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DOSBox – Runs Old MS-DOS Games/Programs in Linux

Narad Shrestha | Last Updated: June 15, 2020 | Games | 9 Comments

Ever wanted to play old **DOS games** or use old compilers like **Turbo C** or **MASM** to run assembly language code? If you have and were wondering how then **DOSBox** is the way to go.

What is DOSBox?

DOSBox is open-source software that emulates a computer running **MS-DOS**. It uses the **Simple DirectMedia Layer</strong (SDL) which makes it very easy to port to different platforms. As a result, DOSBox is available for a wide range of Operating Systems like Linux, Windows, Mac, BeOS, etc.**

Installing DOSBox in Linux

If you are on **Ubuntu** or **Linux Mint**, you can install it directly from the **Software Center**. For other **Debian** based systems in general, you can use sudo apt-get to install it. The command for it is as follows.

```
$ sudo apt-get install dosbox
```

For other **Linux** flavors like **RHEL**, **CentOS,** and **Fedora**, you can compile and install it from the source as follows. Download the latest source file using the following wget command.

```
# wget https://nchc.dl.sourceforge.net/project/dosbox/dosbox
```

Navigate to the directory in which the file was downloaded and run the following commands to install it.

```
# tar zxf dosbox-0.74-3.tar.gz
# cd dosbox-0.74-3/
# ./configure
# make
# make install
```

How to Use DOSBox

DOSBox can be run from a terminal by executing the following command, it will open up the terminal window, with a `Z:\` prompt.
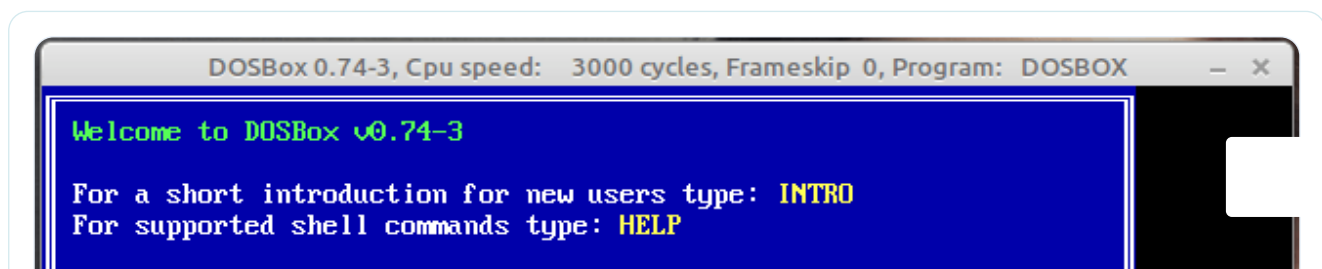
```
$ dosbox
```

Once you start **DOSBox**, you'll have to first mount the part of your system wants to access inside **DOSBox**.

```
mount <label> <path-to-mount>
```

To mount your whole **Home** directory as **C**, you can run the following command.

```
mount C ~
```

Dosbox Running in Linux Mint

Then type in `C:` If you have to mount the same directory and [cd into the same location](#) every time, then you can automate the whole process with the help of the **DOSBox** configuration file.

This file is located in the **~./dosbox** directory. The name of the file will be the **dosbox-[version].conf** where version is the version number of DOSBox which you installed. So if you have installed version **0.74**, you'll run the following command:

```
$ nano ~/.dosbox/dosbox-0.74-3.conf
```

So, if you want your **DOSBox** to automount the home directory and go into the **~/TC** folder every time **DOSBox** starts, you can add the **following** lines at the end of the configuration file.

```
mount c ~
c:
cd TC
```

There are many more options available in the configuration file. For example, if you want DOSBox to always start in full-screen mode you can edit and change the value of a fullscreen parameter from **false** to **true**.

Many other options and description of them is given in the configuration file itself. Also, if you want to add comments anywhere in the configuration file, you can do so by using the # character at the start of that particular line.

