

Raspberry PI OS Upgrade

WLAN Treiber für realtek Chipsatz unter Raspbian installieren

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#!/bin/bash set -e # install-wifi - v5 - by MrEngman.
display_help() { echo "#" echo "# usage:" echo "#"
echo "# install-wifi [-h | --help] |" echo "# [-c | --check
[driver] [rpi-update | commit_id]] |" echo "# [-u |
--update [driver] [rpi-update | commit_id]] |" echo "#
[driver [rpi-update | commit_id]]" echo "#" echo "#
options:" echo "# none - install the driver for the wifi
module connected to the Pi for the currently running
kernel." echo "#" echo "# -h|--help - display usage."
echo "#" echo "# -c|--check [driver] [option] - check if
a driver is available, does not install it." echo "#
driver - specific driver to check for, one of: 8188eu,
8192eu, 8812au, mt7601, mt7610 or mt7612" echo "#
[option]:- blank - check driver for currently running
kernel" echo "# rpi-update - check driver for latest
version of rpi-update" echo "# commit-id - check
driver for specific commit-id of rpi-update" echo "#"
echo "# -u|--update [driver] [option] - update/install
driver, can be used after running, but before rebooting,
rpi-update" echo "# to update the
driver to the one needed for the new kernel installed by
rpi-update." echo "# driver - specific driver to
update/install, one of: 8188eu, 8192eu, 8812au,
mt7601, mt7610 or mt7612" echo "# [option]:- blank
- update/install driver for currently running kernel"
echo "# rpi-update - update/install driver for latest
version of rpi-update" echo "# commit-id -
update/install driver for specific commit-id of rpi-
update" echo "#" echo "# driver [option] - install
specific driver, enables installing the driver for a
module not currently connected to" echo "# the Pi,
or installing a driver for a different module if you want
to change your wifi module." echo "# driver - specific
driver to install, one of: 8188eu, 8192eu, 8812au,
mt7601, mt7610 or mt7612" echo "# [option]:- blank
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- update/install driver for currently running kernel"
echo "#      rpi-update - update/install driver for latest
version of rpi-update" echo "#      commit-id -
update/install driver for specific commit-id of rpi-
update" echo "#" read -n1 -r -p "Press any key to
continue..." echo echo "#" echo "# install-wifi
examples:" echo "#" echo "# Install/update the wifi
driver for the wifi module connected to the Pi for the
currently running kernel" echo "#" echo "# install-
wifi" echo "#" echo "# If you want to change your wifi
module to one using a different driver that is
compatible with this script" echo "# you can install
the driver for the new wifi module, one of: 8188eu,
8192eu, 8812au, mt7601, mt7610 or mt7612" echo "#
In this example it will install the 8192eu wifi module
driver. After installing the driver shutdown the" echo
"# Pi, remove the currently connected wifi module and
connect the new 8192eu wifi module and restart your
Pi" echo "# and it should start up with the new wifi
adapter connected to your network." echo "#" echo "#
install-wifi 8192eu - this will install the 8192eu module
for the current kernel" echo "#" echo "# if you want
to run rpi-update, first check a driver is available
before you update your code. If the check" echo "#
indicates a driver is available run rpi-update to update
the firmware/kernel and then before rebooting" echo
"# update the wifi driver." echo "#" echo "# install-
wifi -c rpi-update - check for driver if rpi-update is
run." echo "# sudo rpi-update          - if a driver is
available you can run rpi-update to update firmware."
echo "# install-wifi -u rpi-update - then update the
driver for the new kernel installed by rpi-update." echo
"# sudo reboot      - now reboot to update the kernel
with the new wifi driver." echo "#" echo "# if you
want to run, say rpi-update b2f6c103e5 to install
3.18.7+ #755, first check a driver is available" echo
"# before you update your code. Then, if a driver is
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available update the code, and then before rebooting"
echo "# update the wifi driver." echo "#" echo "#
install-wifi -c b2f6c103e5 - check for driver if rpi-update
b2f6c103e5 is run to install kernel 3.18.7+ #755." echo
"# sudo rpi-update b2f6c103e5 - if a driver is available
you can run rpi-update b2f6c103e5 to update
firmware." echo "# install-wifi -u b2f6c103e5 - then
update the driver for the new kernel installed by rpi-
update b2f6c103e5." echo "# sudo reboot - now
reboot to update the kernel with the new wifi driver."
echo "#" echo "# and finally, you can change the wifi
module you are using and install the new driver for it as
well as" echo "# running rpi-update to update the
kernel, and assuming in this example the new adapter
uses the 8812au" echo "# driver, using something
like:" echo "#" echo "# install-wifi -c 8812au rpi-
update - check for 8812au driver if rpi-update is run."
