

# INSTALLING BOCHS AND MINIX ON WINDOWS XP

Prepared For: ECS150 (Operating Systems)  
Professor Wu • Fall 2003  
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## PREPARATION

### Required Files:

File Name	Download Location
<code>Bochs-2.0.2.exe</code>	<a href="http://prdownloads.sourceforge.net/bochs/Bochs-2.0.2.exe">http://prdownloads.sourceforge.net/bochs/Bochs-2.0.2.exe</a>
<code>minix.tar.gz</code>	<a href="http://www.csif.ucdavis.edu/downloads/minix.tar.gz">http://www.csif.ucdavis.edu/downloads/minix.tar.gz</a>
<code>floppy.tar.gz</code>	<a href="http://www.csif.ucdavis.edu/downloads/floppy.tar.gz">http://www.csif.ucdavis.edu/downloads/floppy.tar.gz</a>

### Required Programs:

You will need a program that can handle `.tar.gz` files. The latest versions of **WinZip** should support `.tar.gz` files. An evaluation version can be downloaded from:

<http://www.winzip.com/ddca.htm>

Another program that would work is **WinRAR**. An evaluation version is available at:

<http://www.rarsoft.com/download.htm>

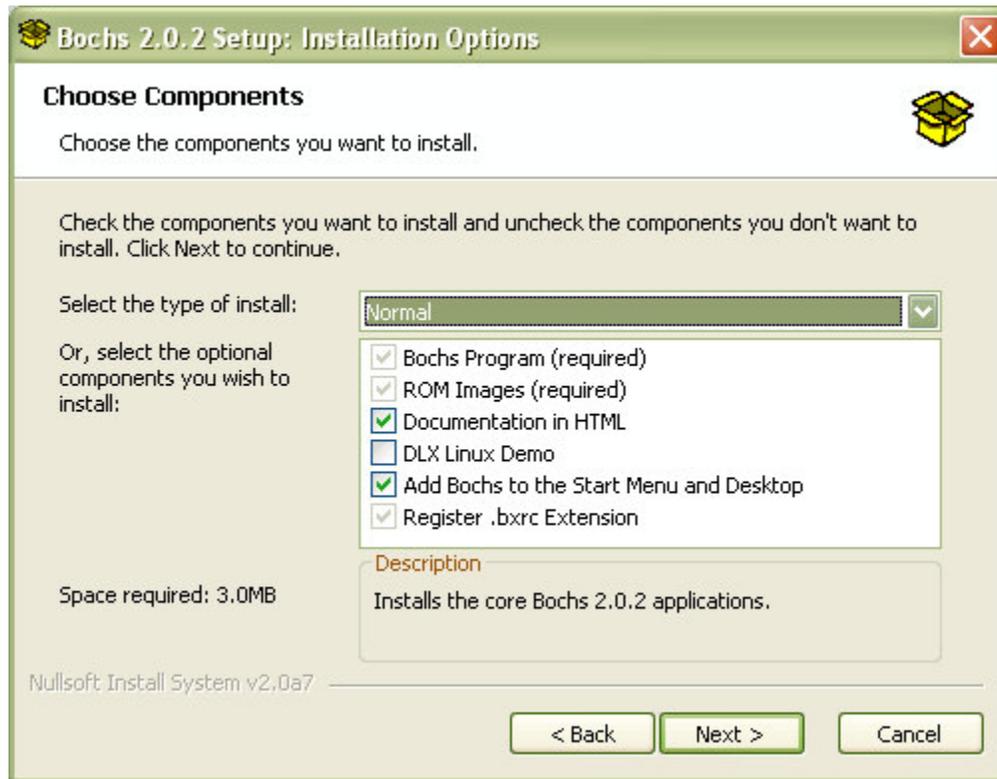
## INSTALLING BOCHS

Make sure you have downloaded the file `Bochs-2.0.2.exe`. If the link above does not work, go to the official **Bochs** website at <http://bochs.sourceforge.net/> and click “See All Releases” from the side menu. You should be able to download the latest windows installer from there.