Installing Few Games and Programmes

If you are a student of Computer Science in India then you must have used this at some point in time in your School or College. Although it is a pretty outdated compiler most Colleges still use it because of their inability to keep up with modern compilers.

1. Turbo C++

Download the latest **TC++** from the below link and extract its contents in your home directory.
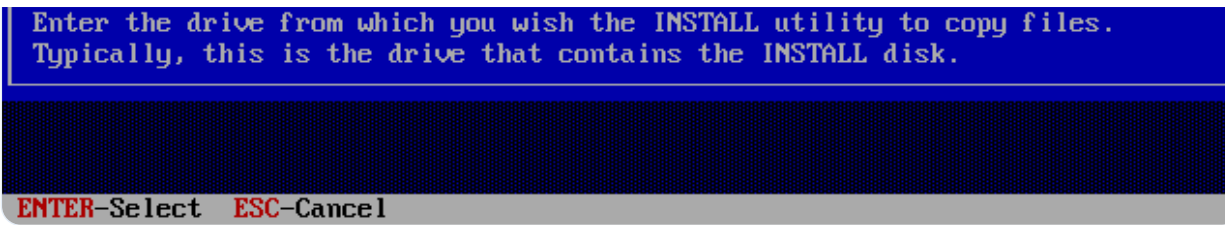
    1. http://turbo-c.soft32.com/

Now start **DOSBox** and run the following commands.

```
mount c ~
c:
cd tc3
install
```

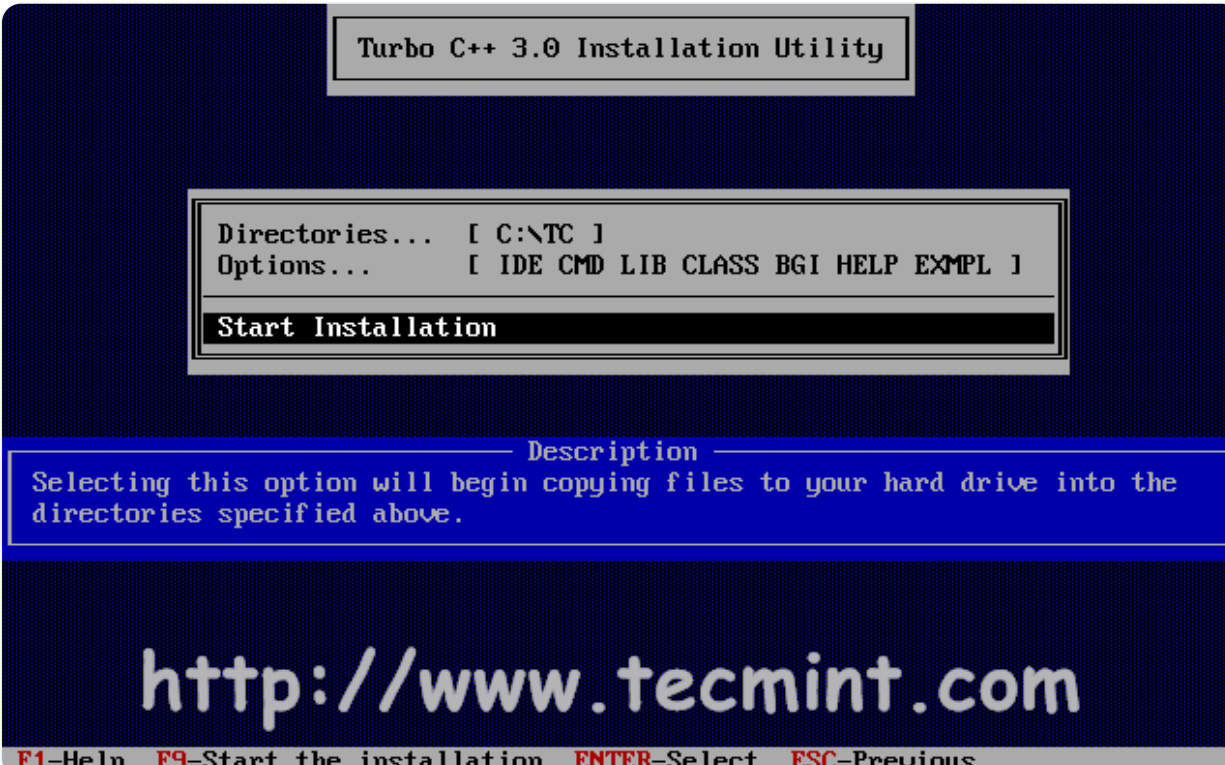Change the source drive to **C** in the installation menu.

