochsrc.html#BOCHSOPT-VGA) to vbe. Finally, you need to use the [LGPL'd VGABIOS](http://savannah.nongnu.org/projects/vgabios/) as [vgaromimage option](http://docs.google.com/bochsrc.html#BOCHSOPT-VGAROMIMAGE) for applications to correctly detect VESA support.

**Note:**  The VGABIOS is already included in the Bochs release, so no separate download is necessary.

**Note:**  To take advantage of the VBE, you must tell Bochs to use the LGPL'd VGA BIOS version 0.4c or higher. A current version of the VGA BIOS will work.

Current limitations:

* 4bpp modes support is incomplete (8, 15, 16, 24 and 32bpp should work)
* banked mode is very slow (if you can, just use Linear Frame Buffering instead!)
* only 320x200, 640x400, 640x480, 800x600, 1024x768 are currently supported

Interesting Facts:

* You need a display driver capable of using the VESA BIOS for this to work (a recent XFree86 will do, Windows 9x/NT/2K/XP probably will not work 'out of the box'.
* Currently the VBE2 extension should be supported ok

8.18.1. Instructions to setup Bochs VBE in Windows Guest OS

This was contributed by Martin Bochnig in February 2004.

Instructions for Win95/98:  
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I can only confirm that SciTech finally made a VBE driver  
for Windows. It works out of the box, at least with win95  
as guest OS, provided you use Bochs 2.1 with the LGPL  
vgabios.  
  
Here is how I did it :  
- install win95 with the vga driver.  
- download sdd 7 beta from <http://www.majorgeeks.com/download382.html>  
- download pmhelp.vxd from <http://unununium.org/viewcvs/snap/redist/release/pmhelp.vxd>  
- copy pmhelp.vxd to the win95 system directory  
- install sdd7  
  
800x600 and 1024x768 in 16 and 24 bpp modes here.  
I did not try 32bpp.

This was contributed by Stanislav Shwartsman in September 2004.

Instructions for Win2000/XP:  
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Bochs VBE Display Drivers for Windows NT/2000  
<http://dhenriq.en.eresmas.com/>

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