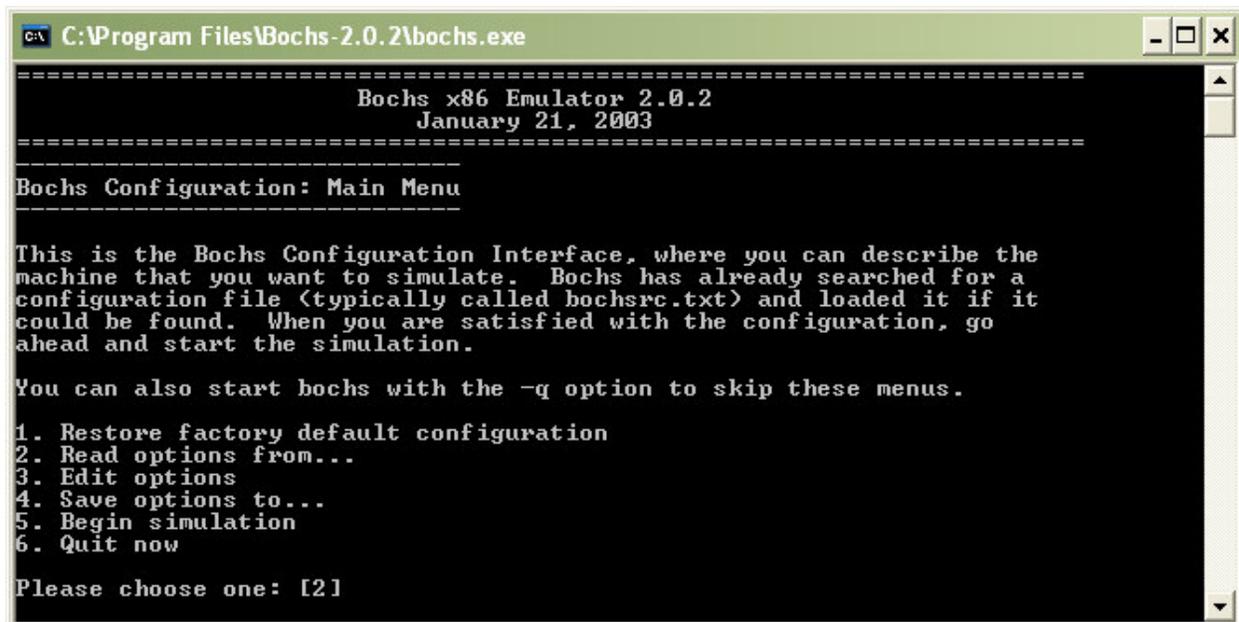
Once downloaded, run `Bochs-2.0.2.exe`. The installation should be straight forward. Remember the location you install **Bochs** (for later reference). The default location should be:

```
C:\Program Files\Bochs-2.0.2
```

Below is a sample **Bochs** installation prompt:



The installation program should place a **Bochs** icon on your desktop. If not, you can start **Bochs** by running `bochs.exe` (located in the installation folder). Below is what you should see when running **Bochs** for the first time:



## INSTALLING MINIX

Now that **Bochs** is installed, it is time to install **Minix**.

I recommend creating a directory for **Minix** somewhere on your system. For this example, assume this directory is:

```
C:\ECS150\Minix
```

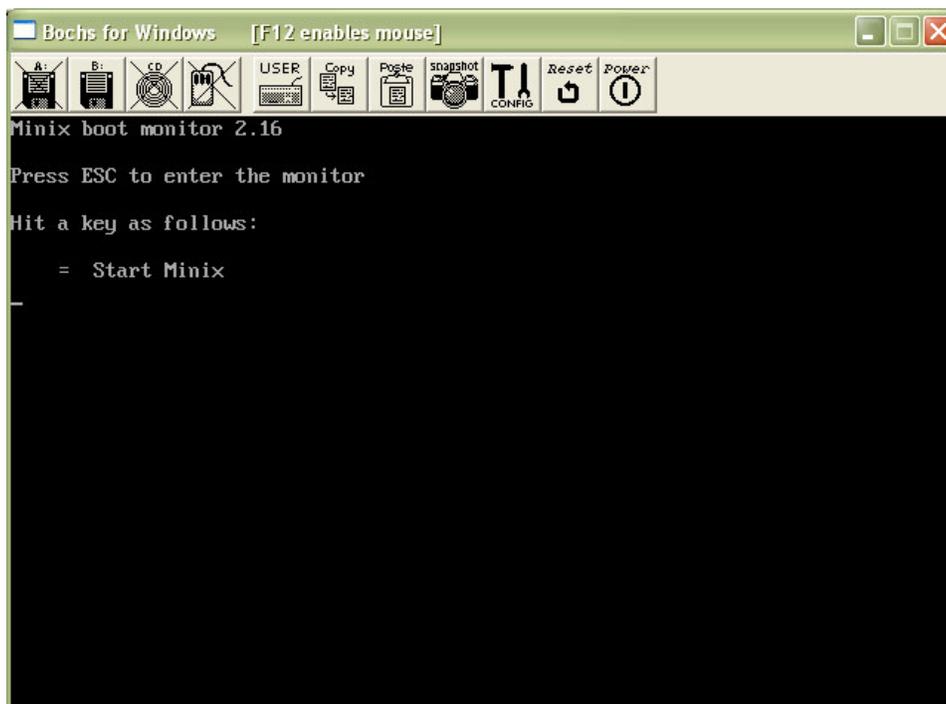
Using **WinZip**, **WinRAR**, or an equivalent program, uncompress the contents of `minix.tar.gz` into the above directory. You should now have the following files:

```
C:\ECS150\Minix\bochsrc.txt  
C:\ECS150\Minix\minix203.img
```

