



### ***Rocky Enterprise Linux 9.2 Manual Pages on command 'wpa\_priv.8'***

**\$ man wpa\_priv.8**

WPA\_PRIV(8)

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NAME

wpa\_priv - wpa\_supplicant privilege separation helper

SYNOPSIS

```
wpa_priv [ -c ctrl path ] [ -Bdd ] [ -P pid file ] [ driver:ifname  
[driver:ifname ...] ]
```

OVERVIEW

wpa\_priv is a privilege separation helper that minimizes the size of wpa\_supplicant code that needs to be run with root privileges.

If enabled, privileged operations are done in the wpa\_priv process while leaving rest of the code (e.g., EAP authentication and WPA handshakes) to operate in an unprivileged process (wpa\_supplicant) that can be run as non-root user. Privilege separation restricts the effects of potential software errors by containing the majority of the code in an unprivileged process to avoid the possibility of a full system compromise.

wpa\_priv needs to be run with network admin privileges (usually, root user). It opens a UNIX domain socket for each interface that is in?

cluded on the command line; any other interface will be off limits for wpa\_supplicant in this kind of configuration. After this, wpa\_supplicant can be run as a non-root user (e.g., all standard users on a laptop or as a special non-privileged user account created just for this purpose to limit access to user files even further).

## EXAMPLE CONFIGURATION

The following steps are an example of how to configure wpa\_priv to allow users in the wpa\_priv group to communicate with wpa\_supplicant with privilege separation:

Create user group (e.g., wpa\_priv) and assign users that should be able to use wpa\_supplicant into that group.

Create /var/run/wpa\_priv directory for UNIX domain sockets and control user access by setting it accessible only for the wpa\_priv group:

```
mkdir /var/run/wpa_priv
chown root:wpa_priv /var/run/wpa_priv
chmod 0750 /var/run/wpa_priv
```

Start wpa\_priv as root (e.g., from system startup scripts) with the enabled interfaces configured on the command line:

```
wpa_priv -B -c /var/run/wpa_priv -P /var/run/wpa_priv.pid wext:wlan0
```

Run wpa\_supplicant as non-root with a user that is in the wpa\_priv group:

```
wpa_supplicant -i ath0 -c wpa_supplicant.conf
```

## COMMAND ARGUMENTS

-c ctrl path

Specify the path to wpa\_priv control directory (Default: /var/run/wpa\_priv/).

-B Run as a daemon in the background.

-P file

Set the location of the PID file.

driver:ifname [driver:ifname ...]

The <driver> string dictates which of the supported wpa\_supplicant driver backends is to be used. To get a list of supported driver types see wpa\_supplicant help (e.g, wpa\_supplicant -h).

The driver backend supported by most good drivers is wext.

The <ifname> string specifies which network interface is to be managed by wpa\_supplicant (e.g., wlan0 or ath0).

wpa\_priv does not use the network interface before wpa\_supplicant is started, so it is fine to include network interfaces that are not available at the time wpa\_priv is started. wpa\_priv can control multiple interfaces with one process, but it is also possible to run multiple wpa\_priv processes at the same time, if desired.

## SEE ALSO

wpa\_supplicant(8)

## LEGAL

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