Enter the drive from which you wish the INSTALL utility to copy files.
Typically, this is the drive that contains the INSTALL disk.

ENTER-Select   ESC-Cancel

Turbo C++

Keep the directory for installation as the default one and start the installation procedure.

Turbo C++ 3.0 Installation Utility

Directories...   [C:\TC]
Options...   [IDE CMD LIB CLASS BGI HELP EXMPL]

Start Installation

Description
Selecting this option will begin copying files to your hard drive into the
directories specified above.

http://www.tecmint.com

F1-Help   F9-Start the installation   ENTER-Select   ESC-Previous
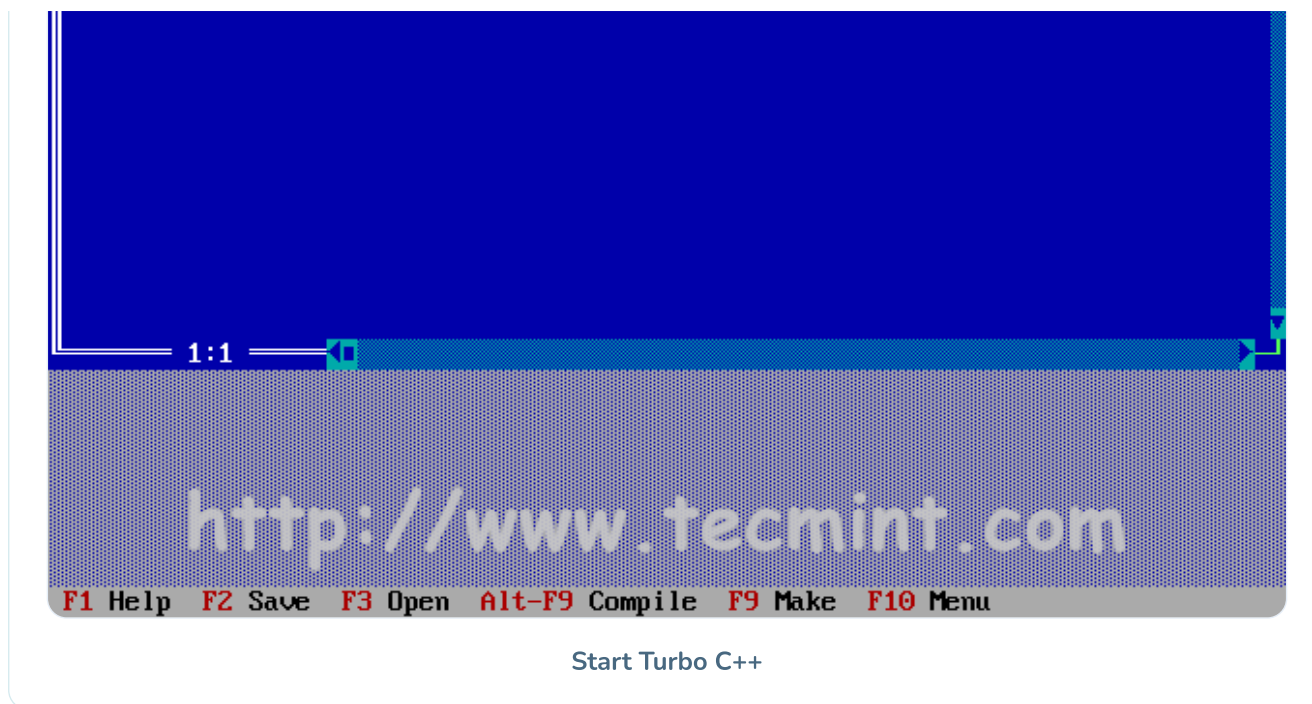
Install Turbo C++

