

Dahdi dummy

wiki.allstarlink.org

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1 Dahdi dummy

Legacy Version - This page is about a legacy version of AllStarLink. See ¹

¹ <https://allstarlink.github.io/user-guide/updates/#note-on-dahdi>

2 DAHDI Dummy

Or how to fix my ASL node from stuttering when I use it.

2.1 Compiling

2.1.1 Raspberry PI ASL 1.01 systems

For ASL 1.01 systems ASL 1.01 system¹.

1. ensure your system is up and going, with the kernel pinned per the readme²

```
# apt-mark hold raspberrypi-kernel-headers raspberrypi-kernel
```

Now run the following commands:

```
# apt-get install gcc raspberrypi-kernel-headers make vim git
# vim /usr/src/asl-dahdi-linux-2.11.1/linux/drivers/dahdi/Kbuild remove the #
  from the dummy file
# cd /usr/src/asl-dahdi-linux-2.11.1
# make
# make install
# echo -e "#needed for rpi timing \ndahti_dummy" >>/etc/modules # add it to
  modules.conf
# modprobe dahdi_dummy
# service restart asterisk
```

2.1.2 Others

To build as root:

```
# cd /usr/src/asl-dahdi-linux-2.11.1/linux
# export MODULES_EXTRA='dahdi_dummy'
# make
```

2.1.3 Loading module

Now you need to load the module into the Linux kernel for use.

```
# insmod /usr/src/asl-dahdi-linux-2.11.1/linux/drivers/dahdi/dahdi_dummy.ko
```

1 https://wiki.allstarlink.org/wiki/Main_Page#Downloads

2 http://dvswitch.org/files/ASL_Images/Raspberry_Pi/Stretch/ASL_1.01-20180228-armhf-raspbian-stretch-image.readme

Verify the module is loaded along with other DAHDI dependencies

```
# lsmod |grep dahdi
dahdi_dummy          3432  0
dahdi                229561 35 dahdi_dummy
crc_ccitt            1771  1 dahdi
```

2.2 Configuring DAHDI

You will need to do `dahdi_genconf` and then `dahdi_cfg`. ASL1.01 is missing this in the service script that starts asterisk. It needs to be added.

Restart asterisk

```
# service asterisk restart
```

Run `dahdi_scan` to view results:

```
# dahdi_scan
[1]
active=yes
alarms=UNCONFIGURED
description=DAHDI_DUMMY/1 (source: HRtimer) 1
name=DAHDI_DUMMY/1
manufacturer=
devicetype=DAHDI Dummy Timing
location=
basechan=1
totchans=0
irq=0
```

2.2.1 Verification

```
StPeteRpt*CLI> dahdi show status
Description                Alarms    IRQ      bpviol  CRC4
DAHDI_DUMMY/1 (source: HRtimer) 1  UNCONFIGUR 0        0        0
```

2.3 Testing

- Before DAHDI dummy module is installed

```
bryan@StPeteRpt:~ $ sudo dahdi_test
[sudo] password for bryan:
Opened pseudo dahdi interface, measuring accuracy...
99.614% 99.594% 99.608% 99.608% 98.476% 99.638% 99.599% 99.601%
99.600% 98.450% 99.602% 99.600% 99.601% 99.600% 98.445% 99.581%
99.621% 99.605% 99.597% 98.478% 99.630% 99.579% 99.626% 99.601%
98.478% 99.630% 99.602% 99.600% 99.601% 98.446% 99.601% 99.580% ^C
--- Results after 32 passes ---
Best: 99.638% -- Worst: 98.445% -- Average: 99.390271%
Cumulative Accuracy (not per pass): 99.967
```

- After `insmod` of DAHDI dummy module.

```

bryan@StPeteRpt:~ $ sudo dahdi_test
Opened pseudo dahdi interface, measuring accuracy...
99.990% 99.967% 99.991% 99.992% 99.991% 99.992% 99.991% 99.991%
99.991% 99.988% 99.992% 99.991% 99.991% 99.992% 99.991% 99.991%
99.991% 99.990% 99.992% 99.991% 99.991% 99.991% 99.991% 99.991%
99.992% 99.991% 99.991% 99.992% 99.991% 99.991% 99.991% 99.991%
99.991% 99.990% 99.991% 99.992% 99.991% 99.991% 99.991% 99.991% ^C
--- Results after 40 passes ---
Best: 99.992% -- Worst: 99.967% -- Average: 99.990443%
Cumulative Accuracy (not per pass): 99.990

```

- Here it is on an intel server running a pci_radio card:

```

root@Itchy:/home/bryan# dahdi_test
Opened pseudo dahdi interface, measuring accuracy...
99.993% 99.986% 99.995% 99.992% 99.984% 99.971% 99.993% 99.990%
99.992% 99.992% 99.991% 99.990% 99.996% 99.990% 99.971% 99.954%
99.994% 99.992% 99.991% 99.995% 99.983% 99.993% 99.992% 99.992%
99.997% 99.990% 99.985% 99.995% 99.990% 99.996% 99.989% 99.993%
99.993% 99.989% 99.997% 99.989% 99.994% 99.996% 99.988% 99.993% ^C
--- Results after 40 passes ---
Best: 99.997% -- Worst: 99.954% -- Average: 99.989596%
Cumulative Accuracy (not per pass): 99.992

```

- Results are identical.

2.4 Contributors

- KK9ROB³
- N8EI⁴
- This page was last edited on 29 June 2024, at 21:27.

³ <https://wiki.allstarlink.org/index.php?title=User:KK9ROB&action=edit&redlink=1>

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¹ Chapter 4 on page 15

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