echo "# sudo rpi-update - if a driver is available you
can run rpi-update to update firmware." echo "# install-
wifi -u 8812au rpi-update - install the 8812au driver for
the new kernel installed by rpi-update." echo "# sudo
halt - shutdown the Pi, replace the wifi adapter with
the 8812au wifi adapter." echo "# - restart the Pi
with the new kernel and new 8812au wifi module."
echo "#" } fetch_driver() { echo "Checking for a wifi
module to determine the driver to install." echo echo
-n "Your wifi module is " lsusb > .lsusb # check for
rtl8188eu compatible driver if cat .lsusb | grep -i '056
E:4008\|2001:3311\|0DF6:0076\|2001:3310\|2001:330F\|
07B8:8179\|0BDA:0179\|0BDA:8179' ; then
driver=8188eu # check for rtl8812au compatible
driver elif cat .lsusb | grep -i "0BDA:8812\|0BDA:881A\|
0BDA:881B\|0BDA:881C\|050D:1106\|050D:1109\|2001:3
30E\|7392:A822\| / \|0DF6:0074\|04BB:0952\|0789:01
6E\|0409:0408\|0B05:17D2\|0E66:0022\|0586:3426\|2001
:3313\| / \|1058:0632\|1740:0100\|2019:AB30\|07B8:8
812\|2001:3315\|2001:3316\|2357:0101\|20f4:805b\| /
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\|13B1:003F\|148F:9097\|2357:0103\|0BDA:0811\|0BDA:0821\|0BDA:8822\|0BDA:0820\|0BDA:0823\| / \|7392:A811\|04BB:0953\|0BDA:A811\|7392:A812\|7392:A813\|2001:3314\|0846:9052\|2001:3318\| / \|0E66:0023\|0411:0242\|2019:AB32" ; then
driver=8812au # check for rtl8192eu compatible
driver elif cat .lsusb | grep -i '2001:3319\|0BDA:818C\|0BDA:818B\|2357:0107\|2357:0108\|2357:0109' ; then
driver=8192eu # check for mt7601Usta compatible
driver elif cat .lsusb | grep -i '148F:7650\|0B05:17D3\|0E8D:760A\|0E8D:760B\|13D3:3431\|13D3:3434\|148F:6370\|148F:7601\| / \|148F:760A\|148F:760B\|148F:760C\|148F:760D\|2001:3D04\|2717:4106\|2955:0001\|2955:1001\| / \|2955:1003\|2A5F:1000\|7392:7710' ; then
driver=mt7601 # check for mt7610u compatible
driver elif cat .lsusb | grep -i '148F:7610\|0E8D:7610\|0E8D:7650\|0E8D:7630\|13B1:003E\|7392:A711\|7392:B711\|148F:761A\| / \|148F:760A\|0B05:17D1\|0B05:17DB\|0DF6:0075\|2001:3D02\|0586:3425\|07B8:7610\|04BB:0951\| / \|057C:8502\|293C:5702\|2019:AB31\|20F4:806B' ; then
driver=mt7610 # check for mt7612u compatible
driver elif cat .lsusb | grep -i '0E8D:7662\|0E8D:7632\|0B05:17C9\|0B05:180B\|0E8D:7612\|0846:9053' ; then
driver=mt7612 fi if [[ ! $driver ]] ; then echo
"unrecognised." echo echo "**** Unable to identify
your wifi module ****" echo echo "The script only
works for wifi modules using the rtl8188eu, rtl8192eu,
rtl8812au, mt7601, mt7610 and mt7612 drivers."
echo echo "Looking for your wifi module the script
detected the following USB devices:-" echo cat
.lsus b echo echo "If you are certain your module uses
one of the drivers the script installs check the output of
command" echo "'lsusb' shows your wifi module. If
lsusb shows your wifi module try running the script
again. If the" echo "script fails to detect your wifi
module again the driver may need updating to add your
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module USB id." echo echo "If lsusb does not show
your wifi module you will need to resolve that issue
before the script can be" echo "used to install the
driver you need." echo exit 1 else echo echo "And
it uses the $driver driver." echo fi } check_driver() {
if [[ $kernelcommit == "rpi-update" ]]; then
rpi_firmware_commit_id=master elif [[ $kernelcommit
]]; then rpi_firmware_commit_id=$kernelcommit fi if
[[ $kernelcommit ]]; then # check if Pi2 B or earlier
version of Pi and select the relevant kernel image if
(grep -Fq BCM2709 /proc/cpuinfo) ; then pi=2
image=kernel7.img elif (grep -Fq BCM2708
/proc/cpuinfo) ; then pi=1 image=kernel.img else
echo "Processor type unknown - you do not appear to
be running this script on a Raspberry Pi. Exiting the
script" exit 1 fi echo -n "Please wait ... checking
the kernel revision and build you will have after running
command 'sudo rpi-update" if [[ $kernelcommit != "rpi-
update" ]]; then echo "$kernelcommit'." else echo
"." fi # download the relevant kernel image if !