After this, **TC++** would have been installed in the location **C:/TC**. You can run it using the following commands.

```
cd /TC
cd bin
tc
```

≡ File   Edit   Search   Run   Compile   Debug   Project   Options   Window   Help
[■] NONAME00.CPP 1=[

Start Turbo C++

2. Wolfenstein 3D

It was one of the most popular first-person shooter games in the **'90s** when it was released and is even today widely popular in the **DOS** games world. So if you want to have some vintage video game action, the steps to install it are given below.

Download the zip file from the below link and extract its contents to your home directory.

1. http://www.dosgamesarchive.com/download/wolfenstein-3d/

Now start **DOSBox** and run the following commands.
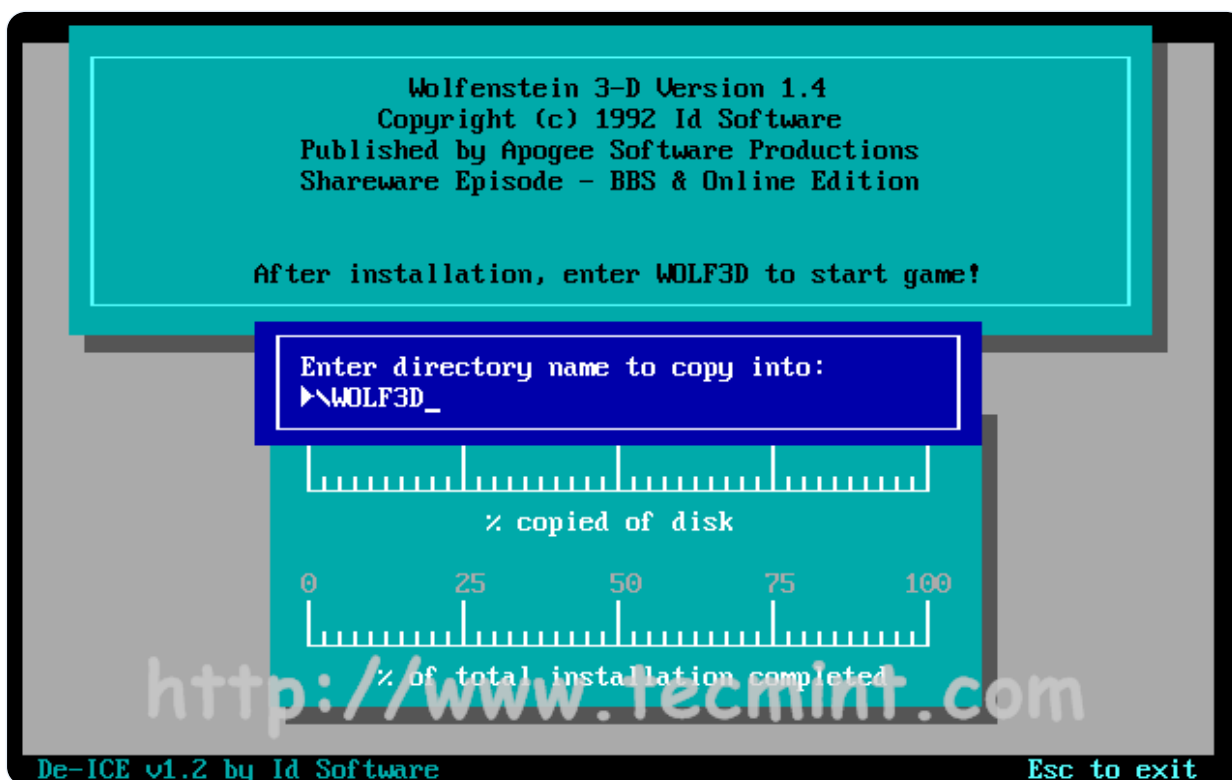
```
mount c ~
c:
cd wolf3d
install
```

Select **C** drive as the installation drive as shown in the screen-shot below.

