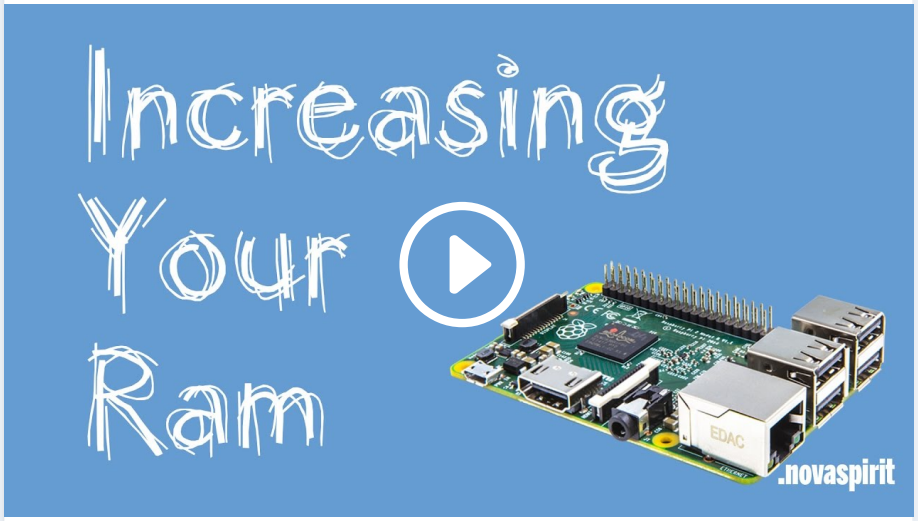
INCREASING RAM ON RASPBERRY PI

Posted by novaspirit | Dec 24, 2016 | Guides | 9 | ★★★☆☆



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This is a quick little walk through what I have been doing to my raspberry pi laptop, using conky to display my computer stats, and wbar for doc, also increased the ram by using zram which compresses memory, many devices like chrome os and androids use this same method. thanks for the view!

EQUIPMENT LIST

Raspberry Pi 3 ► Amazon | Ebay

SOFTWARE LIST

Raspbian Pixel ►
https://www.raspberrypi.org/downloads/

SCRIPT TO ENABLE ZRAM FOR RASPBERRY PI

I have created a script to enable zram on raspberry pi and will calculate the optimal amount for your raspberry pi. While it is possible to modify the script to increase the amount of ram being compressed, I would not suggest it as it will take more CPU cycles thus slowing the performance.

Download the script and copy to /usr/bin/ folder

```
$ sudo wget -O /usr/bin/zram.sh htt
ps://raw.githubusercontent.com/nova
spirit/rpi_zram/master/zram.sh
```

RECENT POSTS

once the script is downloaded we will need to change the permissions so it can be an executable

```
$ sudo chmod +x /usr/bin/zram.sh
```

edit /etc/rc.local file to run script on boot

```
$ sudo nano /etc/rc.local
```

add line before exit 0

```
$ /usr/bin/zram.sh &
```

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ABOUT THE AUTHOR

ABOUT THE AUTHOR



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9 COMMENTS



Kyle on March 28, 2017 at 8:39 pm

Hey Nova – This does work but I have to run zram.sh … I have checked the rc.local for typos. It just doesnt run on boot. Any ideas? Thank you sir.

REPLY



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Erik on April 16, 2017 at 1:32 am

Kyle you get this working? can you paste the script and your rc.local here? If you run “dmesg | grep zram” does it return zram: Created 4 device(s) ?

I’m testing this on a acer aspire netbook with linux mint, raspberry pi 3 is next.

REPLY



Nikos on June 20, 2017 at 2:12 pm

Same here check the script.

```
#!/bin/sh -e
#
# rc.local
#
# This script is executed at the end
of each multiuser runlevel.
# Make sure that the script will “exit
0” on success or any other
# value on error.
#
# In order to enable or disable this
script just change the execution
# bits.
#
# By default this script does
nothing.

# Print the IP address
/usr/bin/zram.sh &
_IP=$(hostname -I) || true
if [ “$_IP” ]; then
printf “My IP address is %s\n” “$_IP”
fi

exit 0
```

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REPLY



TONY on July 16, 2017 at 5:53 pm

This is great! Just got a Pi myself and am in dire need for more RAM.
However I have Arch installed on my Raspberry Pi and this tutorial is for Raspbian.
Could you update it for us Arch users please?
Thanks!

REPLY



Tom on December 24, 2017 at 9:36 am

zram reduces rapidly performance of weak processor. So it is better to use sd card Samsung Evo plus 64 GB and swap

REPLY



JAmes on February 20, 2018 at 8:50 pm

Dude, thank you. New to rpi and was desperate to increase swap/zram. This worked exactly as instructed and I can actually open multiple tabs in Chromium without an absolute meltdown. Thanks again.

REPLY



Jimberry on July 3, 2018 at 5:50 am

Everything worked great until the other day. I started getting a syntax error in the .sh file.
File "/usr/bin/zram.sh", line 2
cores=$(nproc –all)
^
SyntaxError: invalid syntax

GOOGLE HOME FOR RASPBERRY PI

GOOGLE HOME ON RASPBERRY PI

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Any dispensable advice would be received warmly.

REPLY



BUCKONZ on July 13, 2018 at 7:44 pm

Whe I use NANO to look at /usr/bin/zram.sh, the file is blank. There's no config in there. Does anyone no the full/complete syntax so I can get zram running correctly on my PI?

REPLY



Steve on November 25, 2018 at 11:07 pm

/usr/bin/zram.sh produces this instead of what your YouTube video displays. Also, I can't seem to save your version after manually entering it and trying to save. It then says "Error writing ? usr/bin/zram.sh Permission denied" Can you help me?

```
#!/bin/bash
cores=$(nproc –all)
modprobe zram num_devices=$cores

swapoff -a

totalmem=`free | grep -e "^Mem:" | awk '{print $2}'`
mem=$(( ($totalmem / $cores)* 1024 ))

core=0
while [ $core -lt $cores ]; do
echo $mem > /sys/block/zram$core/disksize
mkswap /dev/zram$core
swapon -p 5 /dev/zram$core
let core=core+1
done
```

REPLY

RASPBERRY PI

RASPBERRY PI 3

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