



Rocky Enterprise Linux 9.2 Manual Pages on command 'wpa_action.8'

C:~>man wpa_action.8

WPA_ACTION(8)

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NAME

wpa_action - wpa_cli action script

SYNOPSIS

wpa_action IFACE ACTION

DESCRIPTION

wpa_action is a shell script designed to control the ifupdown framework according to ACTION events received from wpa_supplicant. wpa_cli receives CONNECTED and DISCONNECTED events from wpa_supplicant via the ctrl_iface socket and gives the ACTION event to the wpa_action script as an argument, along with the IFACE to be acted upon.

wpa_action also receives an environment variable from wpa_cli, WPA_ID_STR, containing an alphanumeric identification string for the CURRENT network block. WPA_ID_STR is provided by the 'id_str' network block option of wpa_supplicant.conf, and provides a means to map the ACTION to a LOGICAL interface configured in the interfaces file.

If either the ifupdown interfaces or ifstate file cannot be found, wpa_action will exit silently (status 0). wpa_action will search the following locations for their existence:

/etc/network/run/ifstate

/run/network/ifstate

/etc/network/interfaces

IFACE

Network interface to be acted upon, for example 'eth1' or 'wlan0'.

ACTION

An ACTION to be performed on the IFACE.

CONNECTED

wpa_supplicant has completed authentication. ifup IFACE=WPA_ID_STR is invoked and the action is logged to syslog. Network settings for the LOGICAL interface WPA_ID_STR are applied.

DISCONNECTED

wpa_supplicant has detected disconnection. ifdown IFACE=WPA_ID_STR is invoked and the action is logged to syslog. Network settings for the LOGICAL interface WPA_ID_STR are undone.

stop The 'stop' ACTION is called manually by the user, to stop the wpa_cli daemon, invoke ifdown IFACE (if the IFACE is present in the ifstate file) and stop the wpa_supplicant daemon.

reload The 'reload' ACTION can be used to reload the wpa_supplicant configuration file specified by wpa-roam. 'restart' is a synonym for 'reload' and can be used equally. The action is logged to /var/log/wpa_action.log.

ENVIRONMENT

An alphanumeric identification string provided by the 'id_str' network block option of wpa_supplicant.conf is exported to wpa_action as an environment variable, WPA_ID_STR. When 'id_str' is not configured for the CURRENT network block, 'default' is substituted for the absent WPA_ID_STR environment variable.

A unique network identifier, WPA_ID, is exported to wpa_action. It is the number assigned to the CURRENT wpa_supplicant network block (network_id).

USAGE

The only reasons for wpa_action to be explicitly executed by the user is to stop wpa_cli from controlling ifupdown or reload the wpa_supplicant.conf file after editing.

```
wpa_action eth1 stop
```

Otherwise, wpa_action is given as an argument to a wpa_cli daemon.

```
wpa_cli -i eth1 -a /sbin/wpa_action -B
```

This can be done by using the wpa-roam option in the interfaces file. wpa-roam

takes one argument, a user provided wpa_supplicant.conf file.

The inet METHOD must be 'manual' for this interface, as it will be configured according to wpa_cli action events. Also supply a 'default' interfaces stanza using the dhcp inet METHOD so that networks without an 'id_str' option can fallback to attempting to receive an ip via dhcp. If one or more networks requires additional network configuration, provide an unique 'id_str' for each network, and an interfaces stanza using the 'id_str' value as a LOGICAL interface. The following interfaces file is configured to use dhcp for any network without an 'id_str', a static ip for the network with an 'id_str' of 'home_static' and dhcp plus an additional post-up command for the network with an 'id_str' of 'uni'.

An example wpa_supplicant.conf configured to roam between 3 different networks:

```
network={
    ssid="foo"
    id_str="uni"
    key_mgmt=NONE
}
network={
    ssid="bar"
    id_str="home_static"
    psk=123456789...
}
network={
    ssid=""
    key_mgmt=NONE
}
```

The corresponding interfaces file would contain LOGICAL interfaces, that correlate to each unique 'id_str' provided by the configuration file:

```
iface eth1 inet manual
    wpa-driver wext
    wpa-roam /etc/wpa_supplicant/wpa_supplicant.conf

iface default inet dhcp

iface uni inet dhcp

iface home_static inet static
```

address 192.168.0.20
netmask 255.255.255.0
network 192.168.0.0
broadcast 192.168.0.255
gateway 192.168.0.1

SEE ALSO

wpa_cli(8), wpa_supplicant(8), wpa_supplicant.conf(5), ifup(8), interfaces(5)

AUTHOR

This manual page was written by Kel Modderman <kel@otaku42.de> for the Debian GNU system (but may be used by others).

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