Wolfenstein 3D

Select the default directory for installation and press **enter**.

Install Wolfenstein 3D

After this, **Wolf3d** would have been installed in the location **C:/Wolf3d**. Once inside the **C:/Wolf3d** directory, you can enter "**wolf3d**" to run the game.

Start Wolfenstein 3D

3. MASM(Microsoft Macro Assembler)

If you want to run assembly language code then you need an assembler like **MASM** or **TASM** (**Turbo Assembler**).

Download the rar file from the below link and extract its contents to your home directory.

1. http://sourceforge.net/projects/masm611/

Now start **DOSBox** and run the following commands.

```
mount c ~
c:
cd masm611/disk1
setup
```

Let all the files be installed to their default locations and select the Operating System in which you want your programs to run.

MASM

Once the setup is finished, you can run **asm** files by running the following commands from the **C:/MASM611/BIN** directory.

```
masm <filename>.asm
link <filename>.obj
<filename>
```

4. Prince of Persia

This was the first game that I played on a computer! It was very popular while I was growing up in the early **2000s** in India. So if you too have fond memories like me of playing this game as a kid and would like to revive them, here are the instructions to install it in **DOSBox**.

Actually, you don't need to install it, you just need to download the zip file extract it somewhere and you can play the game in DOSBox directly by entering "**prince**" from that location. Here are the steps for it.

Download the zip file from the below link and extract its contents to your home directory.

1. http://www.bestoldgames.net/eng/old-games/prince-of-persia.php

Now start **DOSBox** and run the following commands.

```
mount c ~
c:
cd prince
```

```
prince
```


Prince of Persia Game

This was my very first article on **Tecmint**, so please feel free to comment on how you thought the article was and any suggestions if you have them for me. Also, you can post your doubts as comments if you run into some problem during the installation of any **game**/**program** in **DOSBox**.

🏷 linux dos games

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He has over 10 years of rich IT experience which includes various Linux Distros, FOSS and Networking. Narad always believes sharing IT knowledge with others and adopts new technology with ease.