(wget -q https://github.com/Hexxeh/rpi-
firmware/raw/$rpi_firmware_commit_id/$image -O
.kernel) ; then echo "Invalid commit-id, kernel not
available for your version of the Pi, Pi $pi." exit 1 fi
# extract uname_string from kernel image strings -n
10 .kernel | grep "Linux version" > .uname_string
kernel=$(cat .uname_string | awk '{print $3}' | tr -d
'+') build=$(grep -Po '(?<=#)[^]*' .uname_string |
awk '{print $1}') echo if [[ $kernelcommit == "rpi-
update" ]]; then echo -n "Running command 'sudo rpi-
update" elif [[ $kernelcommit ]]; then echo -n
"Running command 'sudo rpi-update $kernelcommit"
fi echo "" will load:" echo echo " kernel revision
= $kernel+" echo " kernel build = #$build"
echo fi echo -n "Checking for a new $driver wifi driver
module" if [[ $kernelcommit ]]; then if [[
$kernelcommit == "rpi-update" ]]; then echo " if you
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run command 'sudo rpi-update'." else echo " if you
run command 'sudo rpi-update
$rpi_firmware_commit_id'." fi else echo " for your
current kernel." fi if (wget --spider -o .wgetlog https://
dl.dropboxusercontent.com/u/80256631/$driver\-$kerne
l\-$build.tar.gz) ; then echo "There is a driver module
available for this kernel revision." else if cat .wgetlog
| grep -iq "404 Not Found" ; then echo "A driver does
not yet exist for this update." else echo "The script
cannot access Dropbox to check a driver is available."
fi exit 2 fi } install_driver() { echo "Downloading the
$driver driver." if (wget -q https://dl.dropboxuserconte
nt.com/u/80256631/$driver\-$kernel\-$build.tar.gz -O
wifi-driver.tar.gz) ; then echo "Installing the $driver
driver." echo tar xzf wifi-driver.tar.gz if [[ $driver
== mt7601 ]] ; then driver=mt7601Usta sudo mkdir
-p /etc/Wireless/RT2870STA/ sudo cp RT2870STA.dat
/etc/Wireless/RT2870STA/ sudo cp 95-ralink.rules
/etc/udev/rules.d/ elif [[ $driver == mt7610 ]] ; then
driver=mt7610u_sta sudo mkdir -p
/etc/Wireless/RT2870STA/ sudo cp RT2870STA.dat
/etc/Wireless/RT2870STA/ sudo cp 95-ralink.rules
/etc/udev/rules.d/ elif [[ $driver == mt7612 ]] ; then
driver=mt7662u_sta sudo mkdir -p
/etc/Wireless/RT2870STA/ sudo cp RT2870STA.dat
/etc/Wireless/RT2870STA/ sudo cp 95-ralink.rules
/etc/udev/rules.d/ else sudo cp $driver.conf
/etc/modprobe.d/. fi sudo install -p -m 644 $driver.ko
/lib/modules/$kernel+/kernel/drivers/net/wireless sudo
depmod $kernel+ if (lsmod | grep $driver > /dev/null) ;
then echo "A version of the driver $driver.ko is
already loaded and running. You will need to reboot to
load the new driver." exit else sudo modprobe
$driver fi else echo echo "A driver does not yet
exist for this kernel." fi } display_current() { echo
echo "Your current kernel revision = $kernel+" echo
"Your current kernel build = #$build" echo }
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tmpdir=$(mktemp -d) trap "\rm -rf $tmpdir" EXIT cd
$tmpdir #initialise some variables command=$0
option=$1 kernelcommit=$2 $1" in
8188eu|8192eu|8812au|mt7601|mt7610|mt7612)
driver=$1 display_current check_driver
install_driver ;; -c|--check) case "$2" in
8188eu|8192eu|8812au|mt7601|mt7610|mt7612)
driver=$2 kernelcommit=$3 ;; esac
display_current if [ ! $driver ]; then fetch_driver fi
check_driver ;; -u|--update) case "$2" in
8188eu|8192eu|8812au|mt7601|mt7610|mt7612)
driver=$2 kernelcommit=$3 ;; esac
display_current if [ ! $driver ]; then fetch_driver fi
check_driver install_driver ;; -h|--help)
display_help exit 0 ;; "") display_current
fetch_driver check_driver install_driver ;; # proceed
to install *) echo "unknown command: $1" >&2
~/ $command --help exit 1 ;; esac exit 0
```

Das Script lädt den notwendigen Treiber und installiert diesen.

Eindeutige ID: #1014

Verfasser: n/a

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