At this point, **Minix** is now “installed”. However, some configuration must occur before you can run **Minix** under **Bochs**.

## RUNNING MINIX ON BOCHS

The easiest way to run **Minix** on **Bochs** is to rename the file `bochsrc.txt` to `bochsrc.bxrc`. Then, you should be able to double-click `bochsrc.bxrc` to start **Minix**. You should then see the following screen popup:



Pressing the “=” key will boot **Minix**. The login is `root`, with no password. At this point, you have successfully installed and run **Minix** on **Bochs**.

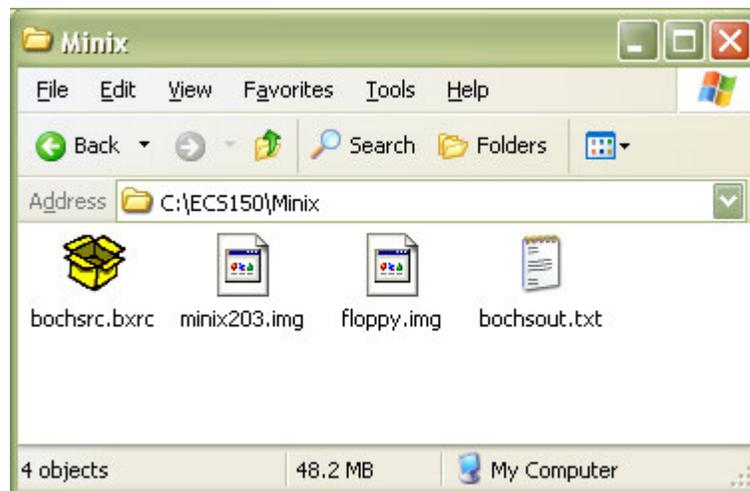
If changing the extension of `bochsrc.txt` to `bochsrc.bxrc` did not work, please see me. There are a couple other ways to get **Minix** running on **Bochs** that we can try.

## FLOPPY DISK SUPPORT

You may be required to turn in homework assignments using a floppy disk, or a virtual floppy image. (More on homework hand-in procedures will be posted later.)

### Virtual Floppy Disk Image:

First, let's configure **Minix** to support a virtual floppy disk image. You will need to use **WinZip**, **WinRAR**, or an equivalent program to uncompress the contents of `floppy.tar.gz` into `C:\ECS150\Minix`. The folder should now look something like this:



*Note: The file `bochsout.txt` is automatically created by **Bochs** after the first time you run **Minix**.*

This should be all that is required to use `floppy.img` as a virtual floppy image. For more information on mounting and unmounting this floppy image under **Bochs** and **Minix**, see the document `minix_bochs.pdf` available from the course website at:

[http://www.cs.ucdavis.edu/~wu/ecs150/minix\\_bochs.pdf](http://www.cs.ucdavis.edu/~wu/ecs150/minix_bochs.pdf)

## Physical Floppy Disk:

To use a physical floppy drive, you must edit the `bochsrc.bxrc` file. Line 35 should read as:

```
floppya: 1_44=/dev/fd0, status=inserted
```

You will have to change this to the following:

```
floppya: 1_44=a:, status=inserted
```

You should then be able to follow all the steps in `minix_bochs.pdf` to mount/unmount this device.