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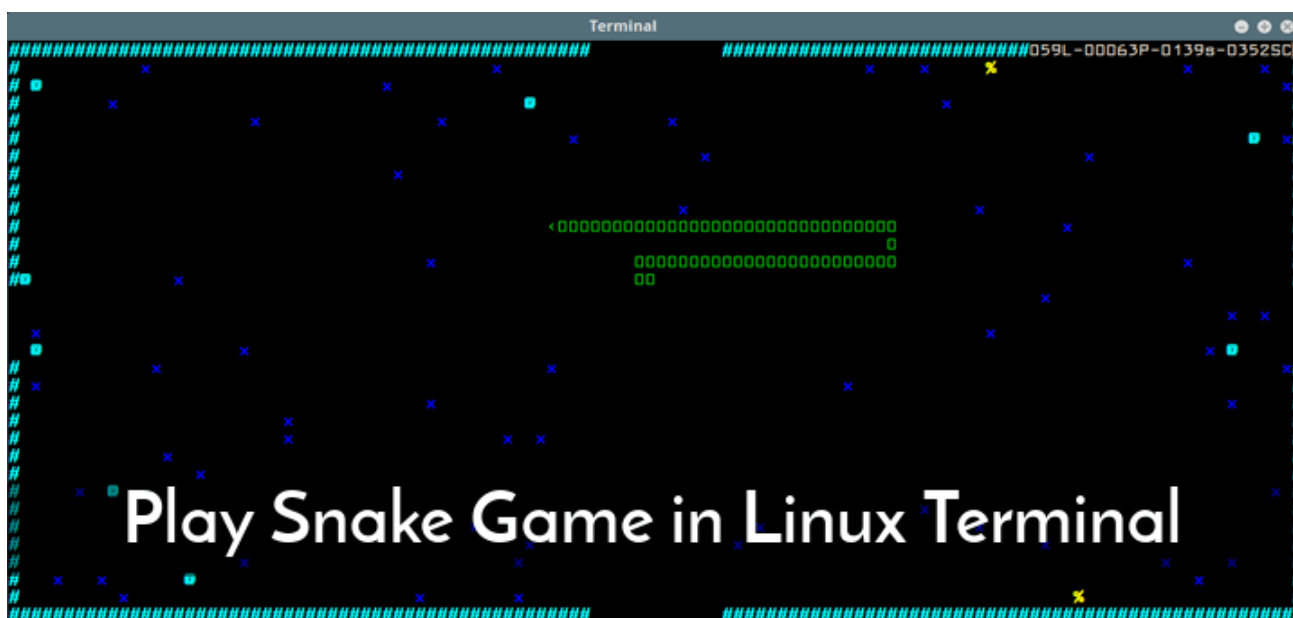
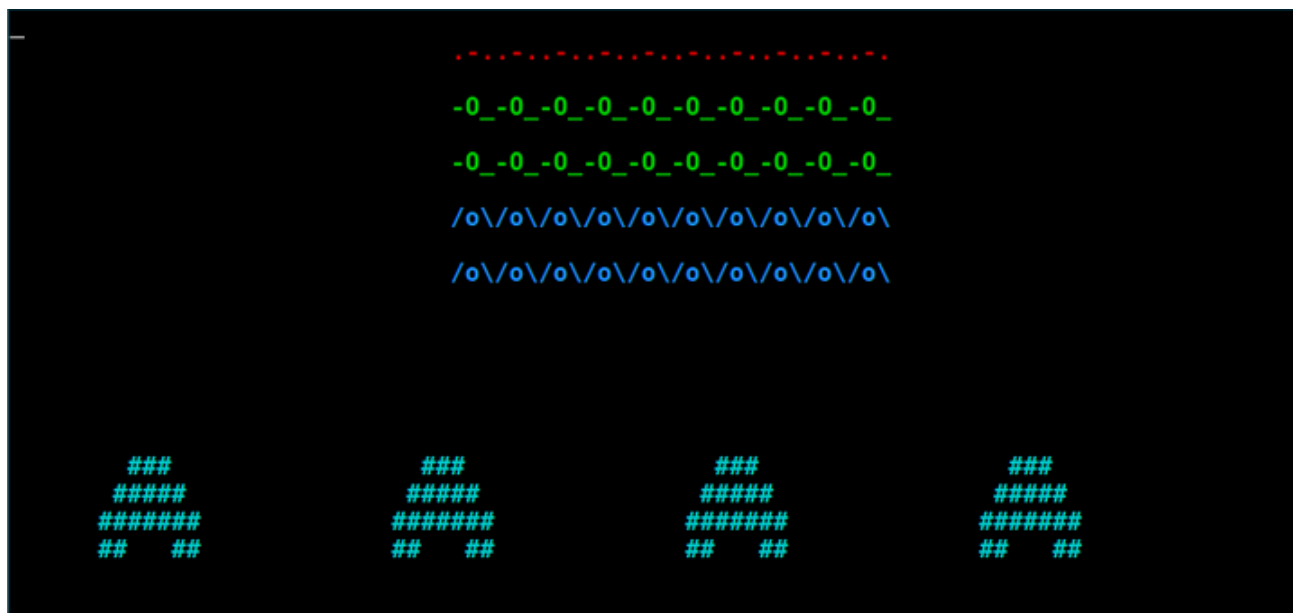## Related Posts

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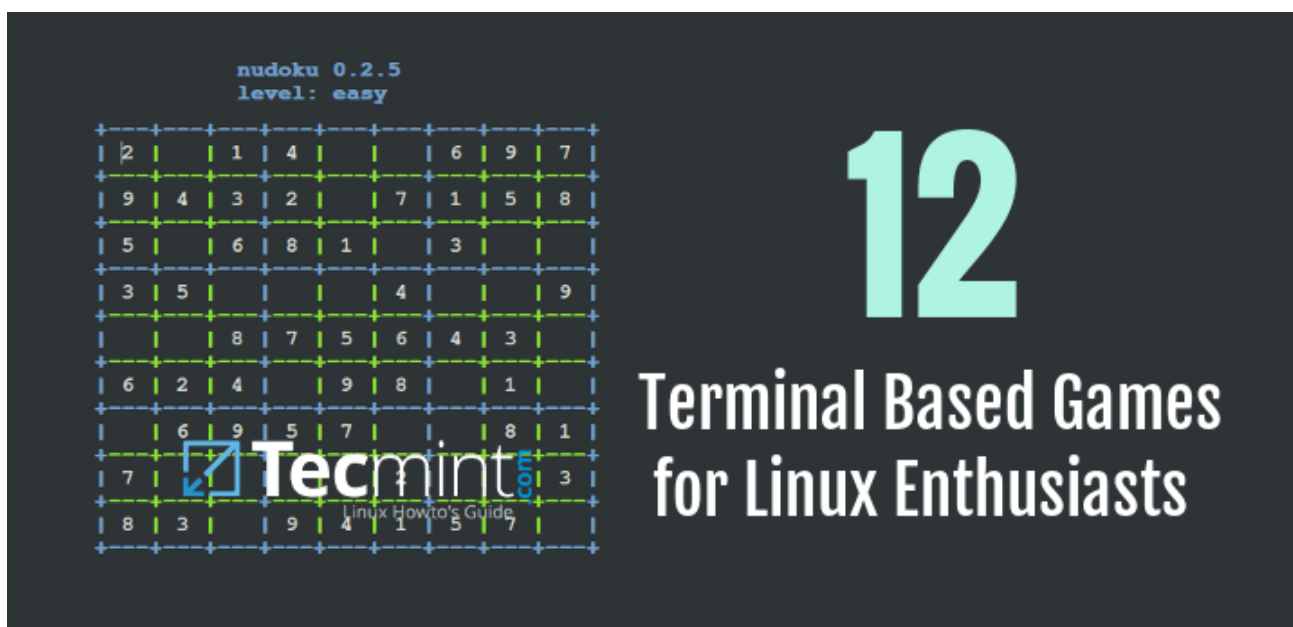

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9 thoughts on "DOSBox – Runs Old MS-DOS Games/Programs in Linux"

Noah

June 14, 2020 at 6:39 pm

This is coming from a user with Linux beta on a Chromebook that is trying to install a game and run it off of DOSBox from `gog.com`.

When I run the "`sudo apt-get install dosbox`" it says:

```
dosbox is already the newest version (0.74-2-3+deb10u1).
0 upgraded, 0 newly installed, 0 to remove and 22 not
upgraded.
```

and I can't find the file to unzip and install it.

any pointers?

Reply

prem

[May 14, 2016 at 1:00 pm](#)

the commands are not working for my mint os dosbox

Reply

Admin

Ravi Saive

[May 14, 2016 at 1:57 pm](#)

@Prem,

Which commands? can you mention it and what error you getting?

Reply

anitha
July 20, 2014 at 2:14 pm

Thanks a lot.....i was searching for a way to work with MASM on centos. I have to try it. glad to know that i can do it.....Thanks again...

Reply

makhauser
November 14, 2013 at 9:36 am

Yeah, one of my favourite apps. I use it everyday, especially – to play DooM II. Thanks for some commands, Ctrl+D ;)

Reply

kaaposc
November 12, 2013 at 8:22 pm

Great article just because wolf3d and prince of persia were mentioned. And please,

CHANGE THE FONT on screenshots!

Reply

Saravanan SJ

[November 13, 2013 at 9:43 pm](#)

Thank you! :D

Which screenshots exactly? Are you talking about the font of watermark?

Reply

Mayuri

[November 12, 2013 at 5:31 pm](#)

Thanks mate. Helped me install DOS for masm compilation :)

Reply

Saravanan SJ

[November 12, 2013 at 6:06 pm](#)

Glad that it was of help. :)

Reply

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